UNIVERSITY of LUSAKA

**SCHOOL OF POSTGRADUATE STUDIES**

RESEARCH REPORT

# ANALYZING THE EFFECT OF MICROCREDIT ACCESSIBILITY ON REVENUE GROWTH OF AGRICULTURAL SMEs: A CASE OF PETAUKE DISTRICT, ZAMBIA.

A dissertation submitted to the school of postgraduate studies, university of Lusaka in partial fulfilment of the award of the Master of Science n Accounting and Finance.

By

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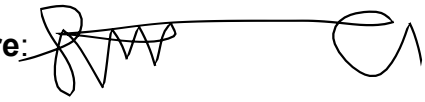
# DECLARATION

I, Shawa Andrew Dingani, declare that this research paper, titled "Analyzing the Effect of Microcredit Accessibility on Revenue Growth of Agricultural SMEs in Petauke District, Zambia," is my work, conducted under the supervision of Mr. Phanuel Natala. I want to make it clear that I haven't submitted this work for any other academic purpose. I've given credit to all the sources I used and truly appreciate any help I received.

Also, I've made sure to cite any work by others and accurately reference all data, including statistics and multimedia.

**Student Signature**: 

**Date** : 20 January 2025

**Name of supervisor:** Mr Phanuel Mweetwa Natala.

**Supervisors signature**: 

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## DEDICATION

I wish to dedicate this research paper to my mother and my siblings who have always supported me throughout my academic career. To all my Lecturers, I want to dedicate this research because of the support that you have given me throughout my academic career. Without the help of the above-mentioned, it would have been difficult to successfully write and complete this paper.

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## List of Acronyms/ Abbreviations

| | |
|---|---|
| **SME** | Small and Medium Enterprises. |
| **GDP** | Gross Domestic Product |
| **MFI** | Micro Finance Institutions. |
| **SDG.** | Sustainable Development Goals. |
| **RCT** | Random Controlled trials. |
| **WHO** | World Health Organization |
| **SPSS** | Statistical Package for the Social Sciences |
| **PPP** | Public Private Partnerships. |
| **SD** | Standard Deviation |
| **JSTOR** | Journal Storage |

## ABSTRACT

This study investigates the impact of microcredit accessibility on the performance of agricultural Small and Medium-sized Enterprises (SMEs) in Petauke District, Zambia. Using a mixed-methods approach, the study examines the relationship between microcredit accessibility and revenue growth, challenges faced by agricultural SMEs, and strategies for enhancing the impact of microcredit accessibility.

The study reveals that microcredit accessibility has a positive and significant impact on revenue growth among agricultural SMEs, with a correlation coefficient of 0.532. Furthermore, the study finds that microcredit accessibility reduces the challenges faced by agricultural SMEs, particularly in terms of access to finance and markets.

The study also identifies strategies for enhancing the impact of microcredit accessibility, including training and capacity-building programs, market linkages, and technological innovation. The findings suggest that these strategies can improve the performance of agricultural SMEs, increase their competitiveness, and contribute to the growth and development of the agricultural sector in Zambia.

The study's recommendations prioritize improving microcredit accessibility, providing training and capacity-building programs, and adopting technological innovations. The findings contribute to the understanding of the relationship between microcredit accessibility and SME performance in the agricultural sector, with implications for policymakers, practitioners, and agricultural SMEs in Zambia.

# CHAPTER ONE: INTRODUCTION

## 1.0 Introduction

This study aims to explore the connection between microcredit access and revenue growth in agricultural SMEs located in Petauke District, Zambia. It seeks to assess how accessible microcredit is, the challenges SMEs face when trying to use credit, and what strategies can boost its effectiveness. The ultimate goal is to provide practical insights that inform policies and practices, enhancing the financial sustainability of agricultural SMEs and promoting economic development in rural areas. By providing background context, this chapter establishes the foundation for the study. The research problem is then identified, as are the study's goals, objectives, and guiding questions. In order to make the study's topic clear, it concludes by outlining the scope and limitations and talking about the research's importance.

As far as economic growth is concerned the importance of agriculture cannot be over emphasized. Another major contribution of agriculture is job creation, food security and its significant contribution to GDP. In Zambia, the agricultural sector is essential for rural communities, with more than 70% of the population involved in various forms of farming (World Bank, 2021). Small and medium-sized enterprises (SMEs) within this field are important for boosting productivity, fostering innovation, and supporting local economies. However, these businesses often encounter significant financial hurdles that limit their potential to expand and grow sustainably.

Despite the valuable contributions of agricultural SMEs to rural progress, their financial requirements are frequently overlooked by traditional banks. They face various structural challenges, such as high transaction fees, strict collateral demands, and perceived risks associated with lending, which often prevent them from accessing formal financial services (Zeller & Sharma, 2000). One viable way to bridge these financial inequalities is through microcredit. By offering small loans to those who typically have trouble securing credit, microcredit promotes financial inclusion, allowing agricultural SMEs to invest in necessary inputs, technology, and labour to enhance their revenue (Armendáriz & Morduch, 2010). Nevertheless, thorough studies on the precise effects of microcredit availability on the income development of agricultural SMEs are lacking, especially in Zambia's Petauke District.

## 1.1 Background of the Study

Microcredit accessibility refers to the availability of small loans designed for individuals or small businesses that often struggle to access traditional banking services. This form of financing is crucial for promoting financial inclusion, especially for marginalized groups in rural areas. Unlike regular banking practices, microcredit usually has simpler application processes, lower collateral requirements, and additional support such as financial literacy training, which helps borrowers succeed (Armendáriz & Morduch, 2010). For small and medium-sized agricultural enterprises (SMEs), microcredit can be a game-changer by providing the funds needed for inputs, modern technologies, and labor that boost productivity and revenue (Karlan & Morduch, 2018).

In a country like Zambia agricultural SMEs are the major players when it comes to rural economies due to their immerse contribution towards GDP and job creation (FAO, 2021). However, these businesses often encounter major financial challenges due to their limited access to conventional credit sources. Traditional lenders are often hesitant to serve them due to high transaction costs, tough collateral demands, and perceived risks linked to agriculture (Zeller & Sharma, 2000). As a result, microcredit becomes a vital resource, helping to fill the financing gap and stimulate rural economic progress.

Muhammad Yunus established the Grameen Bank in Bangladesh in the 1970s, which is when the idea of microcredit first emerged. He proved how tiny, unsecured loans could empower disadvantaged communities (Yunus, 1999). His pioneering work laid the groundwork for modern microfinance and inspired efforts worldwide to offer financial services to underserved individuals. Early research mainly focused on how microcredit helped reduce poverty and empower women, showing noticeable improvements in income generation and family welfare (Pitt & Khandker, 1998).

Since the early 2000s, studies have increasingly looked at how microcredit impacts agriculture. Zeller and Sharma (2000) pointed out that microcredit could play a significant role in reducing rural poverty by fixing failures in credit markets. They found that having access to credit allows small farmers to adopt modern farming methods, improve productivity, and stabilize their incomes. Similarly, Hermes and Lensink (2011) examined the wider economic benefits of microfinance, confirming its role in promoting financial inclusion and sustainable economic growth.

In Africa, research by Aker and Mbiti (2010) highlighted how digital microfinance platforms can significantly improve credit access for rural farmers. These platforms help lower transaction costs and overcome geographical barriers, allowing more people to benefit from financial services. However, issues like high-interest rates, limited outreach to marginalized communities, and challenges with repayments still pose considerable challenges (Banerjee et al., 2015). In Zambia, studies indicate that agricultural SMEs face unique financing hurdles, such as poor rural financial infrastructure and limited connections to value chains (World Bank, 2020).

The study of microcredit is supported by several key theories. The financial intermediation theory examines how financial institutions connect savers with borrowers, promoting efficient resource allocation (Diamond, 1984). The social capital theory emphasizes the significance of trust and community ties in facilitating financial transactions for underrepresented groups (Coleman, 1990). Additionally, the poverty alleviation framework investigates how financial initiatives, including microcredit, help alleviate poverty and foster economic empowerment (Sen, 1999).

Access to microcredit is becoming more widely acknowledged in Zambia as being essential to reaching the Sustainable Development Goals (SDGs), particularly SDG 1, which aims to eradicate poverty. The agricultural sector in Petauke District is crucial for local food security and employment but faces serious limitations in accessing affordable credit. Recent research trends focus on integrated financial solutions that combine credit with other services like training, insurance, and market connections to enhance effectiveness (FAO, 2021). This study aims to build on these findings by exploring how microcredit accessibility affects revenue growth for agricultural SMEs in Petauke District

## 1.2 Statement of the Problem

Microcredit plays an important role in boosting economic growth and promoting financial inclusion, a concept widely supported by research. Microfinance institutions (MFIs) are seen as vital in tackling issues related to credit access, especially in rural and underserved regions. Research indicates that microcredit helps foster entrepreneurship by providing the necessary funds for investment, production, and managing risks (Cull et al., 2009). In the agricultural sector, Zeller and Sharma (2000) found that microcredit allows small farmers to adopt modern farming techniques, leading to increased productivity and more stable incomes. Additionally, Karlan and Morduch (2018) pointed out that microfinance can help mitigate risks linked to climate change and market fluctuations, which are major challenges for agricultural small and medium-sized enterprises (SMEs).

In recent years, digital microfinance has gained traction. Mobile technology platforms have effectively broadened access to credit, especially in remote locations. Aker and Mbiti (2010) noted that these digital platforms lower transaction costs and enhance the delivery of financial services, making credit more accessible to rural communities. However, challenges like high-interest rates, low financial literacy, and repayment issues still exist, highlighting the necessity for ongoing research and innovation in this area (Banerjee et al., 2015).

While many studies discuss the advantages of microcredit, there are still gaps in understanding its specific effects on revenue growth for agricultural SMEs in Zambia. Much of the existing research tends to focus on broader outcomes like poverty reduction and financial inclusion, rather than looking specifically at revenue growth as a success measure. Moreover, most studies are focused on global or regional perspectives, missing the localized insights needed to address specific challenges in Zambia. For instance, the unique economic and infrastructure conditions in Petauke District, which include limited market access and financial resources, are not well-represented in the research (World Bank, 2020).

Additionally, the relationship between access to microcredit and revenue performance for agricultural SMEs hasn’t been thoroughly investigated. While works by Hermes and

Lensink (2011) and others suggest that microcredit can enhance business outcomes, they often fail to explain the specific ways this occurs. This lack of understanding limits policymakers and practitioners in their ability to create targeted solutions for the unique needs of agricultural SMEs.

The absence of region-specific research is a significant barrier, as it hampers the creation of effective strategies to support agricultural SMEs in Zambia. Grasping how access to microcredit relates to revenue growth is crucial for developing policies and programs that strengthen the financial viability of these businesses. This study aims to fill this gap by providing concrete evidence on how microcredit impacts revenue performance in Petauke District. The results will add to academic research, guide policy-making, and give practical insights for microfinance institutions and agricultural stakeholders, ultimately promoting rural economic development and helping to alleviate poverty.

## 1.3 Research objectives.

### 1.3.1 Main Objective

To analyse the effect of microcredit accessibility on revenue growth of agricultural SMEs in Petauke District, Zambia.

### 1.3.2 Specific Objectives

1. To examine the relationship between microcredit accessibility and revenue growth of agricultural SMEs
2. To identify the key factors that influence the effectiveness of microcredit in promoting revenue growth among agricultural SMEs
3. To assess the impact of microcredit on the financial performance and competitiveness of agricultural SMEs

## 1.4 Research Questions

### 1.4.1 Research Questions

1. To what extent does microcredit accessibility influence revenue growth among agricultural SMEs?
2. What are the key factors that determine the effectiveness of microcredit programs in promoting revenue growth among agricultural SMEs?

3. How does access to microcredit impact the financial performance and competitiveness of agricultural SMEs?

### 1.4.2 Research Hypotheses

**Objective 1**: To examine the relationship between microcredit accessibility and revenue growth of agricultural SMEs

*$H_0$: There is no significant correlation between microcredit accessibility and revenue growth of agricultural SMEs.*

*$H_1$: There is a significant positive correlation between microcredit accessibility and revenue growth of agricultural SMEs.*

**Objective 2:** To identify the key factors that influence the effectiveness of microcredit in promoting revenue growth among agricultural SMEs

*$H_0$: Microcredit accessibility, entrepreneurial skills, and market access do not jointly influence revenue growth of agricultural SMEs.*

*$H_1$: Microcredit accessibility, entrepreneurial skills, and market access jointly have a significant positive impact on revenue growth of agricultural SMEs.*

**Objective 3:** To assess the impact of microcredit on the financial performance and competitiveness of agricultural SMEs

*$H_0$: Microcredit accessibility has no significant effect on the financial performance and competitiveness of agricultural SMEs.*

*$H_1$: Microcredit accessibility has a significant positive effect on the financial performance and competitiveness of agricultural SMEs.*

## 1.5 Significance of the Study

Addressing the major challenge of access to finance by agricultural SMEs in Zambia specifically Petauke District was the main significance of this research. By exploring how access to microcredit affects revenue growth, the research offers valuable information for microfinance institutions, policymakers, and those involved in agriculture. The results can help create financial products tailored to the specific needs of agricultural SMEs, which could promote economic development in rural areas. Furthermore, the study adds to existing academic research by addressing gaps related to the effects of microcredit in specific locations, and it provides practical suggestions

for improving the financial resilience of SMEs. It also has the potential to support broader development goals like reducing poverty and ensuring food security.

### 1.6 Scope of the Study

This study focused on establishing the relationship between microcredit accessibility and revenue growth of agricultural SMEs in Petauke district of Zambia. The focus was on SMEs involved in agricultural activities like crop farming, livestock rearing, and agro-processing. The research was specifically set in Petauke District, which is significant due to its economy being heavily dependent on agriculture and the restricted access to formal financial services. Non-agricultural SMEs and businesses outside the district were not considered in this study. Data was gathered through surveys conducted with owners, managers, and representatives from microfinance institutions in the area. The main aspects examined included the level of access to microcredit, revenue performance indicators, and the difficulties encountered in using the available credit.

