

**WOMEN'S MARKETING BARRIERS THAT AFFECT
MUSHROOM PRODUCTION IN SALIMA DISTRICT, MALAWI**

**MASTER'S THESIS (TRANSFORMATIVE COMMUNITY
DEVELOPMENT)**

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MTCD 1423

MZUZU UNIVERSITY

JANUARY, 2026

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MUSHROOM PRODUCTION IN SALIMA DISTRICT, MALAWI**

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(Bachelor of Public Relations and Marketing)

MTCD 1423

**A THESIS SUBMITTED TO THE FACULTY OF
ENVIRONMENTAL SCIENCES, DEPARTMENT OF
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FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN
TRANSFORMATIVE COMMUNITY DEVELOPMENT**

MZUZU UNIVERSITY

JANUARY, 2026

DECLARATION

I, Christina Phenes Mgimba declare that this thesis is a result of my own original effort and work, and that to the best of my knowledge, the findings have never been previously presented elsewhere for the award of any academic qualification. Where assistance was sought, it has been accordingly acknowledged.

Christina Phenes Mgimba

Signature:

A handwritten signature in black ink, appearing to be 'CP Mgimba', written over a horizontal line.

Date: 05 January 2026

CERTIFICATE OF APPROVAL

We, the undersigned, certify that this thesis is the result of the authors own work, and that to the best of our knowledge, it has not been submitted to any academic institution elsewhere. The thesis is acceptable in both form and content, and that satisfactory knowledge of the field covered by the thesis was demonstrated by the candidate through an oral examination held on 30 July, 2025.

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Date: 05 January 2026

DEDICATION

To my late father and mother (Mr. and Mrs. Phenes Mgimba), who inspired me into the profession of transforming communities, may your soul rest in peace. To my beloved child: Doreen Mlowe, my busy time schedules could be felt in your life but not understood. My prayer is that at God's appropriate time, the outcome of my education in its fullness will be realised and shared in your life.

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LIST OF ABBREVIATIONS AND ACRONYMS

GDP	Gross Domestic Product
NGOs	Non-Governmental organisations
NAP	National Agriculture Policy
EPAs	Extension planning Areas
FAO	Food and Agriculture Organisation
MZUNIREC	Mzuzu University Research Ethics Committee
MGDS	Malawi Growth and Development Strategy
MK	Malawian Kwacha
FGDs	Focus group discussions
KIIs	Key Informant Interviews
GoM	Government of Malawi
SDGs	Sustainable Development Goals
USD	United States Dollar

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ABSTRACT

Mushroom production is an increasingly important component of sustainable agriculture worldwide, valued for its environmental, nutritional, and economic benefits. In Malawi specifically in Salima District, mushroom presents a promising opportunity for diversifying agricultural income and improving nutrition. However, women mushroom farmers in the region face numerous barriers that hinder both production and marketing. These barriers include limited access to quality spawn, inadequate technical knowledge in substrate preparation, environmental control, and poor infrastructure, resulting in low yields and inconsistent product quality. Additionally, mushrooms high perish-ability, combined with the lack of proper packaging, storage, and processing facilities, leads to significant post-harvest losses and difficulties in accessing distant markets. The absence of organised supply chains, coupled with limited domestic demand and insufficient government support, exacerbates the marketing barriers. The study is aimed to examine the women's marketing barriers that affect mushroom production in Salima district and thereafter to examine potential solutions for improving market access which will eventually improve mushroom production. The research was conducted using a qualitative approach, involving in interview guide, key informant interviews and focus group discussions with 110 women mushroom farmers in Salima District. However, this study utilised Purposive Sampling framework. Thematic analysis was employed to interpret the data. The findings revealed that women mushroom farmers face substantial barriers in accessing markets, including limited knowledge of effective marketing strategies, inadequate infrastructure, and weak market linkages. The study concluded that addressing these barriers requires targeted interventions, including investments in technical training, infrastructure development, and improved government support. The research recommends creating organised market structures, promoting cooperative efforts among farmers, and providing a supportive policy framework to enhance market access and production for women mushroom farmers in Salima District. These strategies are essential for improving the sustainability and growth of the mushroom industry in Malawi.

Key words: Mushroom farmers, Marketing barriers, Agricultural experts, Extension, Storage facilities.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

Mushroom consumption has long been part of traditional diets in Malawi, with many communities depending on wild mushrooms collected during the rainy season (Chioza & Ohga, 2014a). These mushrooms are valued for their nutrition and health benefits, but their seasonal nature limits their availability and impact on food security. In response, cultivated mushrooms are becoming more popular because they can be grown at any time of year and provide similar or even better benefits. However, mushroom farming remains underused in Malawi due to low awareness, limited technical knowledge, and poor market development (Okuda, 2022).

This study looks at how mushroom farming can help improve rural livelihoods in Malawi, especially for women who are taking up mushroom cultivation as a way to earn income and support their families. In Salima District, women are increasingly growing mushrooms, but they face several marketing challenges such as poor access to markets, lack of packaging materials, limited support services, and low awareness among consumers (Akinbami et al., 2010).

The chapter begins by providing background information about trends in global, national, and local mushroom production. It then presents the problem that the study seeks to address and outlines the main and specific objectives of the research. The chapter also introduces the research questions and explains why the study is important. In addition, it describes who will benefit from the research, how the findings will be used, and how the study contributes to national goals and academic knowledge. Finally, the chapter outlines the limitations of the study and explains how the rest of the research is organized.

1.2 Background

Globally, mushroom production has experienced rapid growth and diversification, driven by increasing awareness of mushrooms' nutritional, medicinal, and economic benefits. Asia leads the sector, with China alone contributing between 75% and 93% of the total global output (Okuda, 2022). Other significant producers include the United States, Italy, the Netherlands, and Poland. The most commonly cultivated species globally is the button mushroom (*Agaricus bisporus*), which accounts for about 40% of global production, followed by oyster (*Pleurotus spp.*) and wood ear mushrooms (*Auricularia spp.*) (Okuda, 2022).

In 2021, global edible mushroom production reached approximately 44.21 million metric tons and is projected to hit 20.84 million tons by 2026 in terms of market volume, with a valuation exceeding USD 50 billion (Guo et al., 2020; Niego et al., 2021). Technological innovations such as controlled-environment mushroom factories are also transforming the industry, enhancing both yields and sustainability (Chen et al., 2022). Furthermore, mushrooms exemplify circular economics principles by using agricultural waste as substrates, which promotes environmental sustainability and efficient resource use (Grimm & B. Wösten, 2018).

In Africa, and specifically Malawi, mushroom farming remains in the early stages of development but holds great potential for addressing rural poverty, food insecurity, and the impacts of climate variability. The National Agriculture Policy (NAP, 2016) promotes agricultural diversification as a strategy to enhance resilience and economic inclusion. Within this framework, mushrooms are increasingly being considered as a viable non-traditional crop due to their low input requirements and potential for high returns (Fatch et al., 2021; Msowoya et al., 2016).

Oyster mushrooms (*Pleurotus ostreatus*), the most widely cultivated species in Malawi, grow efficiently on common agricultural by-products like maize stalks, aligning with smallholder farmers' existing systems (Adjapong et al., 2015). This offers a unique opportunity to improve nutrition and generate income, especially among women who often lead such initiatives. Mushroom farming contributes directly to food security by providing protein-rich and micronutrient-dense foods and indirectly by diversifying income sources for rural households (Mango et al., 2018).

In Salima district, mushroom cultivation is gaining traction as part of localised agricultural innovation. However, publicly accessible data on the scale and impact of mushroom farming in the district is limited. While anecdotal evidence and NGO reports suggest growing interest, detailed empirical studies or statistics remain scarce. This gap underscores the importance of conducting localised research to assess how mushroom farming can be scaled effectively and sustainably in Salima district.

Furthermore, mushroom farming aligns with national and global development strategies, including Malawi Vision 2063, the Malawi Growth and Development Strategy (MGDS III), the National Agriculture Policy, and the Sustainable Development Goals (SDGs), particularly SDG 1 (No Poverty), SDG 2 (Zero Hunger), and SDG 5 (Gender Equality). By promoting

income generation, improving nutrition, and empowering women, mushroom farming contributes to inclusive and sustainable agricultural transformation.



Figure 1: Cultivated mushrooms (A) and wild mushrooms (B) in Chikumabanja Village, Chinguluwe EPA, Salima District.

1.3 Problem Statement

Mushroom production is growing around the world and is seen as a valuable way to improve food and income, especially in places with limited farming land and water. In Malawi, mushroom farming is encouraged by government policies to help reduce over dependence on maize and improve family nutrition. It fits well with smallholder farming because it uses cheap materials like maize stalks, and can be done with simple tools (Fatch et al., 2021; Msowoya et al., 2016). Salima District has started to adopt mushroom farming as part of this shift, especially among women, who see it as a way to earn money and support their families.

Unfortunately most farmers face significant challenges in both production and marketing. Key issues include limited access to quality spawn which is crucial for consistent production, and inadequate technical knowledge, as many women farmers lack expertise in substrate preparation, environmental control, and pest management that leading to low yields and inconsistent quality. High initial investment in infrastructure, such as growing rooms with controlled environments, is another barrier, particularly for small-scale farmers with financial constraints (Chioza and Ohga, 2014).

Additionally, mushrooms are highly perishable, and without proper packaging, storage and processing facilities, farmers experience post-harvest losses that hinder long-distance marketing and export opportunities. Market access is also limited, as many consumers in Malawi are unfamiliar with cultivated mushrooms, resulting in low domestic demand, while a lack of organised supply chains further hampers marketing efforts. Compounding these issues is the limited government support and absence of a clear policy framework, making it difficult for farmers to access credit, technical assistance, and marketing structures (Chiu et al., 2012). The combined impact of these production and marketing challenges limits the growth potential of the mushroom industry and undermines its contribution to the local economy (Royse et al., 2017)

Although previous studies have examined general challenges in mushroom farming in Malawi, they have not specifically addressed how women in areas like Salima cope with barriers related to mushroom production and marketing. Therefore, this study aims to fill that gap by focusing on the specific marketing and production challenges faced by women mushroom farmers and how these issues impact their income and the sustainability of their farming practices.

1.4 Objectives

1.4.1 Main Objective

To examine women's marketing barriers that affect mushroom production in Salima district.

1.4.2 Specific Objectives

- i. To assess the marketing practices of women on mushroom production in Salima District.
- ii. To analyse the marketing barriers that affect production and sustainability of women mushroom farming.
- iii. To examine potential solutions and strategies for improving production and market access for women mushroom producers

1.5 Research questions

- i. What are the marketing practices of women mushroom farmers in Salima District?
- ii. What are the marketing barriers that affect production and their impact on the profitability and sustainability of women mushroom farming?
- iii. What are the potential solutions and strategies for improving production and market access for women mushroom producers?

1.6 Significance of the study

This study aims to identify the key barriers faced by women involved in mushroom cultivation in Salima District. The challenges they encounter are multifaceted, including limited access to quality spawn, technical knowledge gaps, poor infrastructure, and inadequate market access. These obstacles hinder the growth of the mushroom sector and affect productivity, leading to low yields, high post-harvest losses, and limited economic opportunities for rural women. By addressing these issues, the study seeks to provide a comprehensive understanding of the constraints that women face, thereby enabling stakeholders to develop targeted strategies to overcome them.