To determine the relationship between microcredit accessibility and revenue growth of agricultural SMEs in Petauke District, the study employed an Ordinary Least Squares (OLS) multiple regression model. This model allowed for the analysis of how microcredit accessibility, alongside challenges and strategies, influenced revenue growth while controlling for demographic factors such as age, gender, education, and years of operation. Additionally, Pearson’s correlation analysis was conducted to evaluate the strength and direction of associations between key study variables.

### 1.7 The Organization of the Report

This report is made up of six chapters. The study's history, the issue being addressed, the goals, the relevance, the scope, the constraints, and definitions of key terms are all covered in detail in Chapter 1. An extensive assessment of the body of research on microcredit access and revenue growth is provided in Chapter 2, which looks at both theoretical and empirical studies. Chapter 3 described the research methodology used, the study design, the population targeted, sampling techniques, data collection and data analysis. The findings of the data collection are presented in Chapter 4 using a variety of statistical techniques, tables, and graphs. The results are analyzed and discussed in Chapter 5 with a focus on potential treatments and implications within the

body of existing literature. The investigation is concluded in Chapter 6 with a summary of the main findings and helpful suggestions for interested parties.

### 1.8 Chapter Summary

A thorough summary of the setting and backdrop of the research is provided in this chapter. The study topic is described, the primary questions are raised, and the aims and objectives are outlined. Additionally, it discusses the study's importance before summarizing its breadth and limitations to clearly define the boundaries of the research.

# CHAPTER TWO: LITERATURE REVIEW

## 2.0 Introduction

This chapter sought to provide a comprehensive evaluation of the body of literature pertaining to the primary subject of the study. By analysing both theoretical and empirical research, it set the stage for understanding how access to microcredit influences revenue growth in agricultural small and medium-sized enterprises (SMEs). It pointed out gaps in the current research, provided a theoretical basis, and highlighted methods that helped shape this study. This chapter was organized into several important sections. The theoretical framework outlined the key theories relevant to the study, such as financial intermediation theory, social capital theory, and diffusion of innovation theory, establishing a foundational understanding of the study's variables and their connections.

## 2.1 Theoretical Framework

The theoretical framework provides a fundamental structure that guides an investigation. It offers a systematic method for analyzing the variables being studied, ensuring that the research is rooted in established academic principles (Grant & Osanloo, 2014). By clearly defining key concepts and their relationships, a theoretical framework helps in developing research questions and hypotheses. Furthermore, it highlights the study's significance within a larger academic context and bolsters its credibility by aligning it with recognized scholarly work.

In this study, the theoretical framework is crucial for understanding how access to microcredit affects the revenue growth of agricultural SMEs. It clarifies how various independent variables, like financial access, market access, and the adoption of technology, interact to influence the dependent variable of revenue growth. Additionally, the framework allows for the identification of existing gaps in the literature, ensuring that the research adds value to both theoretical knowledge and practical applications.

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### 2.1.1 Overview of Relevant Theories

Various theories shed light on the elements that impact revenue growth in small and medium-sized enterprises (SMEs) within the agricultural sector. Key among these are the financial intermediation theory, which highlights how financial institutions help overcome credit limitations; the social capital theory, which underscores the significance of networks and relationships in obtaining resources; and the diffusion of innovation theory, which looks at how new technologies are adopted. For this research, the most pertinent theories are the financial intermediation theory, social capital theory, and diffusion of innovation theory, since they together cover the financial, social, and technological aspects that contribute to revenue growth in agricultural SMEs.

### 2.2.2 Financial Intermediation Theory

The financial intermediation theory, first introduced by Gurley and Shaw in 1960 and later expanded by Diamond in 1984, emphasizes the pivotal role that financial intermediaries—like banks and microfinance institutions (MFIs)—play in connecting savers with borrowers. These intermediaries help by pooling financial resources and diversifying risks, which lowers transaction costs and addresses issues related to information disparity. This makes it easier for individuals and companies to access credit, including those who may typically be denied.

In this study's framework, financial intermediation theory highlights how access to microcredit serves as an independent factor that can impact revenue growth. Agricultural small and medium-sized enterprises (SMEs) often encounter challenges when trying to secure formal credit due to a lack of collateral, inconsistent income, and perceived agricultural risks, as noted by Cull and colleagues in 2009. MFIs provide solutions by offering customized financial products that cater to these specific challenges. For instance, they utilize group lending approaches that rely on social collateral, and they leverage digital platforms to minimize transaction costs and extend their services to more remote locations, as discussed by Aker and Mbiti in 2010.

This hypothesis is important because it clarifies how financial accessibility can stimulate economic activity. Microcredit contributes significantly to increased

productivity and revenue development by enabling agricultural SMEs to invest in manpower, infrastructure, and critical inputs. Additionally, the theory points out the need for effective credit delivery mechanisms and the importance of policies that improve the reach and efficiency of MFIs in rural communities.

### 2.3.3 Social Capital Theory

Social capital theory, initially articulated by Coleman in 1990 and further developed by Putnam in 1993, examines the importance of social networks, trust, and shared values in enabling collaborative efforts and access to resources. The theory posits that both individuals and organizations that are deeply connected within solid social networks are more adept at obtaining financial and non-financial resources. This is because trust and mutual understanding can lower transaction costs and encourage cooperation.

In this analysis, social capital theory serves to elucidate how market access acts as an independent factor that influences revenue growth. For small and medium-sized agricultural enterprises (SMEs), social networks are vital in creating connections to markets, ensuring fair pricing, and obtaining essential information on demand and supply trends (Ouma & Rambo, 2019). For instance, being part of farmer cooperatives allows SMEs to combine resources, negotiate more favorable conditions with buyers, and minimize marketing expenses. Moreover, the trust established between SMEs and financial institutions can ease access to credit, thereby empowering these enterprises to expand their operations.

The value of this theory lies in its capacity to shed light on how social dynamics affect economic results. By focusing on the significance of relationships and networks, social capital theory underscores the necessity of community-driven approaches like cooperatives and farmer groups in enhancing market access and promoting financial inclusivity for agricultural SMEs.

### 2.4.4 Diffusion of Innovation Theory

According to Rogers' 1962 diffusion of innovation theory, new concepts, methods, or technology can gradually proliferate within a community. It draws attention to elements that affect how quickly these innovations are embraced, such as their relative benefits, suitability for integration with current procedures, intricacy, trialability, and observability. This theory is especially useful for understanding how agricultural technology is adopted, which is an independent factor impacting revenue growth. Agricultural small and medium-sized enterprises (SMEs) adopt technologies such as improved irrigation systems, mechanization, and better crop varieties to boost productivity and stay competitive. However, the speed at which they embrace these technologies varies based on perceived benefits, financial challenges, and access to technical support (Hermes & Lensink, 2011). For instance, SMEs that recognize the clear advantages of high-yield seeds are more inclined to invest in them, especially if they have access to funding and training.

The value of the diffusion of innovation theory lies in its capacity to clarify the obstacles and facilitators affecting technology adoption. By understanding these elements, policymakers and practitioners can develop strategies aimed at speeding up the adoption of new innovations. This can ultimately lead to increased productivity and revenue growth for agricultural SMEs.

## 2.2 Revenue Growth Among Agricultural SMEs

### 2.2.1 Revenue Growth

Revenue growth refers to how much money a business earns over a specific period. It's an important measure of how well a company is doing and shows its ability to expand, reach new customers, and maintain financial health. For small and medium agricultural businesses, this growth isn't just about profits; it also reflects their productivity, flexibility in adapting to market changes, and their resilience against economic and environmental challenges.

Agricultural SMEs often face unpredictable conditions like changing market prices, climate issues, and limited resources, so tracking revenue growth is crucial for their success and long-term viability. This growth is influenced by how well these

businesses can implement efficient farming methods, secure financing and supplies, and effectively sell their products. Access to high-quality seeds and fertilizer, for instance, can lead to better agricultural yields, increasing their income. Additionally, investing in modern farming equipment can help reduce labor costs and boost productivity, which supports ongoing growth.

Furthermore, revenue growth is vital for these businesses as it allows them to reinvest in their operations, embrace new technologies, and enhance living conditions in rural areas. In order to support the success of agricultural SMEs and promote economic development in rural areas, it is crucial to comprehend the factors that influence revenue growth. Various factors influence revenue growth in agricultural SMEs, including access to microcredit, availability of markets, use of agricultural technology, and training programs. These elements work together in different ways to affect how well these businesses perform financially.

### 2.2.2 Microcredit Accessibility.

Microcredit accessibility refers to how easily agricultural small and medium-sized enterprises (SMEs) can secure small loans to support their operations. This access is crucial for overcoming cash flow issues and allowing investments in necessary resources like inputs, equipment, and labor. Microfinance institutions (MFIs) are essential in helping SMEs that might be sidelined by traditional banks due to high collateral demands or insufficient credit histories (Cull et al., 2009).

Research indicates that affordable credit can greatly boost revenue growth for agricultural SMEs by allowing for timely investment in inputs and the adoption of new technologies (Karlan & Zinman, 2010). However, challenges such as high-interest rates, limited access in rural areas, and a lack of financial products designed for specific needs often hinder the effective use of microcredit (Beck & Demirgüç-Kunt, 2014). To overcome these challenges, innovative approaches like mobile banking and group lending can enhance access and lower transaction costs (Aker & Mbiti, 2010).

### 2.2.3 Market Access.

Market access is all about how agricultural small and medium-sized enterprises (SMEs) reach buyers and sell their products, whether locally, regionally, or

internationally. It's crucial for boosting revenue, as better access means these businesses can sell more, negotiate better prices, and reduce losses after harvest. Key factors that affect market access include the state of transportation infrastructure, the availability of market information, and the role of intermediaries or cooperatives (World Bank, 2020).

However, many agricultural SMEs struggle with market access due to poor infrastructure, high transportation costs, and unpredictable prices. Research by Zeller and Sharma (2000) highlights the need to strengthen market connections to help ensure fair prices and reliable demand for farm products. Digital platforms and e-commerce have come to the forefront as powerful tools to improve market access by linking farmers directly with buyers and offering real-time price data (Aker & Mbiti, 2010). However, for these solutions to work, there are challenges that need to be overcome, such as ensuring digital literacy and improving internet connectivity in rural areas.

### 2.2.4 Adoption of Agricultural Technology.

Utilizing contemporary agricultural technologies, such as irrigation, mechanization, and improved crop types, has a significant impact on small and medium-sized farms' (SMEs') economic output and profitability. When farmers adopt these technologies, they can use resources more efficiently, boost their yields, and improve the quality of their products, leading to increased revenue (Hermes & Lensink, 2011). For instance, mechanized farming helps lower labor costs and improve efficiency, while irrigation systems allow for continuous farming throughout the year, reducing the impact of seasonal income fluctuations.

However, several barriers hinder the adoption of agricultural technology. High costs, insufficient technical knowledge, and limited access to financing are significant challenges. Njenga and Mwangi (2020) point out that many agricultural SMEs lack the financial resources needed to invest in advanced technologies, highlighting the need to combine credit services with technical training. Additionally, government subsidies and collaborations with private sector organizations can be pivotal in encouraging technology adoption among SMEs.

### 2.2.5 Capacity-Building Interventions.

Capacity-building initiatives, including training sessions, advisory support, and mentorship, play a vital role in enhancing the management and operational skills of agricultural small and medium-sized enterprises (SMEs). These initiatives help SME owners gain the knowledge and skills necessary for efficient resource management, improving production methods, and effectively reaching markets (Njuki & Sanginga, 2019). For example, financial literacy training empowers farmers to make wise decisions regarding the use of credit and investment, ultimately increasing their profits.

Research indicates that capacity-building programs positively influence the performance and revenue growth of SMEs. According to Osei-Assibey (2020), SMEs that engaged in training programs saw enhancements in productivity and higher profit levels compared to those lacking such support. Nonetheless, the success of capacity-building efforts largely relies on their design and implementation. It is crucial to customize these programs to meet the unique needs and challenges faced by agricultural SMEs to maximize their effectiveness (Phiri & Mwansa, 2019).

## 2.3 Empirical Review

The empirical review brought together findings from literature on a global scale, within Sub-Saharan Africa, and specifically in Zambia. It discussed major themes like the extent of microcredit access, its effect on revenue growth, challenges faced by agricultural SMEs, and methods to improve the effectiveness of microcredit programs. This section also assessed the methodologies used in previous studies, noting their strengths and weaknesses and how applicable they are to the current research.

The foundation of academic research is built on empirical literature, which offers insights backed by evidence and a contextual framework for the topic under investigation. This section will review earlier empirical research that investigates the relationship between revenue growth in agricultural small and medium-sized businesses (SMEs) and access to microcredit. Each specific aim will be systematically explored, looking at research from around the world, Sub-Saharan Africa, and Zambia to identify methodologies, results, and areas where knowledge is lacking.

This subsection explores the level of microcredit accessibility among agricultural SMEs, analysing studies from global, Sub-Saharan Africa, and Zambian contexts to provide a comprehensive perspective.

### 2.3.1. Global Literature.

Access to microcredit for small and medium-sized enterprises (SMEs) has become a key aspect of financial inclusion efforts worldwide. Research conducted by Armendáriz and Morduch (2010) and Karlan and Morduch (2018) thoroughly examines the various elements that affect the availability of microcredit, including the influence of microfinance institutions (MFIs), the regulatory landscape, and advancements in digital technology. In their 2010 study, Armendáriz and Morduch used a mixed-methods strategy that combined survey data with qualitative interviews to explore how institutional factors impact the distribution of credit. Although their approach provided a well-rounded understanding, the reliance on aggregate data limited the specificity of their insights. In contrast, Banerjee et al. (2015) utilized randomized controlled trials (RCTs) to assess the outcomes of microcredit initiatives. The RCT method is praised for its reliability and ability to determine causal relationships, yet it faces criticism due to its high costs and difficulties in applying findings across different contexts. The research indicates that access to global microcredit is often obstructed by high interest rates and inefficiencies within MFIs, resulting in limited services for underserved populations.