The findings of this study will offer valuable insights into how addressing these barriers can improve the livelihoods of rural women. By overcoming the obstacles in the mushroom production process, women will be able to boost their income, gain more control over their economic activities, and experience greater empowerment. The results will also emphasise the need for targeted interventions that support women farmers, enhancing their participation in the mushroom sector and enabling them to benefit from its potential.

Additionally, the study will contribute to policy recommendations that could lead to stronger support for the mushroom sector in Salima District. These recommendations could help policymakers recognise the potential of mushrooms as a high-value crop, leading to increased investment, better infrastructure, and more effective policies aimed at overcoming the sector's challenges. By fostering a supportive environment, these policies will encourage sustainable growth in the mushroom industry, generating greater economic impact in the region.

Raising consumer awareness about the nutritional and economic benefits of mushrooms will also be a crucial outcome of this research. Increasing demand for mushrooms will not only benefit producers but also expand market access, creating new opportunities for women farmers. As consumer awareness grows, the local market for mushrooms will become more vibrant, offering women more avenues for selling their products and improving their economic outcomes.

Finally, this study will add to the body of knowledge on alternative high-value crops, filling a gap in previous research that has primarily focused on staple crops like maize and cotton. By shifting the focus to mushrooms, the study highlights the potential of this underutilised crop to

contribute to both rural livelihoods and local economies, providing a foundation for future research and development efforts in the agricultural sector

1.7 Justification of the Study

This study is important because it focuses on women mushroom farmers in Salima District who are trying to improve their lives by growing and selling mushrooms. Many of these women face serious difficulties when it comes to accessing markets. They often do not have enough information about where to sell, how to price their products, or how to package and transport their mushrooms. They also receive very little help from government officers or support programs. By exploring these challenges, the study provides a better understanding of the problems women face in mushroom marketing and identifies ways of reducing these problems.

The findings from this research will benefit several groups. Women mushroom farmers are the main beneficiaries because the study offers practical solutions that can help them sell their products more effectively, increase their income, and improve their farming businesses. Government departments, especially the Ministry of Agriculture, can use the findings to improve support services and develop better policies that consider the needs of women farmers. Development organisations and Non-Governmental Organisations (NGOs) will also find the results useful in designing programs for training, funding, and improving market access. In addition, extension officers can use this information to better assist women farmers on the ground.

The study also contributes to academic knowledge by filling a gap in the current research. While many studies in Malawi have focused on major crops like maize, cotton, and soybeans, there is little research that looks at mushrooms, especially from a gender perspective. This study provides new knowledge about women's experiences in selling mushrooms, the barriers they face, and the impact these have on their income and farming activities. This helps scholars and students understand how women participate in non-traditional farming sectors and how they can be better supported.

Furthermore, the research supports important national and global goals. It contributes to Malawi Vision 2063, which promotes economic growth, food security, and equal opportunities for men and women. It aligns with the National Agriculture Policy, which encourages farmers to grow different types of crops, including mushrooms, to reduce poverty and improve nutrition. It also supports the Gender Equality Act, which aims to reduce gender inequality in

all areas, including farming. On a global level, the study is relevant to the Sustainable Development Goals, especially Goal 1 on ending poverty, Goal 2 on ending hunger, and Goal 5 on promoting gender equality. By helping women overcome challenges in mushroom marketing, the study plays a role in building a more inclusive and sustainable farming system in Malawi.

1.8 Limitations of the Study

This study, while valuable in its exploration of the marketing barriers faced by women mushroom farmers in Salima District, has several limitations that affect the scope and generalisability of its findings. First, the study is geographically limited to Salima District, which means the results may not fully apply to other districts or regions in Malawi or beyond, especially those with different socioeconomic or cultural conditions. Consequently, the study's findings should be interpreted within the specific context of Salima, though the findings may serve as a useful reference for similar rural areas with comparable barriers. The data collection process encountered some logistical barriers, particularly in gaining the trust of respondents. Given the sensitive nature of financial information, some farmers were reluctant to disclose accurate details about their earnings or expenditures, which may have impacted the accuracy and completeness of the data. Furthermore, the study's limited time frame and the dynamic nature of market conditions meant that some emerging barriers, which could have influenced the outcomes, might have been overlooked or inadequately addressed.

While this study proposes potential solutions and strategies to improve market access and profitability for women mushroom farmers, these recommendations remain largely theoretical or stakeholder-driven. They lack full empirical validation through real-world case studies or pilot implementations. This gap in empirical evidence limits the immediate applicability of the proposed solutions. Moreover, the study did not conduct an in-depth analysis of broader external factors such as economic policies, climatic conditions, and global market trends which are elements that may significantly impact the viability and sustainability of mushroom farming in Malawi. Furthermore, the study's focus on gender-specific barriers means that broader, gender-neutral issues such as infrastructure development, market volatility, and institutional support for all smallholder farmers were not as extensively explored. This focus could have inadvertently excluded other demographic factors, such as youth involvement in agriculture or the role of men in farming, which may also influence marketing outcomes and sustainability.

1.9 Organisation of the Study

This study investigates the marketing practices, barriers, and solutions affecting the profitability and sustainability of women mushroom farmers in Salima District. Chapter One has introduced the study's background, objectives, research questions, and significance, emphasising the role of marketing in enhancing women farmers' livelihoods. Chapter Two reviews relevant literature, exploring theories and concepts such as market access, profitability, and gender-specific barriers in agriculture. Chapter Three outlines the research design, sampling methods, and analytical tools, while highlighting limitations encountered. Chapter Four presents the findings, and Chapter Five discusses the findings by linking to the literature and offering insights into the unique barriers faced by women mushroom farmers. Finally, Chapter six concludes by summarising key findings, providing actionable recommendations, and suggesting avenues for future research to promote sustainable and profitable mushroom farming practices for women in the region.

The next chapter presents the literature review. It integrates key theories such as Social Capital Theory and Market Orientation Theory, to examine social, economic, and institutional factors affecting market access and profitability. By synthesizing existing studies, the chapter identifies research gaps and establishes a conceptual framework to guide the analysis and development of strategies for improving market outcomes and sustainability

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant literature to provide a theoretical and empirical foundation for understanding the marketing barriers faced by women mushroom farmers in Salima District. It integrates key theories such as Social Capital Theory and Market Orientation Theory, to examine social, economic, and institutional factors affecting market access and profitability. By synthesising existing studies, the chapter identifies research gaps and establishes a conceptual framework to guide the analysis and development of strategies for improving market outcomes and sustainability.

2.2 Theoretical framework

The study was guided by the following theories:

2.2.1 Social Capital Theory

Social Capital Theory is a framework that emphasises the value of social networks, relationships, and norms in fostering cooperation and facilitating economic activities (Martikke, 2017). It posits that social capital, akin to financial or physical capital, can be harnessed to derive various benefits, including enhanced market participation and improved economic outcomes. Within the context of agricultural marketing, particularly among women mushroom farmers in rural districts such as Salima, Malawi, social capital can be a vital asset in overcoming marketing challenges like poor market access, lack of information, limited transport, and the absence of support services.

Social capital is often categorised into three distinct types: bonding, bridging, and linking capital. Each type serves a different function and can significantly impact marketing activities. Bonding social capital refers to the relationships within a closely-knit group, facilitating solidarity among members, which can lead to support systems, sharing of resources, and collective marketing efforts. For instance, women mushroom farmers in Salima can pool resources for joint transportation or share market information, thus reducing costs and enhancing their market reach. Studies have shown that smallholder farmers often leverage bonding social capital to create informal networks that provide assistance in addressing common challenges, such as labor shortages or sharing agricultural inputs (Esther et al., 2018).

Bridging social capital, connects diverse social groups, enhancing access to new networks, ideas, and opportunities outside one's immediate community. This can be crucial for women mushroom farmers who might lack exposure to broader markets. By forming connections with external stakeholders such as NGOs, agricultural extension services, or urban markets, these farmers can obtain new market insights and access additional resources. For example, initiatives that link farmers with urban markets have demonstrated how bridging social capital can enhance market participation by providing necessary market intelligence (Mpandeli & Maponya, 2014).

Linking social capital pertains to relationships with institutions and organisations that enable access to resources, information, and power dynamics. Women farmers in Salima can benefit from linking social capital through formal affiliations with agricultural cooperatives or government programs that provide training, financial aid, or infrastructure improvements. According to various studies, women cooperatives have significantly improved marketing capabilities by enabling collective bargaining power and access to finance (Esther et al., 2018).

Common marketing barriers such as limited transport options can be mitigated through these types of social capital. For instance, bonding social networks might create a local transport pooling arrangement that allows several women farmers to share transport costs for delivering their mushrooms to market. Furthermore, bridging ties can help women access transport providers who are willing to offer favorable rates for bulk deliveries, thus addressing the costs associated with logistics (Acharya & Dhungel, 2021).

Additionally, linking capital provides pathways to government resources intended for agricultural development, allowing women farmers to ameliorate their infrastructural deficits. Programs designed to improve rural road networks and increase market access for agricultural products have seen success in regions where linking capital is strong (Langyintuo, 2020).

Empirical examples from similar contexts also support these assertions. The implementation of programs that form networks among smallholder farmers has led to significant improvements in market accessibility and profitability. In South Africa, small-scale farmers reported increased sales and access to information after joining cooperatives that utilised all forms of social capital to facilitate collective marketing efforts (Mpandeli & Maponya, 2014).

Muringai & Ngarava (2021) studied social capital in smallholder horticultural production in Zimbabwe. They found that farmers with stronger social ties (both bonding and bridging

capital) had better access to market information and inputs, leading to improved productivity and profitability.

Adejumo and Okunlola (2019) examined social capital among vegetable farmers in Nigeria where their findings showed that group membership, trust, and participation in farmer organisations positively influenced access to extension services and improved marketing of produce.

2.2.2 Market Orientation Theories

Market Orientation Theory outlines a framework for businesses to align their strategies and practices with the needs and preferences of customers, competitors, and marketing stakeholders (Tomaskova, 2007). This theory can serve as an instrumental approach for women mushroom farmers in rural areas like Salima District in Malawi, where marketing agricultural produce presents various challenges such as low consumer demand, limited product differentiation, weak competition awareness, and poor coordination between production and sales. The key components of Market Orientation Theory, which are customer orientation, competitor orientation, interfunctional coordination, and social benefit orientation can collectively enhance the market performance of these farmers.

Customer Orientation focuses on understanding and meeting the needs of consumers. It emphasises the importance of gathering data about consumer preferences and behaviors to develop products that satisfy market demand. Women mushroom farmers can benefit from this component by investigating consumer preferences for mushroom varieties, packaging, and pricing. Studies have shown that farmers who tailor their products according to local consumer tastes can improve their sales significantly (Quisumbing et al., 2015). By adopting customer-oriented marketing practices, these farmers can increase consumer demand and reduce instances of unsold produce.

Competitor Orientation entails being aware of competitors' strategies and market activities to gain a competitive advantage. Women mushroom farmers in Salima may face challenges competing with larger agricultural producers, necessitating an understanding of competitor pricing, product offerings, and market positioning. Research indicates that farmers who actively monitor their competitors can better adapt their marketing strategies and pricing, leading to improved market conditions (Tham-Agyekum et al., 2021). This awareness is crucial for overcoming marketing barriers and increasing market participation.

Inter-functional Coordination involves the alignment and cooperation between different departments or functions within a business to ensure the seamless delivery of products to the market. For women mushroom farmers, effective coordination between production, marketing, and sales is vital. Poor communication can inhibit farmers' ability to respond swiftly to market demands or changes. By improving inter-functional processes such as linking production schedules with market requirements farmers can ensure that they have adequate supplies to meet customer demand, thereby minimising excess production and waste(Tadesse, 2020). Coordination facilitates timely information sharing, which can enhance product availability and customer satisfaction.

Social Benefit Orientation extends beyond profit-making, emphasising the role of businesses in contributing to social and community well-being(Tham-Agyekum et al., 2021). For women farmers, adopting a social benefit orientation could mean engaging in sustainable practices that benefit local communities, such as promoting local sourcing of inputs or environmentally friendly farming techniques. Aligning business practices with social goals can help build consumer trust and loyalty. The integration of social considerations into business strategies has been shown to enhance market access and profitability, particularly in communities that value ethical and sustainable farming.

The market-oriented approach has proven effective in enhancing smallholder farmers' access to markets and income generation. Successful case studies indicate that smallholders who adopt market-oriented strategies outperform their peers in terms of sales and profitability. For instance, women farmers engaged in high-value crops have reportedly improved their incomes significantly by tailoring their marketing strategies to align with market demands and consumer preferences(Quisumbing et al., 2015).

Odongo et al. (2018) studied market orientation among smallholder vegetable producers in Kenya. They found that producers with high market orientation (strong customer and competitor awareness) were more likely to adopt innovations, improve quality, and achieve better prices. Iram et al. (2020) explored the relationship between market orientation and the performance of mushroom producers in Pakistan. The study found that producers who focused on understanding customer preferences (e.g., packaging, freshness, type of mushroom), they improve customer's satisfaction through their services.

In summary, Market Orientation Theory offers a robust framework for analysing and strategising the marketing practices of women mushroom farmers in Salima District. By

focusing on customer needs, understanding competitive dynamics, fostering interdepartmental collaboration, and emphasising social benefits, these farmers can address pressing challenges such as low consumer demand and weak market presence. The integration of this theoretical framework into the current study's objectives underscores its relevance to better understand the marketing barriers faced by women mushroom farmers and to develop strategies that aim to enhance their market performances and economic empowerment.

2.3 Empirical literature Review

2.3.1 Marketing Practices among Smallholder Farmers

Marketing practices among women smallholder farmers engaging in non-traditional crops like mushrooms have garnered increased attention in recent years due to their potential for economic empowerment and food security. This section examines the various marketing strategies employed by these farmers, focusing mainly on women in rural settings. The review includes sales methods, pricing strategies, product packaging, customer interaction, and the role of both informal and formal networks. The discussion draws from experiences predominantly in Sub-Saharan Africa, where women farmers often face unique challenges and opportunities in their marketing endeavours.

Women smallholder farmers typically sell their produce through several channels, including farmgate sales, local markets, and cooperative models. Farmgate sales involve direct selling to consumers or local traders, which allows farmers to retain a greater share of the sale price (Markelova & Mwangi, 2010). However, such practices often limit the market reach, especially for non-traditional crops like mushrooms that may require more promotional effort to inform consumers about their benefits (Harvey et al., 2014). Local markets tend to be the most common avenue for marketing agricultural products, including mushrooms. Farmers who sell at local markets can benefit from reduced transportation costs and direct interactions with consumers, which facilitate stronger relationships. Importantly, cooperative models have emerged as effective means for women farmers to pool resources, share market information, and potentially negotiate better prices, as evidenced by successful cooperatives in Tanzania and Uganda (Markelova & Mwangi, 2010).

Pricing among women farmers in rural settings often reflects local demand and competition, with common strategies based on cost-plus pricing or value-based pricing. For high-value crops like mushrooms, understanding consumer price sensitivity can significantly enhance

profitability. Several studies highlight that women who adopt competitive pricing understanding the price point that local markets can bear experience better sales outcomes (Otekunrin et al., 2019). Furthermore, the flexibility afforded by cooperative selling allows women to adjust prices dynamically based on market conditions, ultimately leading to improved financial outcomes (Merrey et al., 2018).

Product packaging is increasingly recognized as an essential aspect of marketing that can influence consumer purchasing decisions. Women mushroom farmers in certain regions have used multi-functional packaging techniques that not only preserve freshness but also attract local consumers (Nordhagen et al., 2021). For instance, studies have shown that visually appealing packaging can enhance consumer perception of quality, leading to increased sales (Chalachew, 2018). In some cases, women utilise locally sourced materials to create packaging that resonates with cultural aesthetics, thereby strengthening community ties and enhancing marketability.

Direct interaction with customers is vital in building loyalty and sharing information about non-traditional crops. Women often engage in personalised customer service during market days, providing tastings and demonstrations that educate consumers about mushroom varieties and their nutritional benefits (Otekunrin et al., 2019). Research indicates that strong customer relationships foster repeat business and referrals, which are critical for long-term sustainability (Urquieta and Alwang, 2012). Furthermore, informal networks, such as local women's groups, play a crucial role in promoting interactions that bolster sales by recommending mushroom products to community members.

Both informal and formal networks are pivotal for women smallholder farmers aiming to enhance their market access. Informal networks, such as community groups, provide valuable information about market trends and consumer preferences, often enabling a collaborative approach to marketing. In contrast, formal networks such as agricultural cooperatives or partnerships with NGOs can provide training, access to larger markets, and essential resources for improved agricultural practices (Assan, 2022). Notably, research has shown that cooperative membership is associated with increased market information access and improved bargaining power, enabling women to engage more effectively with buyers (Markelova and Mwangi, 2010).

The marketing practices of women farmers vary significantly by crop type and gender dynamics. Studies indicate that women are more likely to engage in labour-intensive and high-value horticulture crops like mushrooms, whereas men predominantly focus on staple crops such as maize and rice. The gender difference in crop choice often impacts access to marketing opportunities, with women frequently facing higher barriers to market entry due to socio-cultural limitations (Chalachew, 2018). Additionally, the marketing of mushrooms, which requires specific knowledge of post-harvest techniques and related market dynamics, poses unique challenges that may not be equally faced by male counterparts who engage in less sensitive mainstream crops (Nico & Azzarri, 2022).

Despite the acknowledged importance of women in agricultural marketing, there is a notable scarcity of empirical studies specifically addressing the marketing practices of women mushroom farmers, particularly in regions like Salima District in Malawi. Current literature often overlooks mushrooms as a focus crop, even though mushrooms represent significant potential for rural economic development (Harvey et al., 2014). The literature indicates that women smallholder farmers, especially of non-traditional crops like mushrooms, navigate a mix of traditional and modern marketing strategies. When adapted to their specific rural contexts, these approaches offer promising avenues for enhancing both profitability and sustainability.

2.3.2 Marketing Barriers

Women smallholder farmers across Sub-Saharan Africa play an essential role in agricultural production, yet they face widespread marketing barriers that restrict their participation in and benefit from agricultural value chains. These challenges, which include limited market access, poor infrastructure, weak bargaining power, inadequate storage and packaging facilities, and information asymmetry, significantly affect the profitability, scalability, and sustainability of their agricultural enterprises. A growing body of empirical research highlights the ways in which these structural and gendered barriers constrain women's potential in rural agricultural economies.

One of the most consistently reported challenges is limited access to markets. Women farmers often operate in geographically remote areas with limited infrastructure, making it difficult to reach profitable markets beyond their immediate communities. Market participation is frequently restricted to informal or local markets, which offer limited returns and fewer

opportunities for price negotiation. Markelova and Mwangi (2010) noted that physical distance from commercial hubs, compounded by inadequate transport, greatly reduces access to higher-value markets. Similarly, Gengenbach et al. (2017) found that women smallholder farmers in Uganda encountered significant barriers when trying to reach urban markets, particularly due to the unavailability of vehicles and the cost of transport. These challenges directly reduce potential income, limit opportunities for business expansion, and discourage the production of surplus crops.

Transport and infrastructure limitations are closely linked to these market access issues. Poor road conditions, unreliable public transport, and the absence of farm-to-market networks are common constraints. In Zambia, a quantitative study found that the lack of transport infrastructure not only increased the time and cost required to market produce but also led to substantial losses, especially for perishable items (John, 2013). Women producing high-value crops such as vegetables or fruits were especially vulnerable to post-harvest losses due to their reliance on infrequent and often costly transport options. In many cases, the additional burden of arranging transportation also falls disproportionately on women, further reducing their time and resources for productive farming activities.

Bargaining power, shaped largely by socio-cultural dynamics, presents another layer of difficulty. In male-dominated agricultural markets, women frequently face systemic disadvantages when negotiating prices or terms of trade. Fischer and Qaim (2012), in their study of Kenyan farmers, documented how middlemen often exploited women's limited access to market information and capital, offering lower prices for comparable goods. The absence of negotiation training, combined with entrenched gender roles, limits women's capacity to secure favourable terms even when they produce high-quality crops. These power imbalances translate into lower profit margins and a lack of control over market-related decisions.

Packaging and storage are additional constraints that affect women's ability to preserve and market their produce effectively. In many rural contexts, women lack access to durable packaging materials or temperature-controlled storage, which are essential for maintaining quality, especially for perishable crops. Kushwaha et al. (2024) noted that the use of makeshift packaging leads to product degradation, reduced shelf life, and in many cases, market rejection. Similarly, Azam et al. (2019) observed that under-investment in post-harvest infrastructure both at the farm level and along the supply chain was a major barrier to expanding women's access to premium or formal markets.

Another key issue is the lack of access to real-time and reliable market information. Market knowledge, including current prices, demand trends, and buyer preferences, is often out of reach for women due to limited access to digital tools, literacy barriers, or exclusion from agricultural information networks. Markelova and Mwangi (2010) highlighted that without such information, women are unable to make informed decisions about what to grow, when to sell, or where to market their produce. However, Gengenbach et al. (2017) found that women involved in cooperatives or supported by NGOs with information-sharing mechanisms were better equipped to respond to market fluctuations, adopt responsive pricing, and improve their earnings.

Together, these studies point to a complex interplay of logistical, institutional, and socio-cultural factors that shape women's experiences in agricultural marketing. The structural barriers are further compounded by gender inequalities that restrict women's access to capital, training, and support services (Fischer and Qaim (2012). As a result, women are often confined to low-profit marketing channels and face persistent constraints in scaling their farming enterprises or improving income sustainability. While there is a growing body of literature documenting these challenges, empirical research remains limited in some non-traditional agricultural sectors, including emerging value chains like mushrooms, which may present unique marketing dynamics for women producers.

The literature reveals that women smallholder farmers in Sub-Saharan Africa face complex marketing barriers shaped by both structural and institutional factors. Studies emphasise the importance of gender-responsive interventions such as supportive policies, infrastructure investment, and improved market access to enhance women's participation and equity in agricultural value chains.

2.3.3 Strategies for Enhancing Market Access for Women Smallholder Farmers

Women smallholder farmers in the agricultural sector, particularly those involved in mushroom and horticultural production, face significant marketing challenges despite their important role in food production and income generation. This section explores practical strategies that have been implemented to address these barriers in order to improve women's access to markets, profitability, and economic empowerment.