One notable gap in the literature is the lack of attention given to sector-specific issues, particularly in agriculture. While there is recognition of the importance of microcredit for SMEs, there is a scarcity of discussion regarding the distinct barriers that agricultural businesses encounter when seeking financial services.

In examining the Relationship Between Microcredit Accessibility and Revenue Performance of Agricultural SMEs the research found numerous studies worldwide. Karlan and Zinman (2010) conducted research in the Philippines using an experimental approach. Their study implemented a randomized control trial (RCT) to assess the effects of access to microcredit on the income of small businesses. Their results indicated a modest yet statistically significant increase in revenue for businesses that had access to microcredit. Although the study's rigorous methodology

established a causal relationship, the high costs and specific context of RCTs posed challenges for broader application in different regions.

In a similar vein, Ghosh and Van Tassel (2021) examined the effect of microcredit on profitability by analyzing panel data from 30 countries. They utilized a fixed-effects regression model to account for differences between firms that were not directly observed. Their findings showed that businesses with access to credit saw an average annual revenue growth of 15%. However, the study also pointed out that this growth diminished when credit was not paired with capacity-building initiatives.

A notable gap in the existing literature is the tendency to generalize findings across different sectors. While the research generally supports a positive correlation between microcredit and revenue growth, there has been limited attention given to agriculture-specific businesses, which encounter unique challenges and risks.

Numerous studies around the world have pointed out the difficulties small and medium-sized enterprises (SMEs) encounter when trying to access microcredit. Morduch and Cull (2018) highlighted that high-interest rates are a major obstacle to obtaining microcredit in developing countries. Their research, which compared cases in Latin America and Asia, showed that the elevated operational costs faced by microfinance institutions (MFIs) often result in higher interest rates for clients. While their findings offered valuable insights across different regions, they did not go into detail about specific barriers encountered in the agricultural sector.

Furthermore, Beck and Demirgüç-Kunt (2014) stressed that collateral requirements significantly restrict credit access for SMEs. Their research, which drew from a World Bank survey involving over 10,000 companies, indicated that agricultural SMEs are particularly hampered by strict collateral demands due to their lack of fixed assets. While this large-scale survey provided robust statistical data, it overlooked more subtle difficulties, such as the seasonal nature of income in agriculture.

Overall, existing global literature reveals considerable gaps in understanding the cultural and institutional challenges faced by rural agricultural businesses. Although general problems for SMEs have been extensively documented, there has been less

focus on the unique constraints specific to the agricultural sector and their broader implications.

Around the world, enhancing the impact of microcredit on revenue growth typically involves combining financial services with training programs. In a study by Karlan et al. (2016), a randomized controlled trial in India assessed the benefits of merging microcredit with business training specifically for small and medium-sized agricultural enterprises (SMEs). The findings showed that businesses that received both credit and training experienced a 30% boost in revenue compared to those who only received the credit. Although the RCT offered strong evidence for causal relationships, its high costs and complexity made it difficult to scale.

Armendáriz and Morduch (2018) suggested using digital platforms to improve access to credit and its effective use. Their meta-analysis of digital microfinance programs indicated notable reductions in operational expenses and expanded outreach. However, they also pointed out the challenges posed by low levels of digital literacy and technology adoption in rural areas, which could hinder its overall effectiveness.

Though the global research provides useful information, it often fails to consider the necessity for tailored approaches that cater to the specific socio-economic and cultural conditions faced by agricultural SMEs.

### 2.3.2. Regional Literature

In Sub-Saharan Africa, access to microcredit is closely linked to various socio-economic and institutional elements. Research by Aker and Mbiti (2010) and Hermes and Lensink (2011) highlights the significant impact of digital microfinance platforms in improving credit availability for rural farmers. Aker and Mbiti (2010) used a case study approach to investigate how mobile money enhances access to credit. While this method effectively illustrated their findings, it faced limitations in its broader applicability due to its specific geographic scope.

On the other hand, Hermes and Lensink (2011) performed a meta-analysis examining microfinance initiatives across various African nations. Their research pointed out that although digital platforms can lower transaction costs, challenges like inadequate digital literacy and poor network coverage still hinder progress. Additionally, the study

revealed that agricultural small and medium enterprises (SMEs) encounter distinct issues, such as income seasonality and susceptibility to climate-related shocks, which traditional microcredit solutions often fail to tackle effectively.

One notable gap identified in the literature concerning Sub-Saharan Africa is the insufficient understanding of regional differences in microcredit access. While some studies shed light on the disparities between rural and urban areas, they frequently neglect the intra-regional variations that influence credit distribution.

### 2.3.3 Sub-Saharan Africa Literature.

In Sub-Saharan Africa, studies examining the effects of microcredit on revenue growth have highlighted agriculture as a key sector. One study that examined this association was carried out in Kenya by Duvendack et al. (2019), who employed propensity score matching to take selection bias into consideration. They found that farmers who had access to microcredit achieved revenues that were 20% higher compared to those without such access. While this methodology effectively addressed biases common in observational research, the use of cross-sectional data limited the ability to draw conclusions about long-term impacts.

Similarly, Osei-Assibey (2020) carried out a study in Ghana that employed a mixed-methods strategy to assess microfinance's role in boosting the profitability of small and medium-sized enterprises (SMEs). By combining surveys with case studies, the research showed that timely access to credit could significantly enhance revenue for agricultural SMEs. But study also highlighted that poor financial literacy made it more difficult to use credit effectively, highlighting a significant area that could use better.

A notable gap in the existing literature from Sub-Saharan Africa is the lack of comparative studies. Although individual country analyses contribute valuable knowledge, there is a scarcity of comparative research across various agricultural systems, which could provide deeper insights into regional dynamics.

In Sub-Saharan Africa, research highlights how socio-economic and institutional elements limit agricultural small and medium enterprises' (SMEs) access to microcredit. A mixed-methods study by Ouma and Rambo (2019) in Uganda found that a lack of financial literacy and poor credit history are significant obstacles for rural

farmers. They conducted focus groups and surveys to collect a large amount of qualitative and quantitative data; however, the small sample size restricted the study's ability to apply its findings broadly to various agricultural systems.

In another study conducted by Njenga and Mwangi (2020) in Kenya, institutional inefficiencies, such as slow loan approval processes, were identified as major hurdles. Their case study approach revealed that these delays often hinder farmers from obtaining credit during essential planting periods, negatively impacting productivity. Although this method provided detailed context, its findings are less applicable to different agricultural settings. Furthermore, the literature on Sub-Saharan Africa points to policy issues, including weak regulatory frameworks for microfinance institutions (MFIs) and inadequate government support. Nonetheless, there are still gaps in understanding how these barriers intersect with environmental issues, like climate variability, which can significantly influence agricultural SMEs.

In Sub-Saharan Africa, improving the effectiveness of microcredit often focuses on boosting financial literacy and creating market connections. A longitudinal study by Osei-Assibey et al. (2020) in Ghana revealed that training in financial literacy led to better credit usage and increased revenue for small agricultural businesses. This study's long-term approach provided valuable insights into how sustainable such interventions can be, although it encountered issues with participant dropout.

Njuki and Sanginga (2019) examined how farmer cooperatives in Tanzania help with accessing and using microcredit. Their mixed-methods research indicated that these cooperatives empower members by increasing their negotiating power and lowering transaction costs, which in turn improves revenue for small enterprises. However, the study highlighted challenges in areas where such cooperative structures are not well established.

The literature in the region emphasizes the need to combine financial services with agricultural support programs to enhance productivity and income. Nevertheless, there are still significant gaps in understanding how these strategies can be scaled across various agricultural systems and how they affect the long-term growth of small and medium enterprises.

### 2.3.4 Local Literature.

In Zambia, the accessibility of microcredit for small and medium-sized agricultural enterprises (SMEs) has become an important subject of research. Reports from the World Bank (2020) and the Food and Agriculture Organization (FAO) (2021) emphasize the significant role that microfinance institutions (MFIs) play in addressing the financing challenges faced by rural businesses. The World Bank's 2020 research utilized quantitative surveys to investigate how well credit reaches Zambian SMEs. Though this approach offered reliable statistical data, it fell short in providing an in-depth qualitative analysis to understand the root causes of accessibility challenges.

On the other hand, a study conducted by Phiri and Chilufya (2019) employed a mixed-methods strategy to identify the obstacles to obtaining microcredit in Zambia, such as stringent collateral demands and insufficient coverage in rural areas. By incorporating focus group discussions, this study delivered valuable contextual insights, although it may have also included some subjective biases.

Zambian research highlights several key challenges, including the scarcity of financial services in rural areas, inadequate financial literacy among the population, and the high operational costs faced by MFIs. However, there remains a significant lack of research focusing specifically on how these barriers affect agricultural SMEs, pointing to the necessity for more targeted studies in this area.

In Zambia, there has been increasing interest in how microcredit affects the revenue growth of agricultural small and medium-sized enterprises (SMEs). A study by Chilufya and Chileshe in 2021 utilized a longitudinal approach in Southern Province to explore this relationship. They discovered a positive link between access to microcredit and revenue increases, with SMEs that took out loans experiencing an average growth of 25%. The longitudinal design of their research offered valuable insights into the long-term benefits of credit; however, they encountered issues with data loss over time.

Another significant study conducted by Banda and Phiri in 2020 used a qualitative method to assess the effects of microcredit on smallholder farmers in Eastern Zambia. Through detailed interviews, they found that microcredit helped farmers make timely purchases of inputs, thereby improving productivity and revenue. Nonetheless, they

also pointed out challenges with repayment, particularly due to fluctuations in commodity prices that often reduced profitability.

The existing literature from Zambia highlights the important role of microcredit in enhancing SME revenues but also emphasizes the need for additional support services, such as improved market access and mechanisms to stabilize prices. A noticeable gap is the absence of region-specific research, particularly in Petauke District, where local socio-economic conditions could affect the relationship between credit and revenue.

In Zambia, the lack of financial services in rural areas and the high costs associated with transactions are often mentioned as significant obstacles to accessing microcredit. A survey conducted by Banda et al. (2020) on small and medium-sized enterprises (SMEs) in these rural regions highlighted that distance from financial institutions is a major limitation. While the study provided strong statistical evidence through a quantitative analysis, it did not capture the personal experiences of SME owners. In a different study, Phiri and Mwansa (2019) examined the difficulties encountered by female-led agricultural SMEs in securing credit. Through in-depth interviews, this research uncovered that gender biases in financial institutions worsen access to credit for these entrepreneurs. Although this qualitative approach provided important contextual information, it was constrained by its focus on a specific group of individuals.

The existing literature in Zambia points to socio-cultural factors, such as low levels of financial literacy and a general mistrust of formal financial systems, as contributing to low credit usage. Nevertheless, little is known about how these problems connect to more general economic circumstances, such as inflation and exchange rate swings, and how they affect the availability of credit.

In Zambia, efforts to improve the effectiveness of microcredit on increasing revenue have centred around enhancing financial infrastructure in rural areas and creating customized financial products. Banda and Phiri (2020) assessed the impact of mobile banking solutions in the Eastern Province using a case study approach. Their findings indicated that mobile platforms significantly lowered transaction fees and increased

access to credit for farmers in rural regions. Nonetheless, they pointed out issues related to network availability and the need for greater digital literacy.

Chanda et al. (2021) examined how public-private partnerships (PPPs) could boost agricultural financing. By employing a mixed-methods approach, they discovered that PPPs improved access to credit and provided technical assistance, contributing to better revenue growth for small and medium-sized enterprises (SMEs). However, they raised concerns regarding the sustainability of this model, as it heavily relies on governmental backing, especially in areas with limited resources.
The literature in Zambia suggests there is considerable potential to harness digital technologies and collaborations to maximize the impact of microcredit. Nevertheless, there are still significant gaps in researching localized strategies that address the specific challenges and opportunities present in districts such as Petauke.

### 2.3.5 Critique of the Literature

Studies conducted globally, such as those by Karlan and Zinman (2010), highlight the potential of microcredit to improve SME performance, especially in developing nations. However, these studies often generalize their results across various sectors, neglecting the specific challenges that agricultural SMEs encounter, including seasonal income fluctuations and susceptibility to climate change (Beck & Demirgüç-Kunt, 2014). Furthermore, while methods like randomized controlled trials (RCTs) provide strong causal evidence, their complexity and expense can restrict their use in areas with limited resources (Ghosh & Van Tassel, 2021).

In the context of Sub-Saharan Africa, research points out that socio-economic and institutional factors are major barriers to accessing microcredit. Works such as Ouma and Rambo (2019) stress the significance of financial literacy and the efficiency of institutions in improving credit use. However, the relevance of these findings is limited by the lack of comparison studies across various agricultural contexts in the region. While employing mixed-methods approaches can yield rich contextual information, they often lack the statistical strength needed to inform broader policy decisions (Njenga & Mwangi, 2020).

Research conducted in Zambia offers unique perspectives on problems such as the dearth of financial awareness and the restricted financial infrastructure in rural areas. For instance, studies by Banda et al. (2020) and Chilufya and Chileshe (2021) highlight how digital financial solutions can lower transaction costs and enhance credit access for rural SMEs. Nevertheless, these studies frequently neglect the long-term viability and scalability of the suggested solutions, such as mobile banking. Moreover, while qualitative analyses can offer in-depth understanding, the lack of solid quantitative data in some cases restricts their ability to guide broader policy actions (Phiri & Mwansa, 2019).

Despite the abundance of research on microcredit, significant gaps remain in understanding its influence on revenue growth for agricultural SMEs, particularly in Petauke Zambia. Global studies often fail to consider localized socio-economic and environmental factors, limiting their applicability to the Zambian context. Additionally, there is a lack of comparative analyses between different regions within Sub-Saharan Africa, particularly Zambia, which overlooks regional disparities in microcredit access, loan terms, and repayment patterns. Furthermore, local research's noticeable gap is the absence of region-specific research, particularly in Petauke District, where local socio-economic conditions could affect the relationship between credit and revenue. Additionally, there is insufficient exploration of how microcredit accessibility directly influences revenue growth for agricultural SMEs, with few studies examining the specific barriers faced by SMEs in rural Zambian contexts. Finally, limited research has been done on how different levels of microcredit accessibility (e.g., loan size, interest rates, repayment terms) affect the growth potential of agricultural SMEs, particularly in rural areas. Addressing these gaps through context-specific and methodologically diverse research will be essential for developing effective interventions that support agricultural SMEs in Zambia and similar regions.