A critical approach to improving market access has been the formation of cooperatives and the adoption of group marketing strategies. These models allow women to pool their resources and

collectively navigate market systems, resulting in economies of scale and enhanced bargaining power. In Uganda, cooperative initiatives led to increased incomes among women by facilitating collective marketing practices that lowered transaction costs and improved market visibility (Mayanja & Tipi, 2017). Similarly, the KALRO cooperative in Kenya, which focused on women floriculturists growers, demonstrated that organised group efforts can significantly bolster pricing power and financial stability (Ramani et al., 2021). Beyond economic benefits, such initiatives also nurture a sense of community and shared ownership, which contributes to the sustainability and empowerment of women farmers.

Alongside cooperative efforts, the use of digital platforms and mobile-based market information systems has emerged as a transformative solution. By leveraging mobile technology, women farmers gain access to real-time information about pricing, demand patterns, and best agricultural practices. The “M-Farm” initiative in Kenya exemplifies this approach by providing farmers with market intelligence through mobile phones, enabling better decision-making (Gengenbach et al., 2017). In Malawi, similar technologies have helped women bypass exploitative intermediaries by facilitating direct contact with buyers (Orr et al., 2018). These digital tools are essential in levelling the information playing field between male and female farmers and ensuring equitable participation in markets.

Another key strategy involves capacity-building through training and extension services. Tailored programs that focus on production techniques, value addition, quality control, and branding have shown substantial results. In Ethiopia, targeted training in mushroom cultivation enabled women to improve not only their production but also the marketability of their products (Mayanja & Tipi, 2017). Empowering women through knowledge directly contributes to improved confidence, higher product quality, and greater returns (Prithika et al., 2024). The gender-sensitive nature of these training modules ensures that they address the unique obstacles women face in agricultural marketing.

In addition to these efforts, public-private partnerships have played a crucial role in integrating women into formal agricultural value chains. Initiatives involving collaborations among NGOs, government bodies, and private enterprises have been effective in providing access to modern inputs, technical support, and structured market opportunities. Programs such as the “New Green Revolution for Africa” exemplify how inclusive models can support women by addressing deep-rooted systemic issues (Gengenbach et al., 2017). These partnerships promote

value addition and help create demand for women-produced goods, further advancing their market position and sustainability.

Value addition and branding are also pivotal in enhancing women's competitiveness, especially in specialised markets such as mushrooms. Through interventions that focus on packaging, branding, and artisanal processing, women have been able to significantly elevate the market value of their products. For example, initiatives in Uganda showed that marketing mushrooms as gourmet or organic helped women tap into premium market segments, boosting their income (Handsouch & Wollni, 2015; Mayanja & Tipi, 2017). These approaches not only increase profitability but also build the professional identities of women farmers as entrepreneurs.

Despite these advancements, persistent gender dynamics continue to constrain progress. Structural issues such as unequal access to land, financial services, and intra-household decision-making authority remain major barriers (Quisumbing et al., 2015). Effective implementation of the above strategies requires a comprehensive understanding of these challenges and the integration of gender-sensitive frameworks that reflect local cultural and social contexts (Prithika et al., 2024).

The reviewed literature underscores the importance of integrated strategies such as cooperative models, digital platforms, targeted training, and public-private partnerships in improving market access for women smallholder farmers. Evidence from various contexts illustrates that when these interventions are designed with gender sensitivity, they yield meaningful improvements in women's market engagement and economic outcomes. However, the persistence of structural gender barriers is a recurring theme, suggesting that for these strategies to be truly effective, they must be implemented alongside broader efforts to promote gender equity within agricultural systems.

2.4 Conceptual frame work

This shows the breakdown of the independent, dependent, and the intermediate variables on women mushroom farmers in Salima district - Malawi. The framework shows the independent, dependent and intermediate variables' relationships. Once independent variables: market practices (Market, promotion, prices), barriers (Storage, transportation, technology, packaging) and strategies (Government role, NGOs' role, Farmers' initiatives) are influenced positively by the intermediate variables (Gender, production level and demand), they will result to dependent variable; sustainable mushroom farming characterised of food security and increased income.

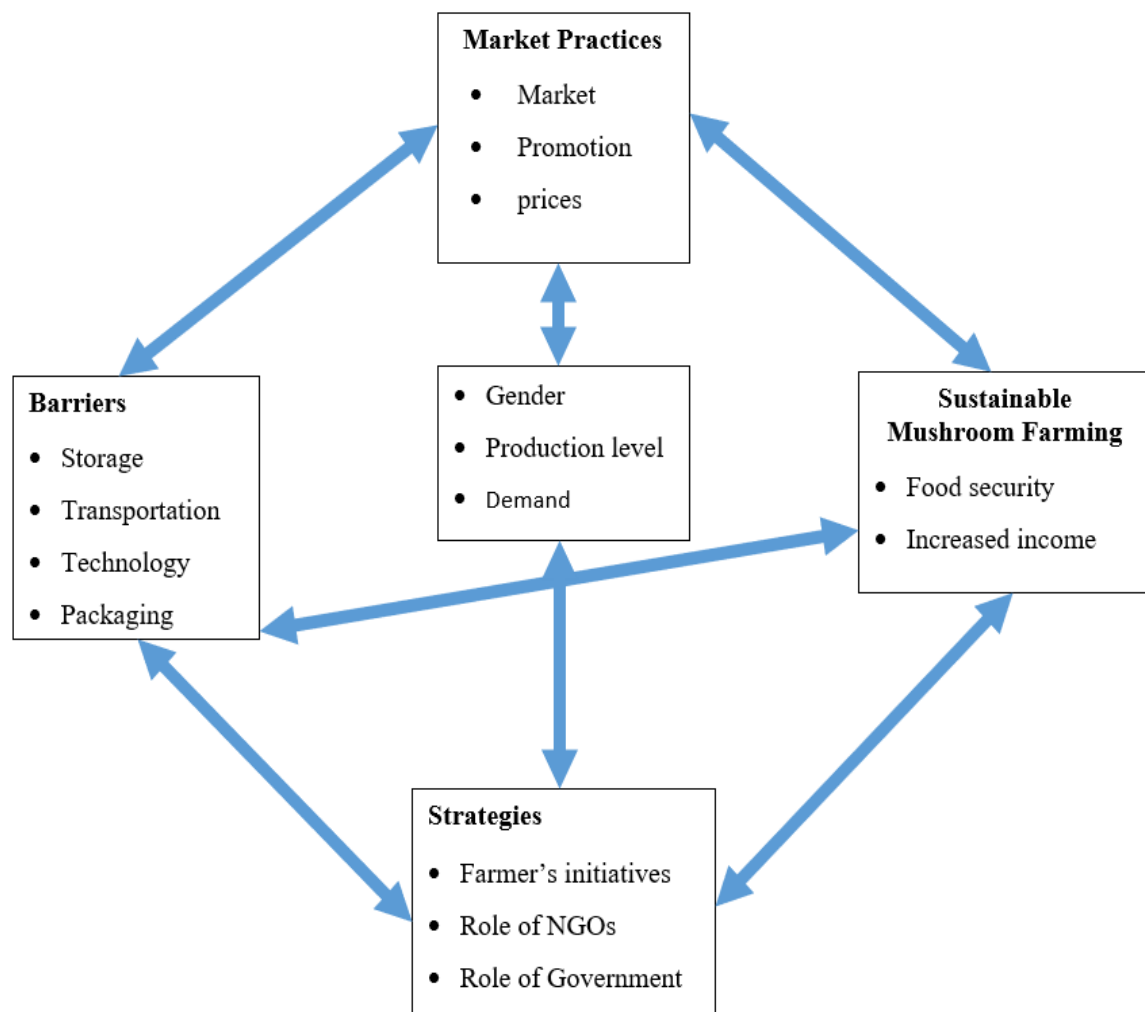


Figure 2: Conceptual framework for the barriers that face women mushroom farmers in Salima district.

2.5 Summary of the chapter

In conclusion, this literature review has highlighted the key aspects of marketing practices among women mushroom farmers in Salima District. It has shown that while women play a significant role in mushroom production, their marketing practices are often limited by factors such as inadequate access to markets, lack of proper marketing skills, and limited infrastructure. These constraints severely impact the profitability and sustainability of their farming ventures, as women face barriers in securing fair prices, reaching a broad customer base, and maintaining consistent product quality. The review has emphasised the importance of addressing these barriers to improve the economic outcomes of women in mushroom farming.

Furthermore, the review has identified potential solutions to enhance market access and profitability for women mushroom producers. Strategies such as training in marketing techniques, establishing cooperative groups, improving transportation infrastructure, and enhancing product quality through standardization were highlighted as essential for overcoming the Barriers faced by these farmers. By focusing on these strategies, women in Salima District can improve their market reach, increase their incomes, and ensure the long-term sustainability of their mushroom farming businesses. This chapter underscores the need for targeted interventions to empower women farmers, ensuring they have the necessary tools and support to thrive in the competitive agricultural market.

The next chapter presents the research design and methodology. It describes the research design, study area, sampling procedures, sample size to be included in the study, along with data collection, data analysis methods and tools, ethical consideration.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter presents the methodology and methods adopted by the study to identify barriers and opportunities related to women mushroom cultivation and marketing channels in Salima District. The chapter describes the research design, study area, sampling procedures and sample size to be included in the study, along with data collection, data analysis methods and tools, and ethical consideration.

3.2 Study area

This study was conducted in Salima District, located in the Central Region of Malawi, along the western shores of Lake Malawi. The district is predominantly rural, with most of its inhabitants engaged in small-scale farming as their primary source of livelihood. Salima is agriculturally diverse, benefiting from fertile soils and a favourable climate that supports the cultivation of various crops. In recent years, mushroom farming has emerged as an alternative income-generating activity, particularly among women. Women in the district have adopted mushroom production not only as a source of income but also as a way to improve household food security and nutrition. Despite the growing interest and investment in this agricultural niche, mushroom producers especially women face numerous marketing challenges. These include restricted access to markets, poor road infrastructure that hampers transportation, lack of adequate storage facilities, and limited bargaining power due to weak cooperative organisation and insufficient access to market information.

Salima District was purposively selected as the study site due to its increasing prominence in mushroom production and the visible engagement of women in this activity. The district's geographical location, situated within accessible distance to Lilongwe, Malawi's capital city and a major urban market, presents significant yet underutilised marketing opportunities for smallholder producers. This proximity could potentially facilitate market linkages and improve profitability, but existing barriers continue to hinder the full exploitation of these opportunities. The presence of active community-based groups and agricultural development programs supporting mushroom cultivation made Salima a compelling setting for investigating the gendered dynamics of agricultural marketing. The district has also been the target of various interventions from government agencies, Non-Governmental Organisations (NGOs), and

donor-supported programs aiming to strengthen women’s roles in agriculture, further justifying its relevance for this study.

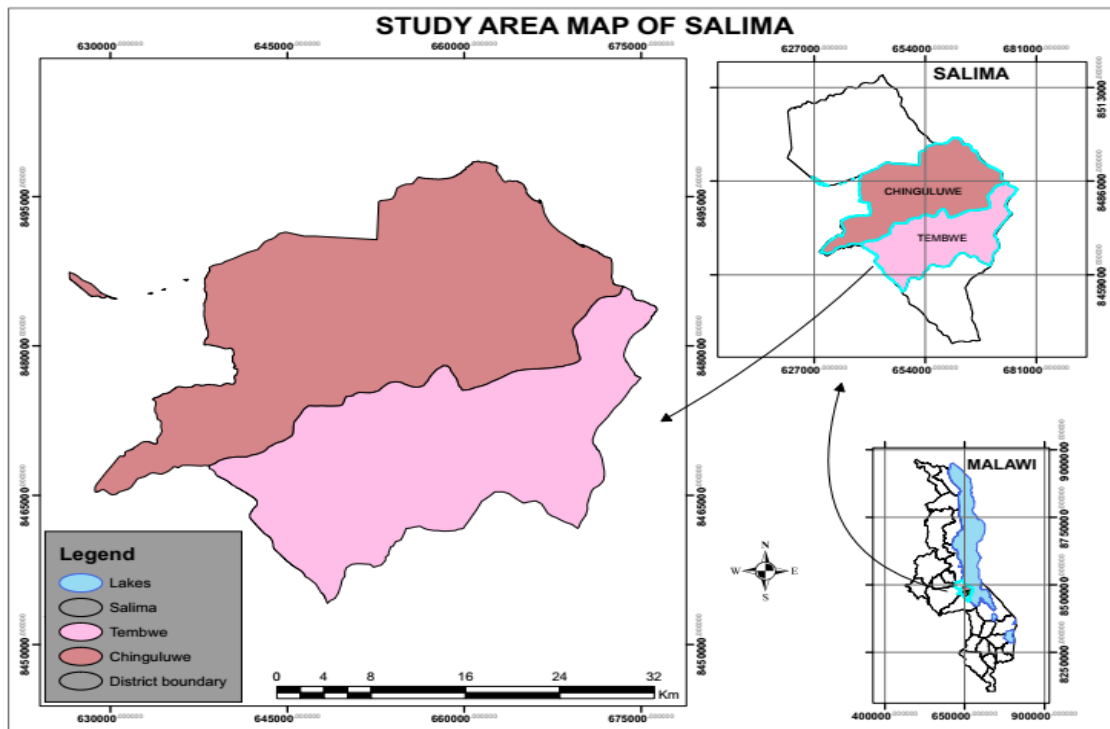


Figure 3: Map of Salima district showing T/As where the researcher sampled the participants of the study.

Within Salima District, two Extension Planning Areas (EPAs) Chinguluwe and Tembwe were purposively selected for in-depth fieldwork. These EPAs were identified in collaboration with the Salima District Agriculture Office, which operates under the Ministry of Agriculture and is responsible for coordinating agricultural extension services at the local level. The choice of Chinguluwe and Tembwe was based on their relatively high concentration of women engaged in mushroom cultivation. In these areas, women are organised in community-based farming groups and cooperatives that have received support from local NGOs and government-affiliated extension services. These groups have benefitted from training sessions, the provision of mushroom spawn, and technical assistance to enhance production. The combination of active production, observable marketing barriers, and the existence of supportive institutional frameworks made these EPAs appropriate for capturing the complex realities facing women mushroom producers.

The study focused exclusively on women farmers because they constitute the majority of smallholder mushroom producers in the selected EPAs and are disproportionately affected by marketing challenges. Unlike men, women in rural Malawi often face systemic barriers such as limited access to land, lower levels of education, and constrained mobility, all of which influence their ability to participate effectively in agricultural markets. By focusing on women, the study aimed to generate deeper insights into the specific challenges they face and to inform targeted interventions that could enhance their market participation and economic empowerment. The exclusion of men from the study was therefore intentional, based on the objective of understanding and addressing gender-specific barriers within the context of mushroom marketing in Salima District.

3.3 Population of the study

The study population encompasses all individuals who possess the characteristics deemed relevant by the researcher for addressing the objectives of the investigation (Creswell & Plano Clark, 2018). In this study, the primary focus was on women, particularly those engaged in mushroom farming, as well as key stakeholders such as extension officers, local government leaders, and other relevant authorities. Specifically, the research targeted women involved in mushroom production within Chinguluwe and Tembwe EPAs, ensuring the inclusion of diverse experiences and practices. Additionally, agricultural extension officers and local government leaders were included to provide broader insights into the institutional and policy environments impacting mushroom production. This composition of the study population was designed to capture a comprehensive understanding of the factors influencing market access, production practices, and profitability among women mushroom farmers in the Salima district.

3.4 Research Design

Creswell (2014) defines research design as the procedures for collecting, analysing, interpreting, and reporting data in research studies. This study aimed to assess the marketing practices, barriers, and potential solutions for improving market access and profitability for women mushroom farmers in Salima district, focusing on three objectives: To assess the marketing practices of women mushroom farmers in Salima District. To analyse the major marketing barriers and their impact on the profitability and sustainability of women mushroom farming. And to examine potential solutions for improving market access and profitability for women mushroom producers.

To achieve these objectives, the study employed a qualitative research design. The qualitative approach allowed for an in-depth exploration of the perspectives and experiences of women mushroom farmers, providing a rich understanding of the barriers they face and the strategies that could help enhance their market access and profitability. This approach, based solely on qualitative data, was aligned with Creswell's emphasis on understanding the complexities of human experiences and offered valuable insights into the underlying factors affecting the sustainability of women's mushroom farming in the region.

3.5 Sample Sizes and Sample technique

This study employed purposive sampling, a non-probability sampling technique that allowed the researcher to deliberately select participants with specific knowledge and experience relevant to the research objectives (Tongco, 2006). This approach ensured that only women actively involved in mushroom farming and facing marketing barriers were included, thereby maximising the richness and relevance of the data. While purposive sampling does not guarantee statistical generalisability, it enhances the depth and quality of qualitative insights and helps minimise selection bias (Creswell & Plano Clark, 2018).

In line with qualitative research best practices, the sample size was determined by the principle of data saturation, the point at which no new information or themes emerge from additional data collection. The initial plan was to interview 150 participants but saturation point was reached at 110 participants. These individuals were engaged through interview guide and focus group discussions (FGDs). Out of these 110 participants, 43 were from Tembwe EPA and 67 from Chinguluwe EPA. The participants primarily included women mushroom farmers, who were the main focus of the study. In addition, extension officers and local government leaders were included as key informants to provide broader context and triangulate findings.

The two EPAs Tembwe and Chinguluwe were selected purposively based on the following criteria: High involvement of women in mushroom farming where these areas had an active presence of women mushroom producers, aligning with the study's focus. Also, existence of organised farmer groups or cooperatives: this facilitated easier access to participants for interviews and FGDs. Variation in socio-economic conditions: The selected EPAs reflected differing socio-economic characteristics within Salima District, helping to capture a range of experiences.

The exclusive focus on women is justified by the study’s aim to explore gender-specific challenges in market access and production practices. In Malawi and much of Sub-Saharan Africa, women dominate small-scale mushroom farming, often integrating it with household responsibilities (Chipande, 2008). Including men could have diluted the focus on structural gender inequalities, as men are typically more involved in commercial farming and marketing decisions. Overall, the combination of purposive sampling, targeted participant selection, and thoughtful site selection ensured the collection of comprehensive, relevant, and context-rich data to address the study objectives.

Table 1: Respondents of the study

Population	Respondents	Total
Women farmers	110	110
Extension officers	1	1
Local government leaders	2	2

3.6 Methods for Data Collection

This study employed a qualitative research approach to explore the topic in depth, focusing on understanding the experiences, perspectives, and barriers of participants (Marshall ,1996). Data collection was primarily through Interview guide, key informant interviews, and focus group discussions, and enabling the researcher to gather rich, detailed insights from participants. This qualitative method allowed for an in-depth exploration of the research topic, providing a deeper understanding of the underlying factors and contextual influences. The emphasis was on capturing the meanings and interpretations participants attached to their experiences, ensuring a nuanced analysis of the subject matter.

3.6.1 Interview guide

Creswell (2009) argues that qualitative research interviews centered on few open-ended questions that “are intended to elicit views and opinions from the participants.

An interview guide was used as a key tool in conducting semi-structured interviews with participants. The guide consisted of open-ended questions designed to align with the study objectives and thematic focus areas. A total number of 60 participants were fully participated.

This allowed the researcher to maintain consistency across all interviews while also creating space for flexibility (Creswell, 2009). The open-ended nature of the questions encouraged participants to share their experiences in detail, helping to uncover deep insights into their roles, challenges, and perspectives in mushroom production and marketing.

The interview guide also served as a framework to steer the conversations in a focused yet natural manner. It enabled the researcher to explore emerging themes and probe further into relevant issues as they arose during discussions. This approach was especially valuable for understanding the social dynamics, market practices, and personal motivations of the women involved in mushroom farming, which may not have been fully captured through structured questionnaires alone.

3.6.2 Focus Group Discussions

As part of the qualitative data collection process for this study, Focus Group Discussions (FGDs) were conducted to gain a deeper understanding of the collective experiences, perceptions, and challenges faced by women mushroom producers in Salima District. Five FGDs with 50 total number of participants were organised, where two were conducted in Tembwe EPA and three in Chinguluwe EPA bringing together participants from each area to engage in guided, open-ended discussions. These sessions created an environment that encouraged active participation, open dialogue, and shared reflections on barriers, innovative practices, and the social dynamics influencing their mushroom farming activities. The interactive nature of the focus groups allowed for the emergence of common themes and context-specific insights, enriching the study with collective viewpoints and lived experiences (Krueger & Casey, 2015).

Focus groups, originally rooted in sociology, have since become widely used in fields such as marketing and social sciences, including development research. Robert Merton was among the first to formally introduce the method as a structured group interview technique (Mishra, 2016). A focus group involves gathering a small, purposefully selected group of individuals who share certain demographic characteristics in this case, women engaged in mushroom production to discuss issues relevant to the study in a moderated setting (Sachdeva et al., 2024). In this study, the focus group method enabled researchers to observe group dynamics, stimulate discussion, and explore diverse yet interconnected perspectives, making it a valuable tool for

understanding the social and economic realities shaping women's participation in mushroom farming in Salima.

3.6.3 Key Informant Interviews

Key Informant Interviews (KIIs) were employed in this study as a qualitative data collection method to gather in-depth insights from individuals with expert knowledge and firsthand experience related to mushroom production and marketing in Salima District. This method was particularly useful for understanding broader trends, motivations, and structural challenges that may not be easily captured through other tools (Gauchan et al., 2022). Key informants were carefully selected based on their roles and involvement in relevant areas such as agriculture extension services, community leadership, and women's economic empowerment initiatives. Their perspectives provided valuable contextual understanding of the factors influencing women's participation in mushroom farming.

According to Gauchan et al. (2022), KIIs are specialised interviews that emphasize depth over breadth, focusing on information-rich sources to uncover detailed and nuanced insights. Unlike general surveys or group discussions, KIIs allow for more focused exploration of specific issues through flexible, semi-structured conversations. This approach is especially effective in areas where expert knowledge is crucial, such as policy implementation, local governance, and development interventions. In this study, KIIs played a critical role in complementing data from focus groups and questionnaires, helping to validate findings and illuminate underlying social, institutional, and market dynamics affecting women mushroom producers in Salima.

3.7 Data Collection Tools

3.7.1 Voice recording

To complement the interview process, a voice recorder (specifically, a mobile phone recorder) was used to capture all conversations with participants only after obtaining their informed consent. This ensured that the data collected was both accurate and complete. The use of audio recording reduced the need for extensive note-taking during interviews, allowing the researcher to focus more on engaging with participant. Recorded interviews were later transcribed verbatim for analysis, preserving the authenticity of participants' voices and enhancing the credibility and reliability of the study findings.