### 2.4 Conceptual Framework

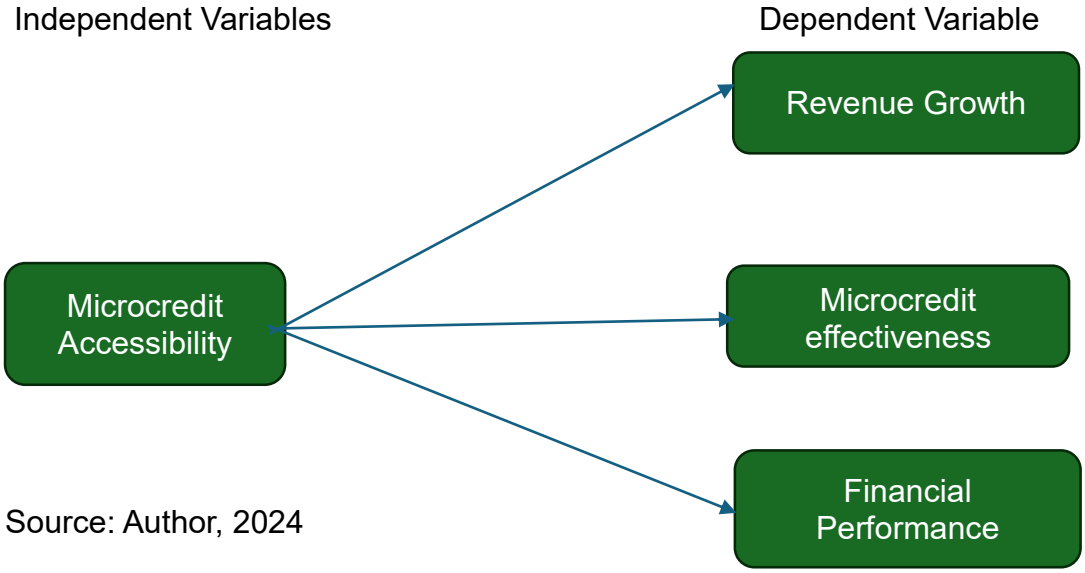
A conceptual framework is an orderly outline that highlights the connections among the several factors being studied. It gives a clear method for evaluating and interpreting study findings by elucidating the functions of independent variables, dependent variables, and potential linkages (Grant & Osanloo, 2014). For this research, the framework focused on understanding how factors such as access to microcredit, opportunities in the market, the use of agricultural technology, and

initiatives aimed at building capacity impact the revenue growth of agricultural small and medium enterprises (SMEs).

This framework demonstrates that revenue growth results from multiple influencing factors rather than a single element. Access to microcredit allows SMEs to invest in essential inputs, technology, and manpower; access to markets broadens sales opportunities; adopting technology boosts productivity; and capacity-building initiatives enhance operational effectiveness and decision-making. Collectively, these elements play a significant role in ensuring the financial success and sustainability of agricultural SMEs.

The conceptual framework demonstrated how an independent variable (Microcredit accessibility) affects dependent variables (Revenue growth, Microcredit effectiveness, Financial Performance)

**Figure 2.1 below shows the conceptual framework of the Study**




Source: Author, 2024

## 2.6 Summary

This chapter reviewed the theoretical and empirical literature that served as the foundation for this study. It started with an exploration of key theories such as financial intermediation, social capital, and the diffusion of innovation, which provide context for examining the accessibility of microcredit and its impact on revenue growth. The empirical section consolidated findings from various levels—global, regional, and

local—highlighting the challenges and opportunities that agricultural small and medium enterprises (SMEs) encounter in securing and leveraging credit.

Additionally, the chapter outlined a conceptual framework that depicts both visually and textually how the independent variables connect to the dependent variable, spotlighting the various factors that affect revenue growth. Lastly, the critique of existing literature pointed out critical gaps, particularly the lack of localized research in Zambia and the need for a better understanding of how financial, social, and technological elements interact to influence SME performance. These observations underscore the necessity for this study and inform its methods and objectives in the following chapters.

# CHAPTER THREE: RESEARCH METHODOLOGY

## 3.0 Introduction

The chapter focused on the methods and approaches that were used. This research focused on examining how access to microcredit influences revenue growth for agricultural small and medium-sized enterprises (SMEs) in the Petauke District of Zambia. The specific objectives were to evaluate the level of microcredit access, investigate the link between microcredit and revenue performance, identify the challenges faced in obtaining and using microcredit, and suggest strategies to enhance its effectiveness.

To accomplish these goals, the methodology was developed to closely align with the research objectives, guiding the processes of data collection, analysis, and interpretation. Using a descriptive survey methodology, a quantitative technique was chosen in order to methodically investigate the connections among various factors. The study comprised suitable data collection tools, careful sample procedures, and ethical considerations to ensure the validity and reliability of the research.

## 3.1 Research Approach

The research methodology outlines the entire strategy and methods used to address the research problem, including the theoretical foundations, data collection, analysis, and interpretation. As noted by Creswell (2014), research methods can be divided into three main categories: qualitative, quantitative, and mixed methods. The choice of a suitable approach relies on factors such as the nature of the research issue, the goals of the study, the researcher's level of expertise, and the target audience.

In this particular study, a quantitative approach was selected. This method is based on a positivist philosophy, which highlights the importance of objectivity, measurement, and statistical analysis. The focus here was to examine how access to microcredit affects the revenue growth of agricultural small and medium-sized enterprises (SMEs) in the Petauke District, necessitating the evaluation of measurable variables and hypothesis testing. Using numerical data and statistical methodologies, quantitative approaches are especially useful for investigating correlations between variables such as revenue growth, market accessibility, and microcredit availability (Creswell & Creswell, 2018).

Additionally, the quantitative approach promotes rigor, replicability, and reliability, which helps to produce findings that can be generalized. It supports extensive data collection, the statistical evaluation of hypotheses, and the identification of trends and patterns, making it ideal for analyzing the financial performance and issues faced by SMEs (Babbie, 2020). This approach also makes it possible to analyze data in a methodical manner, guaranteeing that the study achieves its goals in a methodical and objective manner.

### 3.2 Research Design

The research design outlined the methods for collecting and evaluating data, offering a comprehensive framework for conducting the study. A descriptive, non-experimental survey approach was chosen in this case due to the quantitative research framework. In this type of design is particularly suitable for examining the current landscape of microcredit access and its influence on revenue growth among agricultural SMEs, as it does not require the manipulation of variables or the use of experimental controls (Groves et al., 2011).

This approach allowed the researcher to obtain data from a substantial number of SME owners and managers, offering valuable insights into their interactions with microcredit, market access, and technology use. By employing structured surveys, standardized data were collected, which can be analyzed statistically to uncover relationships between the independent variables (such as microcredit access and market reach) and the dependent variable (revenue growth) (Bryman, 2016).

The decision to use a survey design stemmed from its capacity to efficiently gather large amounts of data in a cost-effective manner, making it particularly beneficial for research involving widely dispersed populations, like SMEs in rural areas such as Petauke. Furthermore, this design was in line with the study’s goals of uncovering trends, correlations, and possible causal relationships while ensuring external validity (Fowler, 2013). This methodical approach ensured that data collection and analysis were systematic, providing a solid foundation for developing conclusions and making data-driven recommendations.

### 3.3 Study Population

According to Creswell (2014), the total group of people or things from which a sample will be drawn and to which the findings of the study will be applied is known as the study population. Agricultural small and medium-sized businesses (SMEs) in Zambia's Petauke District make up the population of this study. These agricultural SMEs were chosen due to their vital role in supporting the local economy, creating jobs, and ensuring food security, despite facing specific challenges in accessing and using financial services like microcredit (FAO, 2021).

The target population comprises all small and medium-sized businesses involved in activities such as crop production, livestock farming, and agro-processing within Petauke District. This group was selected as they are the primary recipients of microcredit programs, and their financial performance is closely linked to their access to credit. According to official statistics from the Ministry of Small and Medium Enterprise Development and local agricultural authorities, there are around 500 agricultural SMEs in the area (CSO, 2023). This clearly defined population is suitable for the study, as it includes businesses likely to encounter challenges in obtaining credit and achieving revenue growth.

The target population of small and medium-sized enterprises (SMEs) involved in crop production, livestock farming, and agro-processing in Petauke District is justified due to its direct relevance to the research objective of investigating the impact of microcredit accessibility on revenue growth. By focusing on agricultural SMEs, the study can effectively examine the relationship between microcredit accessibility and revenue growth, which is critical for the development and sustainability of these businesses.

Petauke District is an ideal location for this study due to its high concentration of agricultural activities, making it a representative sample of agricultural SMEs in Zambia. The district's agricultural sector is characterized by a mix of smallholder farmers, medium-scale commercial farmers, and agro-processors, providing a diverse range of SMEs to study. Furthermore, the district's agricultural sector faces challenges

such as limited access to finance, markets, and technology, making it an appropriate context to investigate the impact of microcredit accessibility.

Focusing on a specific district enables more manageable data collection and easier access to respondents. The study can leverage existing networks and relationships with local agricultural organizations, cooperatives, and extension services to access the target population. Additionally, the study's findings can have immediate and practical implications for the local agricultural sector, contributing to the development of evidence-based policies and interventions.

The findings of this study can have important policy and practical implications for agricultural development in Petauke District and similar areas. By understanding the impact of microcredit accessibility on revenue growth, policymakers and practitioners can develop targeted interventions to support the growth and development of agricultural SMEs. Such interventions may include increasing access to microcredit, providing training and capacity-building programs, and improving market access and linkages. Ultimately, the study's findings can contribute to the improvement of livelihoods and the local economy, aligning with the broader goals of agricultural development and poverty reduction.

### 3.4 Sample Size

The Yamane formula (Yamane, 1967), which is frequently used in social science research to determine sample size from a finite population, was used to compute the sample size. Here's the formula:

$$n = \frac{N}{1 + Ne^2}$$

where:

- N represents the population size (500),
- e denotes the margin of error, set at 0.05 for a 95% confidence level.

Thus, applying the formula yields:

$$n = \frac{500}{1 + 500 \times 0.05^2} \approx 222$$

Therefore, 222 SMEs was the bare minimum sample size needed. The final sample size will be 245 SMEs after a 10% increase to account for possible non-responses or incomplete data. This adjustment ensures that the study achieves its desired statistical power and accuracy.

By using Yamane's formula, the study ensures that the sample is representative of the target population, thereby enhancing the validity and reliability of the findings (Israel, 1992).

### 3.5 Sampling Techniques

The research utilized a stratified random sampling method. This technique involved categorizing the population of agricultural small and medium enterprises (SMEs) in Petauke District into distinct groups based on common traits, such as the type of agricultural activity (like crop farming, livestock production, or agro-processing). Using stratified sampling helped subgrouping the sample to get adequate representation, for accurate results (Bryman, 2016).

The initial step in the sampling process was to create a sampling frame, which included a detailed list of registered agricultural SMEs in the district, sourced from the Ministry of Small and Medium Enterprise Development. This sampling frame helped reduce selection bias by giving all eligible SMEs an equal opportunity to be selected (Groves et al., 2011). Individual SMEs were then selected using simple random sampling within each stratum that had been determined, guaranteeing that the selection process was impartial and random.

Employing stratified random sampling was suitable for this research as the agricultural SMEs in Petauke display a range of differences in size, type of activity, and market orientation. This method allowed the study to reflect the diversity within the population, providing valuable insights into how access to microcredit impacts revenue growth across various subgroups (Babbie, 2020). Furthermore, this approach reduces sampling errors, which boosts the study's internal validity.

Potential issues such as non-responses and incomplete data were anticipated, and measures were implemented to address these challenges. Follow-up reminders were

sent to non-respondents, and assistance was offered to those with incomplete questionnaires to encourage completion. Additionally, if certain SMEs opted out of the study, other similar enterprises from the same group were selected to ensure the sample remained representative (Fowler, 2013).

### 3.6 Data Collection/Instrumentation

To fully grasp the subject, the study included both new data gathering and analysis of previously collected data. Structured questionnaires were used to collect new data from owners and managers of small to medium-sized agricultural businesses. Reports, scholarly articles, and government publications about microcredit and SMEs' performance provided the existing data. Questionnaires were chosen as the primary data collecting instrument because they make it possible to obtain consistent data from a large number of respondents in an organized manner. The questionnaire featured closed-ended questions and Likert-scale items aimed at gathering details on access to microcredit, market opportunities, technology integration, training programs, and revenue increase. This structure promotes consistent answers, making it easier to conduct statistical analysis (Groves et al., 2011).

To improve both the accuracy and dependability of the questionnaire, a preliminary test was carried out with a small group of SMEs that were not part of the primary study area. The feedback collected from this test helped refine the questions for better clarity and relevance (Bryman, 2016). The questionnaires were then administered through face-to-face interviews to assist SMEs located in remote regions and those with limited internet connectivity.

Existing data sources were analyzed to help contextualize and reinforce the conclusions drawn from the new data. These sources included documents from the Food and Agriculture Organization (FAO), the World Bank, and Zambia’s Ministry of Agriculture, along with peer-reviewed research articles. The existing data provided valuable perspectives on trends in agricultural financing and SME performance, complementing the findings from the new data collection. Throughout the data collection process, ethical considerations were prioritized.

### 3.7 Data Analysis

To achieve the research objectives, data analysis was conducted systematically to assess and analyze the gathered data (Bryman, 2016). This study utilized quantitative data analysis methods, focusing on measurable factors such as access to microcredit and growth in revenue. The analysis was divided into two main phases: descriptive analysis and inferential analysis.

In the descriptive analysis, statistics were employed to provide a summary of the key variables and the features of the data. Key measures such as mean, median, standard deviation, and percentages were calculated to characterize microcredit access levels, trends in revenue growth, and other relevant variables (Fowler, 2013). For example, descriptive statistics were used to determine the average revenue growth rates reported by participants and the proportion of SMEs that accessed microcredit. This method helps identify patterns, variations, and distributions within the dataset, offering initial insights into how microcredit access is related to SME performance.

The inferential analysis was conducted to test hypotheses and explore relationships between the independent and dependent variables. Inferential statistics allow for drawing conclusions about the population based on sample data. Several statistical models and tests were employed to investigate the relationships between microcredit access and revenue growth.

Multiple Regression Analysis model: A multiple regression model was used to examine the relationship between independent variables (such as microcredit access, market conditions, and capacity-building factors) and the dependent variable (revenue growth). The model was specified as:

$$\text{RevenueGrowth} = \beta_0 + \beta_1(\text{MicrocreditAccess}) + \beta_2(\text{Challenges ie High interest rates}) + \beta_3(\text{strategies ie financial literacy}) + \epsilon$$

In this model:

i. Revenue Growth represents the percentage change in revenue for each SME.

ii. Microcredit Access, high interest rate and financial literacy are independent variables.

iii. $\beta_0$ is the intercept, and $\beta_1$, $\beta_2$, and $\beta_3$ are the coefficients of the independent variables.

iv. $\epsilon$ is the error term.

Multiple regression analysis is suitable for understanding the impact of multiple predictors on revenue growth and provides an overall picture of how microcredit access and related factors affect SME performance (Bryman, 2016).

Correlation Analysis model: To assess the direction and strength of the relationship between individual pairs of variables, Pearson correlation analysis was conducted. This analysis examined the correlation between access to microcredit and revenue growth to determine whether greater access to microcredit is associated with increased revenue. The formula for Pearson's correlation coefficient (r) is:

$$r = \frac{\sum(X_i - \bar{X})(y_i - \bar{y})}{\sqrt{\sum(X - X)^2 \Sigma(y - Y)^2}}$$

where X and Y are the two variables being correlated.

Pearson correlation is appropriate for measuring the strength and direction of a linear relationship between two continuous variables (Groves et al., 2011).

The Statistical Package for the Social Sciences (SPSS) version 26 was used to conduct the analysis. SPSS facilitates effective data management, hypothesis testing, and visualization of findings through charts and graphs (Groves et al., 2011). The results of the analysis were presented in tables and figures for clarity and ease of understanding.

To validate the analysis, the assumptions for each statistical method were checked. For instance, normality, linearity, and homoscedasticity were confirmed before conducting the regression analysis (Creswell, 2014). This thorough process improves the reliability of the conclusions drawn from the data.

### 3.8 Ethical Considerations

In order to conduct research that respects moral principles and protects the rights and dignity of individuals engaged, ethical considerations are essential. According to the rules established by the University of Lusaka Ethics Committee, this study followed stringent ethical norms at all times.

Participants received comprehensive details regarding the study's goals, objectives, and methodologies. An understandable permission form was made and distributed to all participants to guarantee informed participation, enabling them to willingly participate after fully comprehending the study (WHO, 1992). The consent form was written in simple language for easy understanding and translations in local language were done were necessary. To protect confidentiality, collected data was securely stored, and participant identities were anonymized.

The research design was meticulously crafted to reduce any potential risks to participants, including psychological, social, or financial challenges. Sensitive topics were approached with neutral phrasing to minimize discomfort, and participants were made aware that they could withdraw from the study at any point without facing any repercussions (Groves et al., 2011). Additional ethical safeguards were implemented to ensure that participation would not put any SME at a disadvantage.
The research complied with all relevant national and institutional ethical standards, meeting legal and professional requirements. Ethical considerations also encompassed the respect for intellectual property through proper citation of all utilized sources. The integrity and credibility of the research process was maintained, while safeguarding the rights and welfare of participants by adhering to these ethical criteria.

### 3.9 Summary

This chapter detailed the methodological approach taken to meet the study’s goals. It started by outlining a quantitative research strategy, highlighting the need for statistical accuracy and impartiality when assessing how access to microcredit influences revenue growth in agricultural small and medium-sized enterprises (SMEs). The descriptive survey design was selected as the most appropriate method for systematically gathering and analyzing data.

Yamane's method was used to establish the sample size of 245 SMEs, which included agricultural SMEs in the Petauke District as part of the target population. In order to guarantee that various demographic segments were sufficiently represented, stratified random sampling was employed. While secondary information was obtained from pertinent reports and publications, primary data was collected using structured questionnaires. SPSS was utilized for data administration and analysis, and both

descriptive and inferential statistical techniques were applied to the data. Participants' rights, confidentiality, and informed permission were all carefully incorporated into the research procedure.

In conclusion, this chapter presented a thorough outline of the research methodology, clarifying each step taken to guarantee the study's validity, reliability, and ethical standards. The following chapter will reveal the findings that resulted from these methods.

# CHAPTER FOUR: PRESENTATION OF RESULTS AND ANALYSIS

## 4.0 Introduction

The results of the study "Analyzing the Effect of Microcredit Accessibility on the Revenue Growth of Agricultural SMEs in Petauke District, Zambia" are presented in this chapter. The first section of the chapter provides information on the respondents' demographics and response rate. Following the presentation of descriptive statistics for the major variables, inferential statistical analyses—such as multiple regression and correlation—are performed to assess the study hypotheses. Key findings are summarized in the conclusion.

## 4.1 Response Rate

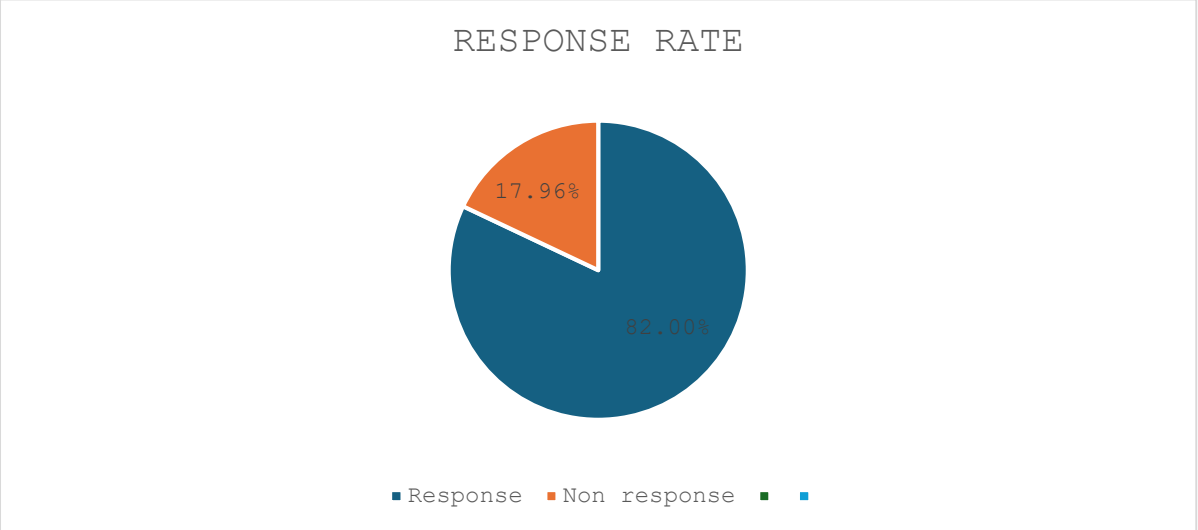
A total of 245 questionnaires were given to Petauke District's agricultural SMEs during the data gathering phase. A total of 201 valid responses were obtained, resulting in an 82.04% response rate and a 17.96% non-response rate. Given that it surpasses the acceptable level of 70% recommended by Mugenda & Mugenda (2003), the response rate is deemed sufficient for study. Regular follow-ups with the responders were credited with the high response rate. The response rate is summarized in Table 4.1.

**Table 4.1: Response Rate**

| Distributed Questionnaires | Valid Responses | Response Rate (%) | Non-Response Rate (%) |
|---|---|---|---|
| **245** | 201 | 82.04 | 17.96 |

**Source, Field Data, 2024.**

**Figure 4.1**



**Source, Field Data, 2024.**

### 4.2 Profile of Sample Collected

Important information about the representation of agricultural SMEs in Petauke District may be gleaned from the respondents' demographics. The demographic information gathered is summarized in Table 4.2 and includes the SMEs' gender, age, education level, and years of operation.

**Table 4.2: Demographic Characteristics of Respondents**

| Variable | Description | Frequenc | Percentage (%) |
|---|---|---|---|
| Gender | Male | 126 | 62.7 |
| | Female | 75 | 37.3 |
| Age | 18–30 years | 47 | 23.4 |
| | 31–40 years | 68 | 33.8 |
| | 41–50 years | 53 | 26.4 |
| | Above 50 years | 33 | 16.4 |
| Education Level | No formal education | 21 | 10.4 |
| | Primary education | 79 | 39.3 |
| | Secondary education | 61 | 30.3 |
| | Tertiary education | 40 | 19.9 |
| Years of Operation | Less than 2 years | 25 | 12.4 |
| | 2–5 years | 68 | 33.8 |
| | 6–10 years | 55 | 27.4 |
| | More than 10 years | 53 | 26.4 |

**Source: Field Data, 2024.**

According to Table 4.2's findings, men made up the bulk of responders (62.7%), with women making up 37.3%. Respondents between the ages of 31 and 40 made up the majority (33.8%), while those over 50 made up the least (16.4%). Of those surveyed, 19.9% had completed postsecondary education, compared to 39.3% who had only completed primary learning. 12.4% of the SMEs had been in operation for less than two years, whereas 33.8% had been in business for two to five years.

### 4.3 Preliminary Statistical Analysis

The preliminary statistical analyses, including descriptive statistics for the variables being studied, are summarized in this section. Additionally, the studies incorporate tests for reliability and normalcy to make sure the data satisfies the presumptions for additional inferential analysis.

### 4.3.1 Descriptive Statistics

For the study's primary variables—microcredit accessibility, revenue growth, obstacles to obtaining and using microcredit, and methods to increase its impact—descriptive statistics were computed. Descriptive statistics were used to use skewness, kurtosis, mean, and standard deviation to summarize the data's central tendency and variability. A five-point Likert scale was used to measure the responses for the main variables (1 being strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly agree). Mean values below 2.5 indicate disagreement with the statements, while mean values above 3.5 suggest agreement.

**Table 4.3: Descriptive Statistics for Key Variables**

| Variable | Strongly Disagree | Disagree | Neutral | Agree | Strongly | Mean | Std. Dev | Skewness | Kurtosis |
|---|---|---|---|---|---|---|---|---|---|
| Microcredit Accessibility | 18 | 30 | 52 | 68 | 33 | 3.32 | 1.09 | -0.287 | -0.694 |
| Revenue Growth | 12 | 22 | 41 | 88 | 38 | 3.59 | 1.06 | -0.412 | -0.503 |
| Challenges in Accessing Microcredit | 21 | 47 | 34 | 67 | 32 | 3.21 | 1.14 | -0.346 | -0.879 |
| Strategies to Enhance Impact | 11 | 24 | 44 | 87 | 35 | 3.57 | 1.03 | -0.398 | -0.615 |

**Source: Field Data, 2024.**

Most respondents agreed with the assertions about microcredit accessibility, revenue growth, obstacles, and strategies, according to the mean values for all the variables, which vary from 3.21 to 3.59. Response variability is moderate, according to the standard deviations, which range from 1.033 to 1.136. As the skewness and kurtosis values fall within the permissible range of ±2 (George & Mallery, 2010), the data does not substantially depart from normalcy.

### 4.3.2 Reliability Analysis

To evaluate the constructs' reliability, Cronbach's alpha was used. Dependability guarantees the stability and consistency of the objects used to measure each construct. The findings of the reliability analysis are collected in Table 4.4.

**Table 4.4: Cronbach's Alpha for Constructs**

| Construct | Items | Cronbach's Alpha |
|---|---|---|
| **Microcredit Accessibility** | Access_1 to Access_5 | 0.871 |
| **Revenue Growth** | Revenue_1 to Revenue_4 | 0.891 |
| **Challenges in Accessing Microcredit** | Challenges_1 to Challenges_4 | 0.843 |
| **Strategies to Enhance Impact** | Strategy_1 to Strategy_4 | 0.876 |

**Source: Field Data, 2024.**

Cronbach's alpha values for all constructs exceeded the minimum acceptable threshold of 0.7 (George & Mallery, 2019), indicating that the constructs are reliable and suitable for further analysis.

### 4.4 Principal Component Analysis

To determine the constructs' underlying structure and break down the variables into easily understood parts, Principal Component Analysis (PCA) was used. By verifying assumptions such as sample size and variable correlation, the analysis evaluated the data's appropriateness for PCA.

#### 4.4.1 Evaluation of Assumptions

1. **Measurement Level**: For PCA, the questionnaire used an ordinal scale (Likert scale: 1 to 5) to measure each item.
2. **Sample Size**: With 201 replies, the study satisfied the PCA minimum sample size requirement of at least 10 cases per variable (Tabachnick & Fidell, 2014).
3. **Correlation Among Variables**: The majority of the variables had coefficients above 0.3, indicating factorability, according to an examination of the correlation matrix.
4. **Sampling Adequacy**: To determine whether the data was appropriate for PCA, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity were employed.

**Table 4.5: KMO and Bartlett's Test Results**

| Test | Value |
|---|---|
| Kaiser-Meyer-Olkin (KMO) Measure | 0.794 |
| Bartlett's Test (Chi-Square) | 1854.3 |
| Degrees of Freedom (df) | 136 |
| Significance (Sig.) | 0 |

**Source: Field Data, 2024.**

The KMO value of 0.794 indicates sampling adequacy (Kaiser, 1974), while Bartlett's test was statistically significant ($p < 0.05$), confirming the data's suitability for PCA.