Table 2: Summary of Tools and Methods

Method	Data Collected	Linked Objectives	Tools Used
Interview Guide	In-depth qualitative data on individual experiences and practices	Objective 1 and 3	Mobile phone (for audio recording)
Focus Group Discussions	Group insights on community-level challenges/barriers, perceptions, and proposed solutions	Objective 2 and 3	Mobile phone (for audio recording and photography)
Key Informant Interviews	Expert knowledge on production constraints and institutional support	Objective 3	Mobile phone (for audio recording)

3.8 Data Analysis

This study used a qualitative method of data analysis, specifically following the thematic analysis approach described by Braun and Clarke (2006). The analysis was done manually without the use of any specialised qualitative data analysis software such as NVivo or MAXQDA. According to Clarke and Braun, thematic analysis can be carried out either manually through printed transcripts, highlighting, and note-taking or with the help of a software. Manual coding is particularly common and effective in small-scale studies like this one, where close engagement with the data is essential.

The manual analysis process followed a structured, multi-step procedure. In the first stage, the researcher became familiar with the data by reading through all transcripts and field notes several times to understand the content as a whole. The second stage involved generating initial codes, where meaningful words, phrases, and concepts were carefully identified and marked throughout the data set.

In the third stage, these codes were grouped and reviewed to identify possible themes. Attention was given to patterns and common ideas that appeared across the responses. During the fourth stage, these themes were refined, reviewed, and named to ensure each one clearly represented an important aspect of the data and was different from the others. In the final stage, the themes

were analysed in relation to the study's research questions and the guiding theoretical frameworks Social Capital Theory and Market Orientation Theory.

The entire process was flexible and reflective, allowing for continuous improvement and deeper understanding as new insights developed. This careful, step-by-step manual process ensured that the data was thoroughly examined and that the findings stayed true to the voices of the participants, while also being connected to the theoretical foundations of the study.

Table 3: Methodology Matrix

No.	Objectives	Variables	Data collection Tools	Analysis
1.	To assess the marketing practices of women mushroom farmers in Salima District	Market (restaurants, hotels, lodges, individual customers, etc). Promotion (Social-media, and word of mouth) and Price	Interview guide, Voice recording	Thematic
2.	To identify the major marketing Barriers and their impact on profitability and sustainability of women mushroom farming	Transportation, Storage, Packaging, Knowledge and skills, etc.	Focus group discussion, Voice recording and photos by using mobile phone	
3.	To examine potential solutions and strategies for improving market access and profitability for female mushroom producers	Training and Capacity Building, Access to Financial Resources, Infrastructure Development, Farmers initiatives, Policy and Legal Support, Technology and Innovation, Community and Support	Key Informant Interviews, Voice recoder	

3.9 Ethical Consideration

Ethical considerations were crucial throughout the entire research process. During data collection, the researcher ensured that all ethical guidelines were followed, and participants were treated in accordance with established standards and norms. According to Rashid (2025), ethical issues in research include informed consent, the right to privacy of professional colleagues, and protection from harm.

To gain access to the research field, the researcher first obtained a clearance letter from Mzuzu University before beginning data collection. This letter was then submitted to relevant authorities for approval to conduct the study within their institutions or areas. Prior to data collection, the researcher sought both scientific and ethical approval from the Mzuzu University Research Ethics Committee (MZUNIREC). The study followed ethical standards, ensuring informed consent, confidentiality, and respectful engagement with the local community. Ethical approval was granted by the appropriate authorities, and throughout the study.

3.10 Summary of the chapter

In conclusion, this chapter has outlined the research methodology employed to investigate the barriers and opportunities related to women's mushroom cultivation and marketing channels in Salima District. It has detailed the research design, study area, sampling procedures, and sample size, as well as the data collection and analysis methods used to gather and interpret the relevant information. Additionally, ethical considerations were addressed to ensure the integrity and validity of the study. This approach provides a solid foundation for understanding the barriers and potential strategies to enhance women's involvement in.

The next chapter presents the results and discussion. This chapter delves into the marketing methods employed by women farmers, examining the obstacles they face, particularly those affecting their financial outcomes and long-term viability. It also discusses potential solutions and strategies to improve market access, aiming to boost profitability and support the growth and empowerment of women mushroom producers in the region.

CHAPTER FOUR: RESULTS

4.1 Introduction

This chapter presents the findings of the study on women mushroom farmers in Salima District, structured around three key objectives: assessing their marketing practices, identifying the major marketing barriers affecting profitability and sustainability, and exploring potential solutions to enhance market access and profitability. The results provide insights into the marketing methods used by women farmers; the barriers they encounter especially those impacting financial returns and long-term viability and possible interventions to improve their market participation. Through data analysis, this chapter highlights critical trends and patterns that shape the marketing dynamics of women mushroom producers in the region.

4.2 Mushroom local demand and supply

Wild edible mushrooms have long been used across the country and are eaten mainly at household level during the rains, whereas cultivated oyster and button mushrooms are primarily marketed to the hospitality and retail sectors (hotels, restaurants and major supermarkets) (Mlambo, and Maphosa, 2017). Hence the demands of cultivated mushroom from local households are still limited mainly due to lack of knowledge of the nutritional values of cultivated mushroom and also and low purchasing power due to poverty (Kavhumbura, 2022).

Malawi's domestic cultivated mushroom production was reported at 6.5 tonnes/year against an estimated national demand of 80 tonnes/year. This means that the country meets only 8% of its cultivated-mushroom demand (Marshall, and Nair, 2009). According to the survey conducted in Salima district, the production ranges from 200kg up to 300kg per year which is very small compared to the national demand.

4.3 Marketing Channels and Practices

Women mushroom farmers in Salima district have strategically developed multiple marketing channels to sell their mushroom. One primary avenue involves short-term agreements with local supermarkets and restaurants, enabling direct delivery of fresh mushrooms. These arrangements ensure a steady flow of sales and provide quick market access. However, the short delivery windows of 2–3 days add logistical pressure and create barriers in maintaining consistent supply. Furthermore, the temporary nature of these agreements hinders the farmers

from establishing long-term partnerships that could offer greater stability and predictability in income.

Another vital channel is selling mushrooms to lodges and hotels within the district. These businesses often prioritise fresh, locally sourced ingredients, making the women farmers highly desirable suppliers. By catering to this demand, the farmers not only fulfil an important niche but also build valuable relationships with premium buyers. Despite these benefits, the absence of formal contracts means that their market position remains uncertain and subject to fluctuating demand.

Lastly, some farmers directly engage with individual customers through farm visits or by accepting orders over the phone, delivering mushrooms directly to their buyers. This personalised approach fosters strong customer relationships and meets small-scale, localised demand. However, it diverts time and resources that could have been used for scaling production or exploring larger markets. Together, these marketing practices highlight both the entrepreneurial spirit of the women farmers and the barriers they face in securing sustainable, long-term market access as reflected in the following quote:

“We supply mushrooms to our customers through various methods. Some customers visit our farms directly to purchase mushrooms, while others place orders over the phone, and we deliver the mushrooms to them. But we often acquire customers by chance, as we currently lack access to an established market for mushrooms” (Treasure at Chinguluwe EPA, aged 42).

The current marketing approach in Salima district which focuses primarily on local businesses and individual customers, restricts opportunities for expansion into regional or national markets. Dependence on direct sales and short-term agreements not only limits revenue diversification but also hinders investments in branding and product differentiation that could enhance market reach. Additionally, the highly perishable nature of mushrooms demands quick sales, compelling farmers to prioritise immediate transactions over long-term strategic planning. This constraint reduces their ability to stockpile produce for better pricing opportunities or to explore new and potentially lucrative markets.

4.4 Digital Marketing Practices

The mushroom farmers in Salima District, particularly in the Chinguluwe and Tembwe EPAs, primarily rely on traditional marketing methods to sell their products. These include direct customer interactions and word-of-mouth advertising at community gatherings such as village meetings and church events. While these approaches have proven somewhat effective in attracting new customers, they are limited in scope and scalability. In comparison to other agricultural sectors that have begun embracing digital tools, the mushroom farmers in Salima remain constrained by minimal exposure to modern digital marketing practices. WhatsApp groups are currently their sole digital platform for communication and networking, which restricts their ability to access wider markets, diversify customer bases, or build strong connections with potential buyers.

However, the successful transition to digital marketing requires targeted training and support tailored to the farmers' unique needs and capacities. Providing them with the necessary knowledge and resources to navigate digital tools effectively would empower them to maximise the benefits of these platforms. This shift would not only enhance their individual businesses but also contribute to the sustainable growth of mushroom farming in Salima District, unlocking new opportunities for women entrepreneurs in the region.

4.5 Pricing strategies

The pricing strategies employed by mushroom farmers in Salima District largely rely on direct negotiations between farmers and customers. Without an established or fixed market price, these negotiations often result in inconsistent pricing and financial losses for the farmers. In the Chinguluwe and Tembwe EPAs, for instance, while the standard price for mushrooms ranges from 2,000 to 3,000 MK, farmers are sometimes compelled to sell at significantly lower prices, such as 1000 MK, just to secure a sale. This practice undermines their profitability and the sustainability of their businesses, leaving them vulnerable to economic instability.

Several factors contribute to this pricing barriers such as limited consumer awareness about the health benefits of mushrooms plays a significant role, as many potential buyers remain unaware of their nutritional and medicinal advantages. This lack of knowledge dampens demand and forces farmers to compete on price rather than value. Additionally, the devaluation of the Kwacha exacerbates the situation by driving up production costs and disrupting local market

dynamics. These economic pressures leave farmers with little choice but to accept unfavourable prices, further straining their financial viability as one of the extension mushroom farmer said below:

“We usually rely on bargaining between ourselves as producers and our customers. Unfortunately, this sometimes results in losses, as we are forced to sell our products at lower prices” (Mushroom farmer at Tembwe EPA, aged 40).

4.6 Marketing Barriers

4.6.1 Access to structured market

In Salima District, women mushroom farmers face significant marketing barriers due to the absence of a structured market. Without established market channels, these farmers are forced to rely on selling their products to local lodges, hotels, restaurants, supermarkets, and individual customers within the district. This localised approach limits their access to larger and more diverse markets, confining their customer base to a small geographic area. Consequently, their ability to generate stable and predictable income is hindered, making it difficult for them to plan or invest in expanding their operations as reflected in the quote below:

“As women mushroom farmers here in Tembwe EPA, we lack a structured marketplace to sell our products. Instead, we rely on finding customers at lodges, restaurants, hotels, supermarkets, and customers within our surrounding areas” (Mushroom farmer at Tembwe EPA, aged 40).

One major issue with the unstructured market is price volatility. Since these farmers lack access to consistent buyers or contractual agreements, they are often at the mercy of fluctuating demand and prices. For instance, during periods of high production or low demand, the prices offered by local buyers drop significantly, leaving farmers with unsold stock or minimal profits. On the other hand, during periods of high demand, the lack of organised distribution channels prevents farmers from fully capitalising on market opportunities, as they cannot quickly mobilise their produce to areas of scarcity. Additionally, the absence of structured markets restrains the ability of these farmers to establish long-term business relationships and tap into larger urban or export markets. Structured markets provide the framework for creating reliable

partnerships, accessing market information, and maintaining consistent product quality. Without these, women mushroom farmers in Salima struggle to scale up their operations or benefit from economies of scale. This lack of access to broader markets also exacerbates gender-based inequalities, as women farmers often lack the resources, mobility, and networks needed to navigate fragmented market environments effectively.