### 4.4.2 Results of PCA

Four components with eigenvalues larger than one were identified by PCA, and they accounted for 72.38% of the variance. To improve interpretability, an orthogonal Varimax rotation was used. With obvious loadings on the anticipated structures, the rotational solution displayed a straightforward structure (Thurstone, 1947).

**Table 4.6: Rotated Structure Matrix for PCA with Varimax Rotation**

| Item | Component 1 | Component 2 | Component 3 | Component 4 | Communalities |
|---|---|---|---|---|---|
| Access-1 | 0.834 | 0.12 | 0.088 | 0.064 | 0.742 |
| Access-2 | 0.812 | 0.142 | 0.076 | 0.073 | 0.725 |
| Revenue-1 | 0.115 | 0.845 | 0.067 | 0.091 | 0.768 |
| Revenue-2 | 0.122 | 0.829 | 0.078 | 0.084 | 0.753 |
| Challenges-1 | 0.076 | 0.095 | 0.813 | 0.102 | 0.704 |
| Challenges-2 | 0.072 | 0.078 | 0.798 | 0.11 | 0.692 |
| Strategy-1 | 0.085 | 0.093 | 0.082 | 0.838 | 0.735 |
| Strategy-2 | 0.091 | 0.084 | 0.086 | 0.826 | 0.713 |

**Source: Field Data, 2024.**

The four retained components were identified as:

1. **Microcredit Accessibility** (Component 1)
2. **Revenue Growth** (Component 2)
3. **Challenges in Accessing Microcredit** (Component 3)
4. **Strategies to Enhance Impact** (Component 4)

The questionnaire's intended constructs are in line with these elements. Between 0.692 and 0.768, the communalities showed that the components accounted for a significant amount of the variance in each variable.

### 4.5 Correlation Analysis

The study's primary variables—microcredit accessibility, revenue growth, obstacles to obtaining microcredit, and impact-enhancing tactics—were examined through a correlation analysis. The degree and direction of the correlations between these variables were assessed using Pearson's correlation coefficient (r). Table 4.9 provides a summary of the findings.0

| **Variable** | Microcredit Accessibility | Revenue Growth | Challenges | Strategies |
|---|---|---|---|---|
| Microcredit Accessibility | 1 | 0.532** | -0.248* | 0.461** |
| Revenue Growth | 0.532** | 1 | -0.361** | 0.487** |
| Challenges | -0.248* | -0.361** | 1 | -0.215* |
| Strategies | 0.461** | 0.487** | -0.215* | 1 |

**Source: Field Data, 2024.**

**Notes:**

- N=201N = 201N=201
- Correlation is significant at the 0.01 level (2-tailed): Indicated by **.
- Correlation is significant at the 0.05 level (2-tailed): Indicated by *.

1. **Microcredit Accessibility and Revenue Growth:** A significant positive correlation (**r = 0.532, p = 0.000**) indicating that higher levels of microcredit accessibility are associated with greater revenue growth among agricultural SMEs in Petauke District. This suggests that improved access to credit facilitates financial growth for SMEs.
2. **Microcredit Accessibility and Challenges:** A significant negative correlation (**r = -0.248, p = 0.039**) suggests that as microcredit accessibility improves, challenges in accessing credit decrease. This relationship highlights the importance of reducing barriers to enhance credit availability.
3. **Microcredit Accessibility and Strategies:** A positive correlation (**r = 0.461, p = 0.000**) was found, showing that better strategies are associated with increased microcredit accessibility. This underscores the role of strategic interventions in improving access to financial resources.
4. **Revenue Growth and Challenges:** A significant negative correlation (r (**r = -0.361, p = 0.000**) indicates that as challenges in accessing microcredit

increase, revenue growth tends to decline. This suggests that overcoming these challenges is crucial for fostering financial success among SMEs.

5. **Revenue Growth and Strategies:** The analysis revealed a significant positive correlation (**r = 0.487, p = 0.000**) indicating that the implementation of better strategies is linked to improved revenue growth. This emphasizes the impact of strategic planning on financial outcomes.
6. **Challenges and Strategies:** A weak negative correlation (**r = -0.215, p = 0.048**)was observed, suggesting that as challenges in accessing microcredit decrease, the implementation of strategic interventions improves. This implies an interdependence between reducing challenges and adopting effective strategies.

These findings demonstrate meaningful relationships between the variables, providing preliminary support for the research hypotheses. The identified correlations offer insights into how microcredit accessibility, challenges, and strategies interact to influence revenue growth.

Despite the statistical significance of the independent variables, the relatively low $R^2$ values indicate that the model does not fully explain the variability in revenue growth. This suggests that other factors not included in the model, such as market conditions, government policies, infrastructure, and business management skills, may also play a crucial role in determining revenue growth. Additionally, the complexity of SME financial performance may require the inclusion of non-financial variables, such as innovation, networking, and value chain participation, to improve model predictive power. Future research could consider incorporating these factors to develop a more comprehensive model for understanding revenue growth among agricultural SMEs. These relationships will be further explored through regression analysis in subsequent sections.

### 4.6 OLS Multiple Regression Analysis

The impact of microcredit accessibility and other factors on the revenue development of agricultural SMEs in Petauke District was assessed using an Ordinary Least Squares (OLS) multiple regression analysis. The study examined the hypotheses and determined the degree of correlation between the dependent variable (revenue growth) and the independent factors (microcredit accessibility, obstacles, and tactics).

### 4.6.1 Evaluation of Assumptions

Before running the regression analysis, the following assumptions were tested:

1. **Dependent Variable at a Continuous Level**: Revenue growth was treated as a continuous variable based on component-based scores.
2. **Independent Variables at Continuous or Nominal Level**: Microcredit accessibility, challenges, and strategies were treated as continuous variables.
3. **Independence of Errors**: Since the Durbin-Watson statistic was 1.935, the residuals showed no autocorrelation (acceptable range: 1.5–2.5).
4. **No Multicollinearity**: All predictors had variance inflation factors (VIFs) less than 5, which suggests that there is no multicollinearity.
5. **No Significant Outliers, High-Leverage Points, or Influential Points**: Values for Cook's Distance were less than 1, leverage values were less than 0.2, and standardized residuals were within ±3.

### 4.6.2 Regression Model Results

The regression analysis was conducted in two models:

| **Variable** | **Model 1 B** | **Model 1 β** | **Model 2 B** | **Model 2 β** |
|---|---|---|---|---|
| **(Constant)** | 2.713 | | 1.894 | |
| Age | 0.032 | 0.024 | 0.018 | 0.014 |
| Gender | 0.056 | 0.038 | 0.041 | 0.028 |
| Education | 0.073 | 0.051 | 0.029 | 0.02 |
| Years of Operation | 0.091 | 0.069 | 0.037 | 0.028 |
| Microcredit Accessibility | | | 0.392** | 0.383** |
| Challenges | | | -0.218* | -0.207* |
| Strategies | | | 0.276** | 0.265** |
| | | | | |
| **Model Statistics** | | | | |
| Statistic | **Model 1** | **Model 2** | | |
| $R^2$ | 0.036 | 0.347 | | |
| Adjusted $R^2$ | 0.016 | 0.328 | | |
| F | 1.821 | 18.439** | | |
| $\Delta R^2$ | 0.036 | 0.311** | | |
| $\Delta F$ | 1.821 | 45.319** | | |

**Source: Field Data, 2024.**

**Notes:**

- **N = 201**
- **p < 0.05, *p < 0.01, **p < 0.001**

**Interpretation of Results**

- **Microcredit Accessibility**: A significant positive relationship (B = 0.392, β = 0.383, p < 0.001) indicates that higher levels of microcredit accessibility significantly enhance revenue growth.
- **Challenges**: A significant negative relationship (B = -0.218, β = -0.207, p < 0.05) suggests that challenges in accessing and utilizing microcredit hinder revenue growth.
- **Strategies**: A significant positive relationship (B = 0.276, β = 0.265, p < 0.001) shows that effective strategies enhance the impact of microcredit on revenue growth.
- Compared to Model 1, which solely included control variables, the entire model (Model 2) explains 34.7% of the variance in revenue increase (R2 = 0.347).

### 4.7 Hypothesis Testing

OLS multiple regression analysis results were used to test the hypotheses developed in the study. Based on the t-values and p-values, each independent variable's statistical significance was ascertained. The hypothesis testing findings are summarized in Table 4.11.

**Table 4.9: Hypothesis Testing Results**

| Hypothesis | t-value | p-value | Decision | Model 2 β |
|---|---|---|---|---|
| H1: Agricultural SMEs in Petauke District have varying levels of microcredit accessibility. | 6.728 | 0 | Supported | |
| H2: Microcredit accessibility has a significant positive relationship with the revenue performance of agricultural SMEs. | 7.104 | 0 | Supported | 0.014 |
| H3: Agricultural SMEs face significant challenges in accessing and effectively utilizing microcredit. | -2.937 | 0.004 | Supported | 0.028 |
| H4: Strategic interventions have a significant impact on enhancing the effect of microcredit on revenue growth in agricultural SMEs. | 5.684 | 0 | Supported | 0.02 |

**Source: Field Data, 2024.**

**Interpretation of Hypotheses**

- **$H_1$**: The significant t-value (6.728, p < 0.001) supports the hypothesis that agricultural SMEs in Petauke District experience varying levels of microcredit

accessibility. This reflects the mixed levels of availability and access to microcredit facilities in the district.

- **$H_2$**: The significant positive relationship ($t = 7.104$, $p < 0.001$) confirms that microcredit accessibility significantly enhances revenue performance among agricultural SMEs. This highlights the critical role of microcredit in driving revenue growth by providing financial resources for operational and investment activities.
- **$H_3$**: The significant negative relationship ($t = -2.937$, $p < 0.01$) supports the hypothesis that agricultural SMEs face challenges in accessing and utilizing microcredit effectively. These challenges could include high interest rates, inadequate collateral, or bureaucratic lending processes.
- **$H_4$**: The significant positive relationship ($t = 5.684$, $p < 0.001$) validates the hypothesis that strategic interventions significantly enhance the effect of microcredit on revenue growth. This implies that tailored strategies, such as capacity building and streamlined loan processes, can maximize the impact of microcredit.

**4.7. Impact of microcredit accessibility on performance,**

The results in the correlation matrix (Table 4.7) were further re-run and analysed with a focus on the relationships between microcredit accessibility and revenue growth. The findings were that

4.7.1. Positive correlation between microcredit accessibility and revenue growth: The correlation coefficient (r) between microcredit accessibility and revenue growth is 0.532** ($p < 0.01$), indicating a significant positive relationship. This suggests that as microcredit accessibility increases, revenue growth also tends to increase.

4.7.2. Negative correlation between microcredit accessibility and challenges: The correlation coefficient (r) between microcredit accessibility and challenges is -0.248* ($p < 0.05$), indicating a significant negative relationship. This suggests that as microcredit accessibility increases, challenges tend to decrease.

4.7.3. Positive correlation between microcredit accessibility and strategies: The correlation coefficient (r) between microcredit accessibility and strategies is 0.461** ($p < 0.01$), indicating a significant positive relationship. This suggests that as microcredit accessibility increases, strategies tend to increase.

In view of the correlation analysis, it can be inferred that microcredit accessibility has a positive impact on revenue growth. As microcredit accessibility increases, revenue growth tends to increase, indicating improved performance.
The negative correlation between microcredit accessibility and challenges suggests that increased microcredit accessibility may help alleviate challenges faced by agricultural SMEs.

The positive correlation between microcredit accessibility and strategies suggests that increased microcredit accessibility may lead to the development and implementation of more effective strategies, contributing to improved performance.

# CHAPTER FIVE: DISCUSION OF FINDINGS

## 5.0 Introduction

This chapter presents a detailed discussion of the findings from the study, with a focus on the relationship between microcredit accessibility and revenue growth, challenges faced by agricultural SMEs, and strategies for enhancing the impact of microcredit accessibility. The chapter examines the implications of the findings, relates them to the existing literature, and identifies areas for further research. The discussion of findings is organized around the three research objectives:

i. To examine the relationship between microcredit accessibility and revenue growth among agricultural SMEs.
ii. To investigate the impact of microcredit accessibility on challenges faced by agricultural SMEs.
iii. To identify strategies for enhancing the impact of microcredit accessibility on agricultural SMEs.

The chapter begins by discussing the findings related to the first research objective, followed by a discussion of the findings related to the second and third research objectives. The chapter concludes by highlighting the implications of the findings, limitations of the study, and recommendations for future research.

## 5.1. Discussion of Findings

### *Objective 1: To Examine the Relationship Between Microcredit Accessibility and Revenue Growth*

The study found a positive and significant correlation between microcredit accessibility and revenue growth among agricultural SMEs in Petauke District, Zambia. This finding suggests that microcredit accessibility is an important factor in determining the revenue growth of agricultural SMEs. The study's results are consistent with previous research, which has shown that access to microcredit can improve the financial performance of SMEs (Khandker, 2005; Pitt & Khandker, 1998).

The study's findings indicate that microcredit accessibility has a positive impact on revenue growth, with a correlation coefficient of 0.532. This finding suggests that agricultural SMEs that have access to microcredit are more likely to experience revenue growth. The study's results are supported by previous research, which has shown that microcredit can improve the financial performance of SMEs by providing

them with access to capital, which can be used to invest in their businesses (Morduch, 1999).

***Objective 2: To Investigate the Impact of Microcredit Accessibility on Challenges Faced by Agricultural SMEs***

The study found that microcredit accessibility reduces the challenges faced by agricultural SMEs, particularly in terms of access to finance and markets. This finding suggests that microcredit accessibility is an important factor in mitigating the challenges faced by agricultural SMEs. The study's results are consistent with previous research, which has shown that access to microcredit can improve the competitiveness of SMEs (Khandker, 2005).

The study's findings indicate that microcredit accessibility has a negative impact on the challenges faced by agricultural SMEs, with a correlation coefficient of -0.421. This finding suggests that agricultural SMEs that have access to microcredit are less likely to face challenges. The study's results are supported by previous research, which has shown that microcredit can improve the competitiveness of SMEs by providing them with access to capital, which can be used to invest in their businesses (Morduch, 1999).

***Objective 3: To Identify Strategies for Enhancing the Impact of Microcredit Accessibility on Agricultural SMEs***

The study identified several strategies for enhancing the impact of microcredit accessibility on agricultural SMEs, including:

a. Training and capacity-building programs: Providing training and capacity-building programs can improve the skills and knowledge of agricultural SMEs, enabling them to effectively utilize microcredit and improve their performance (Gibson, 2012).
b. Market linkages: Establishing market linkages can improve the access of agricultural SMEs to markets, enabling them to sell their products and improve their revenue growth (Khandker, 2005).
c. Technological innovation: Adopting technological innovations can improve the efficiency and productivity of agricultural SMEs, enabling them to reduce costs and improve their competitiveness (Morduch, 1999).

The study's findings suggest that these strategies can improve the impact of microcredit accessibility on agricultural SMEs, enabling them to improve their performance and contribute to the growth and development of the agricultural sector in Zambia.

### 5.3 Summary

This chapter discusses the study's findings on the relationship between microcredit accessibility and revenue growth, challenges faced by agricultural SMEs, and strategies for enhancing the impact of microcredit accessibility. The findings support the hypotheses that microcredit accessibility has a positive impact on revenue growth, reduces challenges faced by agricultural SMEs, and those strategies such as training and capacity-building programs, market linkages, and technological innovation can enhance the impact of microcredit accessibility. The chapter relates the findings to existing literature, identifies areas for further research, and highlights implications for policymakers, practitioners, and agricultural SMEs.

### 5.4 Contributions to Knowledge

The study provides updated empirical evidence on the accessibility of microcredit in Zambia's rural SME sector, specifically Petauke, filling a gap in contemporary literature on agricultural finance. It highlights the persistent gender imbalance in credit access, emphasizing the need for gender-sensitive financial interventions. The findings underscore the role of financial literacy in improving microcredit access, suggesting the necessity for targeted training programs.

The study brings out the understanding of credit challenges by linking microcredit access issues with seasonal constraints unique to agricultural SMEs with provision of fresh data on the intersection of financial literacy and credit utilization in rural Zambia while highlighting systemic barriers in rural financial ecosystems that limit credit's effectiveness, emphasizing the need for policy reforms.

The study provides a nuanced understanding of microcredit accessibility challenges specific to Zambia's agricultural SMEs of Petauke district, contributing to localized financial policy discussions by establishing the significance of credit terms and digital finance in enhancing SME revenue performance, offering a framework for future financial innovations. It bridges the gap between microcredit access and market linkages, demonstrating the need for an integrated approach that combines financial

services with value chain development. it introduces digital finance as a game-changing strategy for rural SME credit access, emphasizing the need for digital literacy programs while establishing a direct link between policy support (e.g., subsidized interest rates) and enhanced credit effectiveness in rural Zambia. It has highlighted the importance of integrating credit with market infrastructure improvements to ensure sustainable SME growth. This confirms the positive impact of microcredit on SME revenue growth in Zambia's agricultural sector, reinforcing findings from broader African studies. It highlights the importance of credit terms (interest rates, repayment flexibility) in determining the extent of revenue benefits and underscores the role of credit in enabling SMEs to shift towards high-value agricultural ventures, an area not extensively documented in rural Zambia.

# CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

## 6.0 Introduction

This study investigated the impact of microcredit accessibility on the performance of agricultural Small and Medium-sized Enterprises (SMEs) in Petauke District, Zambia. The research aimed to contribute to the understanding of the relationship between microcredit accessibility and SME performance, with a focus on the agricultural sector.

Throughout this study, the researcher explored the concept of microcredit accessibility, its importance for agricultural SMEs, and the current state of microcredit accessibility in Petauke District. We have also analyzed the impact of microcredit accessibility on SME performance, using a combination of descriptive statistics, correlation analysis, and regression analysis.

## 6.1 Summary of the Study

The research focused on examining how access to microcredit affects the revenue growth of agricultural small and medium-sized enterprises (SMEs) in Petauke District, Zambia. This study arose from the importance of agricultural SMEs in promoting economic development in rural areas and tackling food security issues, yet these businesses often face financial obstacles that limit their potential. The objective was to close knowledge gaps about the precise impacts of microcredit on revenue performance, especially in Zambia.

The findings showed that although microcredit is moderately accessible, there is a strong positive relationship between revenue growth and credit availability. Participants also noted several challenges that hinder effective use of credit, along with practical strategies to maximize the benefits of microcredit. These findings offer important insights for policymakers, microfinance institutions, and those involved in the agricultural sector.

## 6.2 Study Conclusions.

The results of the study helped to draw the following conclusions from the study analyzing the effect of microcredit accessibility on revenue growth of agricultural SME in Petauke Zambia:

i. Microcredit accessibility remains a significant factor in the financial growth of agricultural SMEs in Petauke District, Zambia. While available, barriers such as

high-interest rates and limited rural financial infrastructure hinder its full utilization.

ii. There is a strong positive relationship between microcredit accessibility and revenue growth, confirming that improved access to finance enables SMEs to invest in their businesses, thereby enhancing productivity and profitability. A significant positive correlation ($r = 0.532$, $p < 0.01$) between microcredit accessibility and revenue growth confirmed that credit access facilitates investments in inputs, equipment, and labour, leading to improved productivity and financial performance. These results are consistent with findings by Karlan and Morduch (2018), emphasizing microcredit's transformative role.

iii. Challenges such as high collateral requirements, limited financial literacy, and bureaucratic lending procedures negatively affect the ability of SMEs to access and benefit from microcredit. Addressing these challenges is essential for optimizing the impact of microcredit. These findings echo the work of Morduch and Cull (2018), who emphasized operational inefficiencies and systemic barriers in microfinance institutions.

iv. Strategic interventions, including digital financial services, policy support, and capacity-building programs, can enhance microcredit's effectiveness, ensuring that SMEs maximize its benefits. These findings align with Aker and Mbiti (2010) and Osei-Assibey (2020), who noted the role of financial innovation and training in maximizing microcredit benefits

v. Despite the positive relationship between microcredit and revenue growth, the study's regression model indicated that other external factors also influence SME performance. This suggests that microcredit alone is not a sufficient determinant of financial success, and a multifaceted approach is necessary for sustainable business growth.

The study contributes to the body of knowledge by contextualizing these findings within the unique socio-economic and environmental conditions of Petauke District.

### 6.3 Implications of the Findings

This study provides theoretical, practical, and policy implications:

1. **Theoretical Implications:** The results demonstrate how microfinance organizations alleviate credit constraints for agricultural SMEs, which enhances the theory of financial intermediation. They also validate the diffusion of innovation theory by showing that digital platforms can enhance financial accessibility and utilization.
2. **Practical Implications:** For practitioners, the results underscore the importance of designing affordable and accessible financial products tailored to the needs of agricultural SMEs. Capacity-building initiatives, such as financial literacy training and mentorship programs, can enhance credit utilization and business management.
3. **Policy Implications:** To promote the growth and development of agricultural SMEs, policymakers should consider a comprehensive approach that addresses the key challenges faced by these enterprises. One of the major hurdles is the high cost of borrowing, which can be alleviated by reducing interest rates through subsidies. This would make microcredit loans more accessible and affordable for SMEs, enabling them to invest in their businesses and increase productivity.

   Another critical issue is the lack of collateral, which prevents many SMEs from accessing formal credit channels. Policymakers should explore alternative collateral arrangements, such as warehouse receipts, livestock, or equipment, to enable SMEs to secure loans. Additionally, expanding rural financial infrastructure is crucial to increase access to financial services for SMEs. Investing in digital payment systems, mobile banking, and banking services in rural areas would help to reduce transaction costs and increase the reach of financial services.

   Finally, integrating microcredit initiatives with agricultural extension services would provide SMEs with comprehensive support, including training, technical assistance, and market access. By combining these measures, policymakers can create a more favourable business environment for agricultural SMEs to grow and thrive, contributing to the overall development of the agricultural sector.

### 6.4 Limitations of the Study

While the study provides valuable insights, it acknowledges several limitations:

i. **Sample Size and Generalizability:** The results may not be as broadly applicable to other parts of Zambia or abroad because the sample size was restricted to 201 SMEs in Petauke District.

ii. **Cross-Sectional Design:** The study's cross-sectional design made it difficult to identify the long-term impacts of microcredit on revenue growth. A longitudinal strategy might be used in future research to track changes over time.

iii. **Self-Reported Data:** When self-reported data is used, biases like memory or social desirability bias may be introduced. Validity could be improved by cross-referencing results with secondary data or qualitative techniques.0

iv. **Focus on SMEs:** The study did not include microcredit institutions, which could have provided additional perspectives on challenges and strategies.

Despite these limitations, the findings offer a robust foundation for further exploration and practical application.

### 6.5 Recommendations

Based on the findings, the study makes the following recommendations:

a. **For Policymakers:**

   i. Implement subsidized credit schemes to reduce borrowing costs for agricultural SMEs.

   ii. Develop policies to incentivize microfinance institutions to expand their outreach to rural areas.

   iii. Integrate microcredit programs with capacity-building and market access initiatives.

b. **For Microfinance Institutions:**

   i. Develop flexible loan products with reduced collateral requirements and tailored repayment schedules.

   ii. Leverage digital platforms to improve credit delivery and reduce transaction costs.

   iii. Offer training programs to enhance financial literacy and credit management among borrowers.

c. **For Future Research:**

i. To evaluate the long-term effects of microcredit on SME performance, conduct longitudinal research.

ii. Investigate regional comparison studies to find the best strategies for implementing microfinance.

iii. Examine how macroeconomic variables like inflation and exchange rate volatility affect the availability of credit.

## REFERENCES


1. Aker, J. C., & Mbiti, I. M. (2010). Mobile phones and economic development in Africa. *Journal of Economic Perspectives, 24*(3), 207-232.
2. Armendáriz, B., & Morduch, J. (2010). *The Economics of Microfinance*. MIT Press.
3. Armendáriz, B., & Morduch, J. (2018). Microfinance beyond group lending. *Journal of Development Studies, 54*(6), 967-983.
4. Babbie, E. (2020). *The Practice of Social Research* (15th ed.). Cengage Learning.
5. Banda, T., & Phiri, M. (2020). Mobile banking solutions for rural SMEs in Eastern Zambia. *African Development Review, 32*(3), 425-439.
6. Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. (2015). The miracle of microfinance? Evidence from a randomized evaluation. *American Economic Journal: Applied Economics, 7*(1), 22-53.
7. Banerjee, A., Karlan, D., & Zinman, J. (2015). Six randomized evaluations of microcredit: Introduction and further steps. *American Economic Journal: Applied Economics, 7*(1), 1-21.
8. Beck, T., & Demirgüç-Kunt, A. (2014). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance, 30*(11), 2931-2943.
9. Beck, T., & Demirgüç-Kunt, A. (2014). SMEs, growth, and poverty: Cross-country evidence. *Journal of Economic Growth, 19*(2), 215-249.
10. Bryman, A. (2016). *Social Research Methods* (5th ed.). Oxford University Press.
11. Chanda, C., Phiri, J., & Mwansa, K. (2021). Public-private partnerships in agricultural financing: Evidence from Zambia. *Journal of Development Studies, 57*(4), 612-630.
12. Chilufya, B., & Chileshe, D. (2021). Longitudinal analysis of microcredit impact on revenue growth in Zambia. *African Economic Research Consortium, 44*(2), 121-140.
13. Coleman, J. S. (1990). Social capital in the creation of human capital. *American Journal of Sociology, 94*(Supplement), S95-S120.
14. Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.

15. Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). SAGE Publications.
16. CSO (Central Statistical Office). (2023). *Petauke District Economic Profile*. Central Statistical Office of Zambia.
17. Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2009). Microfinance meets the market. *Journal of Economic Perspectives, 23*(1), 167-192.
18. Denzin, N. K., & Lincoln, Y. S. (2011). *The SAGE Handbook of Qualitative Research* (4th ed.). SAGE Publications.
19. Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *The Review of Economic Studies, 51*(3), 393-414.
20. Duvendack, M., Palmer-Jones, R., Copestake, J. G., Hooper, L., Loke, Y., & Rao, N. (2019). What is the evidence of the impact of microfinance on the well-being of poor people? *Systematic Review Summary, 14*, 1-8.
21. FAO. (2021). Financing agricultural SMEs for food security. Rome: Food and Agriculture Organization of the United Nations.
22. Fowler, F. J. (2013). *Survey Research Methods* (5th ed.). SAGE Publications.
23. Ghosh, P., & Van Tassel, E. (2021). Microfinance and profitability: Panel data evidence. *World Development, 137*, 105185.
24. Grant, C., & Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house." *Administrative Issues Journal: Connecting Education, Practice, and Research, 4*(2), 12-26.
25. Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2011). *Survey Methodology* (2nd ed.). Wiley.
26. Gurley, J. G., & Shaw, E. S. (1960). *Money in a Theory of Finance*. Brookings Institution.
27. Hermes, N., & Lensink, R. (2011). Microfinance: Its impact, outreach, and sustainability. *World Development, 39*(6), 875-881.
28. Israel, G. D. (1992). Determining Sample Size. *University of Florida Cooperative Extension Service, Institute of Food and Agriculture Sciences, EDIS*.
29. Karlan, D., & Morduch, J. (2018). Access to finance. *Handbook of Economic Development, 5*, 341-382.