4.6.2 Storage Facilities for Mushrooms

In Salima District, inadequate storage facilities pose a significant challenge for women mushroom farmers, leading to considerable post-harvest losses. Mushrooms are highly perishable and require specific conditions to maintain their freshness, texture, and moisture content. Unfortunately, many women farmers rely on unsuitable storage methods, such as using plastic buckets, which accelerate the spoilage process.



Figure 4: Growing and storage houses for mushroom

These buckets do not regulate temperature, humidity, or airflow, all of which are critical factors for preserving mushrooms. As a result, farmers often experience rapid deterioration of their products before they can reach the market, leading to financial losses and limiting their ability to meet customer demands. As stated by a woman farmer below:

“Currently, we store harvested mushrooms in plastic buckets and we deliver them directly to our customers. This is because we lack funds and access to refrigerated storage units needed to preserve the freshness of these highly

perishable products. We are unable to process mushrooms into dried products or powders for longer storage because we don't have the necessary drying facilities” (Mushroom farmer at Chinguluwe EPA, 43 years of age).

The impact of these storage barriers extends beyond immediate losses. Spoilage undermines the farmers' reputation with buyers, as inconsistent product quality can erode trust and discourage repeat purchases.



Figure 5: Steps for growing mushrooms (colonisation of mushroom)

This issue is particularly problematic for women mushroom farmers, who already face barriers in accessing formal markets and building long-term business relationships. The lack of appropriate storage solutions also restricts farmers' capacity to explore more profitable markets outside their local area, as the risk of spoilage during transportation discourages them from expanding their customer base. Addressing these barriers requires investment in affordable, user-friendly storage technologies, such as small-scale climate-controlled units or packaging materials that prolong freshness. Equipping farmers with these resources can enhance their competitiveness and enable them to reduce losses, improve profitability, and build sustainable market connections.

4.6.3 Packaging strategies

In Salima District, particularly in the Chinguluwe and Tembwe Extension Planning Areas (EPAs), women mushroom farmers face significant marketing barriers due to inadequate packaging strategies. Many farmers, constrained by limited financial resources, rely on basic

plastic bags, commonly known as jumbos, to package their mushrooms. While these are inexpensive and readily available, they do little to preserve the freshness of the mushrooms or enhance their visual appeal. For a product like mushrooms which is highly perishable and sensitive to handling, poor packaging often results in physical damage and a shorter shelf life. Customers, particularly those in markets such as lodges, restaurants, and supermarkets, are often deterred by unprofessional packaging, which can create the impression of low quality. This directly impacts the farmers' ability to attract and retain buyers or negotiate better prices.

The barriers associated with poor packaging extend beyond visual presentation. The lack of appropriate packaging materials affects the mushrooms' moisture retention and exposure to external contaminants, accelerating spoilage and reducing marketable quantities. Farmers who transport their mushroom over longer distances, or who aim to sell in urban areas, face heightened risks of product deterioration, further limiting their market reach. This issue perpetuates the cycle of low profitability and restricts opportunities for farmers to scale up or invest in better resources as one of the women said;

“We currently use plastic jumbos, that purchased from shops at varying prices, typically ranging from 200MK to 500MK each, depending on the size. We use these bags to pack our mushrooms for delivery to customers. However, this type of packaging does not effectively protect the mushrooms from unfavourable weather conditions, often resulting in losses as some kilograms of mushrooms during transport” (Mushroom farmer at Chinguluwe EPA, 36 years of age).

4.6.4 Transportation

Women mushroom farmers in Salima District face obstacles in the transportation of their products to adequate market which severely hinder their market access and profitability. Many depend on bicycles, locally known as njinga, to transport their fragile and highly perishable mushrooms to markets and customers. While affordable, bicycles are ill-suited for this task, especially during the hot season. To minimise spoilage on long-distance deliveries, farmers often resort to hiring motorcycles, which increases their operational costs. Mushrooms' vulnerability to heat and their short shelf life mean even minor delays can lead to significant financial losses. The problem is compounded by poor road infrastructure, with many rural paths being unpaved or poorly maintained. These conditions make the journey not only time

consuming but also physically taxing, further discouraging market participation and business growth.

The impact of these transportation barriers is far reaching. Spoiled mushrooms mean wasted resources time, labour, and capital that could otherwise contribute to the economic empowerment of these women farmers. Additionally, limited mobility restricts their ability to expand their customer base or explore larger urban markets where they might fetch better prices. This creates a cycle of dependency on local markets with inconsistent demand and lower profitability. The lack of reliable transportation infrastructure also places women farmers at a disadvantage compared to other agricultural producers who might have better access to resources or more resilient crops, one of the related quotes by one of the mushroom farmer from Salima:

"We typically use bicycles (Njinga) to transport mushrooms to our customers. However, when the weather is extremely hot or rainy, we hire motorcycles to prevent spoilage, especially for long-distance deliveries. While the bicycles are our own, the motorcycles are rented. We plan to purchase our own motorcycle in the future, as we believe it will simplify transportation and other activities, particularly for long-distance tasks" (Mushroom farmer at Tembwe EPA aged 29).



Figure 6: Showing a woman using bicycle to deliver mushroom to customers

4.6.5 Knowledge and Skills

Women mushroom farmers in Salima District face significant marketing barriers that stem largely from gaps in knowledge and skills related to mushroom cultivation. Mushroom farming requires specialised expertise and a professional approach to achieve high-quality production and comply with market standards.

However, many farmers lack access to adequate training, leaving them ill-equipped to meet the demands of the industry. This limitation hinders their ability to optimise yields, maintain quality, and compete effectively in the market, one of the mushroom farmers said:

“As mushroom farmers, we recognise that most of us in Salima, particularly here in Tembwe EPA, lack sufficient knowledge about mushroom production. Specifically, we struggle to identify species that thrive in our district's climate. We primarily cultivate Oyster mushrooms because we lack awareness of other suitable species. Salima's weather is extremely hot, and we face barriers in managing temperature both during cultivation and for post-harvest storage. As farmers we lack expertise in controlling mushroom diseases, making these aspects of farming particularly difficult for us” (Mushroom farmer, aged 44).

In particular, farmers in areas such as Chinguluwe EPA and Tembwe EPA encounter additional difficulties in identifying and sourcing quality inputs like mushroom spawn. Limited awareness and technical knowledge about seed quality expose them to the risk of purchasing counterfeit or substandard seeds. These poor-quality inputs often result in reduced yields and subpar products, which further dampens their motivation to scale up or sustain their farming activities as reflected in the quote below:

“We rely solely on our own experience and the basic knowledge we’ve gained from extension officers and others who have farmed mushrooms in the past. However, we lack technical and scientific expertise, which poses a significant challenge. At times, we unknowingly purchase poor-quality or fake mushroom spawn from sellers because we lack the skills to assess seed quality” (Secretary and farmer in Chinguluwe EPA, 39 years of age).

Moreover, the lack of knowledge about effective post-harvest handling, value addition, and market linkage strategies leaves many women mushroom farmers unable to fully capitalize on their produce. Without proper training in these areas, they struggle to align their farming practices with market demands, leading to reduced profitability and limited access to lucrative markets as explained by a key informant below:

“Enhancing mushroom farming in Salima requires expanding access to training on modern cultivation techniques and post-harvest handling. It is also essential to improve the availability of affordable inputs such as spores, substrate, and storage materials as these continue to pose significant challenges for small-scale mushroom farmers.”

4.6.6 Poverty

The lack of financial resources often prevents these farmers from investing in high-quality inputs such as spawn and substrates, which affects their productivity. Additionally, poverty limits their capacity to afford reliable transportation to access distant and more lucrative markets. As a result, they are often restricted to selling in nearby markets, which may be less profitable, further entrenching the cycle of poverty.

Limited financial means also reduce the farmers' negotiating power when setting prices, as their immediate need for income often forces them to accept lower offers from intermediaries. This challenge is compounded by gaps in access to market information. Poverty often correlates with low literacy levels and limited access to modern technology, which hinders the farmers' ability to track pricing trends, understand demand patterns, or explore digital marketing platforms. Consequently, many women farmers rely on traditional and less profitable methods of marketing their mushroom as one of mushroom farmer said below:

“Poverty significantly impacts our ability to achieve progress and sustain our agricultural activities. Often, we are unable to make necessary contributions to our work due to a lack of financial resources. For instance, expanding maize cultivation becomes a challenge, limiting our access to maize stalks, which are essential raw materials for mushroom production. Without sufficient funds, it is also difficult to purchase fertilizers, further restricting our capacity to enhance crop yields and improve soil fertility” (A group leader at Chinguluwe EPA aged 47).

4.6.7 Environmental Barriers

Mushroom cultivation in Salima district has been significantly affected by various environmental barriers. The lack of proper ventilation in growing spaces often simple huts or makeshift enclosures has led to the unnoticed buildup of mushroom spores, exposing farmers to potential respiratory health risks, particularly due to limited awareness and access to protective equipment (Okuda et al., 2022). Moreover, shifting climatic patterns such as increasing temperatures and erratic rainfall have disrupted the delicate balance of humidity and temperature essential for mushroom growth, resulting in lower yields and a higher risk of contamination. These environmental pressures have made mushroom production increasingly vulnerable and underscore the urgent need for interventions focused on environmental management. Promoting sustainable practices like improved ventilation, alternative energy use for sterilisation, and waste management systems is crucial for enhancing both the productivity and sustainability of mushroom farming in the district.

4.7 Strategies for improving market access and profitability

There are many different barriers facing by women mushroom farmers in Salima including limited access to market information, insufficient financial resources, inadequate technical training, and a lack of supportive infrastructure. These hurdles not only constrain their productivity but also limit their ability to achieve sustainable livelihoods and compete effectively in broader markets. Addressing these barriers requires targeted, innovative, and inclusive approaches that empower these women to overcome systemic barriers while enhancing their economic and social well-being.

This section explores potential solutions and strategies to address the issues faced by women mushroom farmers. By focusing on capacity-building initiatives, improved access to markets and credit, gender-responsive policies, and the integration of technology, these strategies aim to create a more enabling environment. Such solutions not only seek to strengthen the resilience of these women but also contribute to the broader economic development of the Salima district as follows;

4.7.1 Value Addition and Product Diversification

This study found out that women farmers have taken steps to add value to their mushroom products by adopting practices such as drying mushrooms. By processing their produce, they

increase shelf life, reduce post-harvest losses, and enhance profitability. Value addition allows them to tap into markets and differentiate their products from raw mushrooms commonly sold in local markets. As a result, farmers who engage in value addition not only secure better prices but also gain access to broader consumer bases, including urban and international markets where processed mushroom products are in higher demand. As highlighted by the key informant quoted below:

“We are making strong efforts to train and support mushroom farmers in adding value to mushrooms through drying, even using sunlight. Since Salima has hot weather, sun-drying is a practical option for them, especially given their limited access to solar dryers. Drying helps extend the shelf life of the mushrooms and prevents spoilage.”

As reported by key informants, sun-drying is a practical and accessible method for these women due to Salima’s hot climate. Supporting literature (Chirwa et al., 2008; GOM, 2006; Lakdawala et al., 2025) confirms that value addition is crucial for enhancing smallholder competitiveness and profitability. The integration of drying, mushrooms contribute not only to economic gains but also strengthens market orientation and employment creation.