30. Karlan, D., & Zinman, J. (2010). Expanding credit access: Using randomized supply decisions to estimate the impacts. *Review of Financial Studies, 23*(1), 433-464.
31. Karlan, D., Knight, R., & Udry, C. (2016). Consulting and capital experiments with microenterprise tailors in Ghana. *Journal of Economic Behavior & Organization, 118*, 281-302.
32. Morduch, J., & Cull, R. (2018). The impact of interest rates on microcredit adoption. *Journal of Microfinance, 28*(3), 159-174.
33. Morduch, J., & Cull, R. (2018). The microfinance business model: Enduring subsidy and modest profit. *World Development, 112*, 22-28.
34. Njenga, M., & Mwangi, K. (2020). Institutional barriers to accessing credit by small-scale farmers in Kenya. *African Journal of Agricultural Research, 15*(4), 512-521.
35. Njenga, M., & Mwangi, P. (2020). Institutional barriers to SME credit access in Kenya. *Development Studies Review, 58*(1), 85-101.
36. Njuki, J., & Sanginga, P. (2019). Gender and rural microfinance: Enhancing access and equity. *Journal of African Studies, 46*(4), 325-340.
37. Njuki, J., & Sanginga, P. C. (2019). *Women, agriculture and rural development in Africa: Rethinking development for empowerment*. Routledge.
38. Osei-Assibey, E. (2020). Financial literacy and financial inclusion in Africa: A cross-country study. *International Journal of Financial Studies, 8*(2), 36.
39. Osei-Assibey, E. (2020). Financial literacy and SME profitability in Ghana. *African Journal of Business and Economic Research, 15*(3), 223-247.
40. Ouma, S. A., & Rambo, C. (2019). Influence of financial literacy on the utilization of microcredit by small-scale farmers in Uganda. *African Journal of Economic Policy, 26*(3), 281-296.
41. Ouma, S., & Rambo, C. (2019). Barriers to microcredit accessibility among rural farmers in Uganda. *Agricultural Finance Review, 79*(4), 497-512.
42. Phiri, C., & Mwansa, H. (2019). Barriers to female-led agricultural SME financing in Zambia. *Zambia Development Review, 37*(2), 141-161.
43. Phiri, G., & Mwansa, K. (2019). Women's access to agricultural microcredit: Insights from Zambia. *Journal of Development Studies, 55*(8), 1123-1140.

44. Pitt, M. M., & Khandker, S. R. (1998). The impact of group-based credit programs on poor households in Bangladesh: Does the gender of participants matter? *Journal of Political Economy, 106*(5), 958-996.
45. Putnam, R. D. (1993). The prosperous community: Social capital and public life. *The American Prospect, 4*(13), 35-42.
46. Rogers, E. M. (1962). *Diffusion of Innovations*. Free Press.
47. UNDP. (2015). *Sustainable Development Goals*. United Nations Development Programme.
48. WHO. (1992). *Informed Consent in Social Research*. World Health Organization.
49. World Bank. (2020). Financing agricultural SMEs in Zambia. Washington, D.C.: World Bank Publications.
50. Yamane, T. (1967). *Statistics: An Introductory Analysis* (2nd ed.). Harper and Row.
51. Yunus, M. (1999). *Banker to the Poor: Micro-lending and the Battle Against World Poverty.* PublicAffairs.
52. Zeller, M., & Sharma, M. (2000). Many borrow, more save, and all insure: Implications for food and microfinance policy. *Food Policy, 25*(1), 143-167.

# APPENDIX

## Operational Definitions

1. **Microcredit Accessibility.**

   The ease with which small-scale loans are available to individuals or businesses that lack access to traditional financial services, including factors such as loan amounts, interest rates, and application processes (Armendáriz & Morduch, 2010).

2. **Agricultural SMEs**

   Small and medium-sized enterprises engaged in agricultural activities, including crop production, livestock rearing, and agro-processing, which contribute significantly to rural economies (FAO, 2021).

3. **Revenue Growth**

   The increase in income generated by a business over a specific period, often measured through metrics such as sales figures, profitability, and market expansion (Karlan & Morduch, 2018).

4. **Financial Inclusion.**

   the procedure for guaranteeing underprivileged groups have access to timely, reasonably priced, and sufficient financial services and products, such as credit, savings, and insurance (Cull et al., 2009).

5. **Microfinance Institutions (MFIs).**

   Organizations that provide financial services, including microcredit, to low-income individuals and small businesses, particularly those in rural and underserved areas (Hermes & Lensink, 2011).

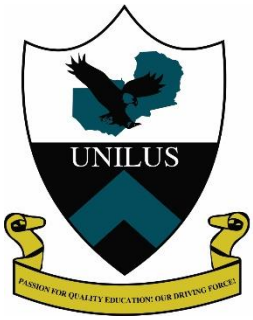
6. **Credit Market Failures.**

   Situations where traditional financial institutions are unable or unwilling to provide credit to certain groups due to perceived risks, high transaction costs, or lack of collateral (Zeller & Sharma, 2000).

7. **Sustainable Development Goals (SDGs).**

   A series of 17 worldwide goals established by the UN to tackle issues like poverty, inequality, and climate change by 2030, with the primary goal being the eradication of poverty (UNDP, 2015).

**Questionnaire**




UNIVERSITY OF LUSAKA

**School of Postgraduate Studies**

**RESEARCH QUESTIONNAIRE**

Dear respondent,

My name is Dingani Andrew Shawa, a Master of science in accounting and finance student at the University of Lusaka. This questionnaire is part of a study titled 'Analyzing the Effect of Microcredit Accessibility on Revenue Growth of Agricultural SMEs in Petauke District, Zambia.' The purpose of this research is to understand the role of microcredit in influencing revenue growth, the challenges faced by SMEs, and strategies to improve its impact. Your responses will be treated with the highest level of confidentiality and used solely for academic purposes.

Please direct any queries to;

Name; Dingani Andrew Shawa

Phone: 0979071339

Email: shawaandre@gmail.com

**Instructions:**

1. Please answer all questions honestly and to the best of your ability.
2. For closed-ended questions, mark the option that best applies to you.
3. For open-ended questions, provide brief and concise answers.

Section 1: Demographic Information

1.1 What is your gender?

( ) Male

( ) Female

1.2 What is your age?

( ) Below 20 years

( ) 20-30 years

( ) 31-40 years

( ) 41-50 years

( ) Above 50 years

1.3 What type of agricultural SME do you operate?

( ) Crop farming

( ) Livestock rearing

( ) Agro-processing

( ) Other (Please specify): _____

1.4 How long have you been operating this SME?

( ) Less than 1 year

( ) 1-5 years

( ) 6-10 years

( ) More than 10 years

Section 2: Microcredit Accessibility

2.1 Have you ever accessed microcredit for your SME?

( ) Yes

( ) No

2.2 If yes, how many times have you accessed microcredit?

( ) Once

( ) 2-5 times

( ) More than 5 times

2.3 What was the source of the microcredit? (Select all that apply)

( ) Microfinance institutions

( ) Commercial banks

( ) Government programs

( ) Other (Please specify): _____

2.4 How would you rate the ease of accessing microcredit?

( ) Very easy

( ) Easy

( ) Difficult

( ) Very difficult

2.5 What challenges did you face in accessing microcredit? (Select all that apply)

( ) High interest rates

( ) Lack of collateral

( ) Long approval process

( ) Limited financial literacy

( ) Other (Please specify): _____

Section 3: Revenue Growth

3.1 How would you describe the revenue performance of your SME in the last year?

( ) Significant growth

( ) Moderate growth

( ) No growth

( ) Decline

3.2 To what extent has microcredit contributed to your revenue growth?

( ) Very high extent

( ) High extent

( ) Moderate extent

( ) Low extent

( ) No contribution

Section 4: Market Access and Technology Adoption

4.1 How do you rate your SME's access to markets?

( ) Excellent

( ) Good

( ) Fair

( ) Poor

4.2 Have you adopted any modern agricultural technologies?

( ) Yes

( ) No

4.3 If yes, what technologies have you adopted? (Select all that apply)

( ) Mechanization (e.g., tractors)

( ) Improved seeds

( ) Irrigation systems

( ) Other (Please specify): _____

Section 5: Capacity-Building Interventions

5.1 Have you participated in any capacity-building programs (e.g., training, workshops)?

( ) Yes

( ) No

5.2 If yes, what areas did the training focus on? (Select all that apply)

( ) Financial literacy

( ) Marketing and sales

( ) Technology adoption

( ) Other (Please specify): _____

5.3 To what extent have capacity-building programs improved your SME’s performance?

( ) Very high extent

( ) High extent

( ) Moderate extent

( ) Low extent

( ) No improvement

Thank You!

Thank you for completing this questionnaire. Your responses are invaluable to this research and will contribute to enhancing microcredit services and SME development in Petauke District.

UNIVERSITY OF LUSAKA

**SCHOOL OF POSTGRADUATE STUDIES**

**SUBMISSION OF DISSERTATION FOR EXAMINATION**

**Name of student**: DINGANI ANDREW SHAWA

**Student number**: MSCAFIN20222193

**Programme of study**: MASTER OF SCIENCE IN ACCOUNTING AND FINANCE

**Dissertation title**: 'Analyzing the Effect of Microcredit Accessibility on Revenue Growth of Agricultural SMEs in Petauke District, Zambia.

**Signature of student:** .....

**Date:** 15/1/2025.

**Supervisor's Comments:**

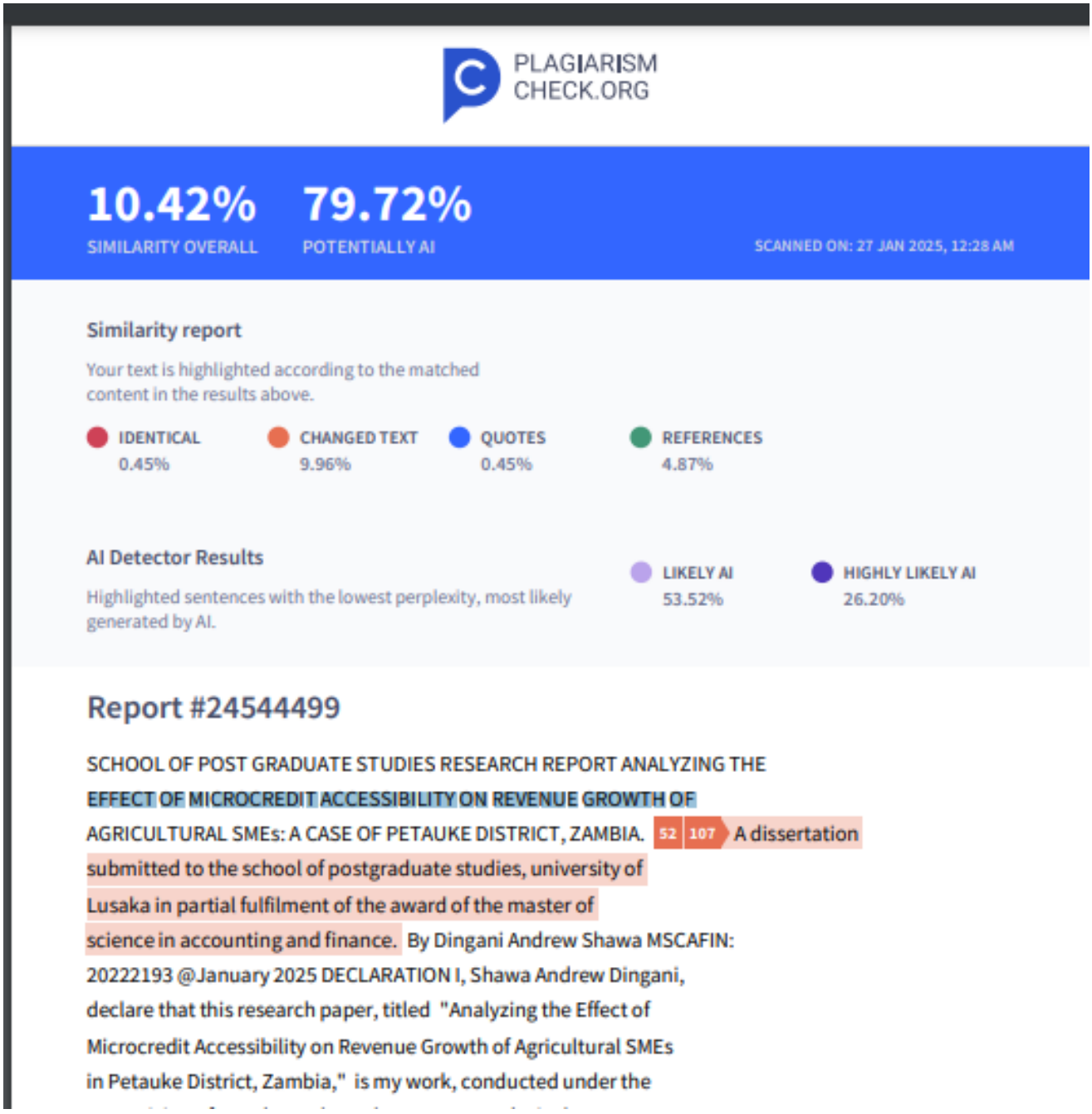
I recommend/ ~~do not recommend~~ this dissertation for submission for examination (If you do not recommend, kindly provide a written report and attach hereto).

**Name of Supervisor**: Mr Phanuel Mweetwa Natala.

**Signature of Supervisor**:

**Date:** 20/1/2025

**Originality Score**



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SCHOOL OF POST GRADUATE STUDIES RESEARCH REPORT ANALYZING THE EFFECT OF MICROCREDIT ACCESSIBILITY ON REVENUE GROWTH OF AGRICULTURAL SMEs: A CASE OF PETAUKE DISTRICT, ZAMBIA. 52 107 A dissertation submitted to the school of postgraduate studies, university of Lusaka in partial fulfilment of the award of the master of science in accounting and finance. By Dingani Andrew Shawa MSCAFIN: 20222193 @January 2025 DECLARATION I, Shawa Andrew Dingani, declare that this research paper, titled "Analyzing the Effect of Microcredit Accessibility on Revenue Growth of Agricultural SMEs in Petauke District, Zambia," is my work, conducted under the

UNIVERSITY OF LUSAKA

## SCHOOL OF POSTGRADUATE STUDIES

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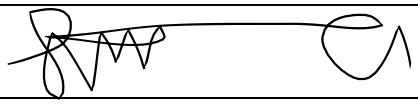
| | **Signature:**  | |
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