4.7.2 Formation of Farmer Groups and Cooperatives

The formation of women-led agricultural groups such as Chikumabanja, Tadala, and Tiyanjane has emerged as a key strategy for overcoming market barriers. These groups foster knowledge exchange, improve production techniques, and enhance bargaining power. As a result, farmers are securing better prices and bulk buyers, reducing exploitation by middlemen. As stated by a mushroom farmer below:

“Being part of a group has truly transformed our experience. We exchange ideas, learn improved methods for cultivating and storing mushrooms, and most importantly, we are able to negotiate better prices collectively. As the Chikumabanja Agriculture Women Group, we collaborate closely with fellow farmers from Tadala Women Group in Tembwe EPA and others, joining forces to strengthen our position and build a stronger local economy through mushroom farming.”

4.7.3 Utilising Digital Platforms for Marketing

A notable outcome of the study is the increased use of digital platforms like WhatsApp among women mushroom farmers for marketing and sales. This shift has expanded their customer base beyond local communities and connected them with urban markets. Digital engagement has proven effective in facilitating direct orders, improving efficiency, and reducing dependency on traditional markets.

Supporting research (FAO, 2025; Astika et al., 2023) highlights the role of digital tools in boosting agricultural competitiveness, inclusivity, and gender empowerment. By embracing social media, these farmers are actively participating in the digital transformation of agriculture, ensuring resilience and broader market participation.

4.7.4 The role of the Government

The government plays a crucial role in addressing the barriers faced by women mushroom farmers in Salima district by implementing policies and programs that foster growth, equality, and sustainability in the agricultural sector. One critical area of intervention is enhancing access to funding and financial resources. Many women farmers face significant Barriers in acquiring the capital necessary to scale their operations due to restrictive lending policies or a lack of collateral. To address this, the government could partner with financial institutions to develop microfinance programs or provide grants specifically targeted at women mushroom farmers. By establishing a revolving loan fund or subsidized credit schemes, the government can enable these farmers to invest in better farming technologies, infrastructure, and inputs.

Another vital strategy is the provision of technical training and extension services. The government can collaborate with agricultural research institutes and extension agencies to deliver practical training on modern mushroom farming techniques, pest control, and post-harvest management. Regular workshops, demonstration plots, and mentorship programs tailored to the needs of women farmers can significantly boost productivity and quality. Additionally, incorporating gender-sensitive approaches in training programs ensures that the unique barriers faced by women are addressed effectively.

Market access and value chain support is another area where government intervention can have a transformative impact. Many women mushroom farmers struggle to find consistent and profitable markets for their produce. Establishing cooperatives or farmers' associations

supported by government policies can help women pool their resources and negotiate better prices. Furthermore, creating market linkages through trade fairs, digital platforms, and export promotion initiatives ensures that farmers can access both local and international markets. The government can also encourage public-private partnerships to enhance market infrastructure, such as storage facilities and transportation networks, reducing post-harvest losses.

The government must also focus on policy and regulatory frameworks that support women in agriculture. Implementing gender-responsive agricultural policies ensures that women mushroom farmers are prioritised in development plans. For instance, land ownership laws that provide women with secure tenure can empower them to invest more confidently in their farming enterprises. Additionally, offering tax incentives or subsidies to mushroom farmers can lower the cost of production and improve profitability.

Lastly, technology and innovation are critical in modernising the mushroom farming sector. The government can facilitate access to affordable technology, such as improved spawn varieties, solar-powered drying systems, and online tools for market intelligence. Promoting digital literacy among women farmers and creating platforms for knowledge-sharing can further enhance their productivity and competitiveness, one of the related quotes expressed by one mushroom farmers:

“We, mushroom farmers in Salima, receive limited support from the government. The primary assistance provided is through the visits of agricultural experts and extension officers to our workplaces. During these visits, they conduct brief seminars focused on mushroom cultivation techniques and occasionally share insights on other agricultural activities. While we appreciate this guidance, we believe that more comprehensive and consistent support, such as access to resources, funding, and advanced training programs, would significantly enhance our productivity and success in mushroom farming” (Mushroom farmer at Tembwe EPA, 36years of age).

4.7.5 The role of Non-Governmental Organization

Non-Governmental Organizations (NGOs) play a crucial role in addressing the barriers faced by women mushroom farmers in Salima district by offering grassroots-level support and designing interventions tailored to the specific needs of marginalised groups. Through various

strategies and solutions, NGOs can significantly contribute to empowering women farmers and complementing government efforts. Between 2010 and 2022, small farmers had an NGO called Basin Lake which supported these mushroom farmers in Salima district, along with other small-scale farmers in the district. However, the organisation has since ceased its operations, leaving the mushroom farmers without any NGO support as one of the local leaders said:

“We previously had only one organisation known as Lake Basin, which supported small scale farmers and vegetable growers near the river. However, currently, there are no NGOs in Salima providing assistance for our agricultural production. This lack of support is why they are urging the government to help connect them with other NGOs from different regions that can provide the resources and guidance so that they can improve farming efforts” (Local leader, Chinguluwe EPA, 56 years).

One of the key areas of NGO support is capacity building and skills development. Many women mushroom farmers lack access to formal training and technical knowledge about best practices in mushroom cultivation. NGOs can organise hands-on workshops and training sessions that teach modern farming techniques, sustainable practices, and proper post-harvest handling to improve productivity and product quality. Additionally, mentorship programs led by agricultural experts can provide continuous support to farmers as they implement new methods. Training on entrepreneurial skills, such as financial management and business planning, is equally crucial in helping women farmers run profitable enterprises.

Another critical strategy employed by NGOs is enhancing access to markets. Women mushroom farmers often face difficulties in finding reliable buyers or fair prices for their produce. NGOs can play a pivotal role in establishing market linkages by connecting farmers to local and regional markets, supermarkets, or export opportunities. Some organisations develop innovative digital platforms where farmers can sell their products directly to consumers, eliminating middlemen and ensuring better profits. Additionally, NGOs often facilitate the formation of farmer cooperatives, which enable women to pool resources, reduce costs, and negotiate better deals collectively.

Access to funding and resources is another area where NGOs make a significant impact. Many women mushroom farmers are constrained by limited financial capital to invest in tools, equipment, or infrastructure. NGOs can address this challenge by providing grants, low-interest loans, or seed funding tailored to the needs of women farmers. Some organisations also partner

with microfinance institutions to develop inclusive financial products, such as group loans or savings schemes, that make financing more accessible. By doing so, NGOs enable farmers to invest in better production systems and scale up their operations.

Advocacy and policy influence are also vital areas of NGO intervention. Many NGOs work to amplify the voices of women mushroom farmers by advocating for policies that address gender disparities in agriculture. For instance, they may push for reforms in land ownership laws, funding allocation, or agricultural extension services to ensure that women farmers receive equitable support. NGOs also provide platforms for women to engage in dialogue with policymakers, ensuring their needs and concerns are taken into account. Lastly, NGOs often promote technology and innovation as solutions to farming Barriers. For example, they can introduce affordable and efficient technologies such as improved mushroom spawn varieties, solar-powered drying systems, or mobile apps for tracking market prices. NGOs also play a crucial role in facilitating access to these technologies by subsidizing costs or providing them at no cost through pilot programs.

4.8 Summary of the chapter

Chapter Four analysed the marketing practices, barriers, and opportunities for women mushroom farmers in Salima District. The findings highlighted the diverse marketing methods used by these farmers and the key barriers affecting their profitability and sustainability, including limited market access, inadequate pricing strategies, and supply chain inefficiencies. The chapter also explored strategies to enhance market opportunities, such as strengthening cooperative networks, improving market information systems, and fostering capacity-building initiatives. By addressing these barriers, women mushroom farmers can improve their financial stability and expand their market reach, ultimately contributing to their economic empowerment and the sustainability of mushroom farming in the region.

The next chapter interprets and analyses the findings presented in Chapter four, linking them to existing literature and theoretical perspectives.

CHAPTER FIVE: DISCUSSION

5.1. Introduction

This chapter brings together what was found in Chapter 4 and connects it with the theories and previous studies discussed in Chapter 2. It gives a careful look at how women mushroom farmers in Salima district, Malawi, market their mushrooms, the problems they face, and the strategies they use. The main goal of the study was to understand these marketing issues. The discussion is guided by three smaller goals: looking at how women currently sell mushrooms, what marketing problems they deal with, and what can be done to help them improve.

The chapter uses Social Capital Theory and Market Orientation Theory to explain the results. The findings are discussed by comparing them with past research, showing how things like unfair systems, gender roles, and lack of support affect how women sell their mushrooms. It also shows how women's local ideas and efforts help them keep going. The study follows the conceptual framework, which says that things like gender, production, and demand (intermediate variables) affect how marketing practices, barriers, and strategies (independent variables) lead to better food supply and income (outcomes). This helps us understand how both local actions and bigger problems affect women's success in selling mushrooms.

5.2. Marketing Practices of Women Mushroom Farmers

The way women mushroom farmers in Salima district sell their mushrooms shows both their ability to adapt and the challenges they face. The findings show that most women depend on informal and local methods, like selling directly from their farms, making short-term deals with local lodges and restaurants, and taking orders through personal phone calls. These methods work for now because there are no formal markets available. They show how women use close social ties called bonding social capital to make quick sales. For example, using WhatsApp to communicate and take orders, even in a basic way, shows a small step toward using digital tools.

But these local methods are very different from what the literature suggests. Studies talk about more organised models like cooperatives (Mayanja and Tipi, 2017) or digital platforms like M-Farm in Kenya (Gengenbach et al., 2017), which help farmers reach bigger markets and know the right prices. In Salima, the reason for using local strategies is the lack of connections to outside groups, which is called bridging and linking social capital. Unlike successful cases in

Tanzania and Uganda (Markelova and Mwangi, 2010), farmers in Salima do not have ongoing support from NGOs, farming cooperatives, or markets in cities. This leaves them out of important help like market information, big buyers, or transport.

Short-term deals with local businesses give some steady income, but they are not stable. Women must deliver mushrooms quickly usually in 2 or 3 days which causes stress and makes planning hard. These sales practices match what Market Orientation Theory says about focusing on customer needs (Quisumbing et al., 2015), but they lack good planning between growing and selling. Without this, farmers can't keep a steady supply or reduce waste.

The low use of digital tools shows more problems. WhatsApp helps with basic communication, but it does not provide full market knowledge. This is different from what some literature says about how digital platforms can give everyone a fair chance (FAO, 2018). A study by Moxley et al., (2022) revealed that advertising through direct customer engagement or social media can significantly expand a farmer's customer base, including online buyers. Further to that Moxley (2022) highlighted the importance of direct customer engagement through digital tools, such as social media, as a means to expand a farmer's customer base, including reaching online buyers. Similarly, Kingsnorth (2016) elaborated on the effectiveness of platforms like Facebook, Instagram, and websites in advertising agricultural products like mushrooms, showcasing their nutritional and medicinal benefits. Poor internet service and limited knowledge of technology stop many women from using these tools fully. Because of this, many farmers focus only on quick sales to meet urgent needs instead of making long-term marketing plans.

Gender roles also have a big impact. Many women cannot travel far or sign formal business agreements. This forces them to rely on middlemen, who sometimes take advantage of them by not paying fair prices (Fischer & Qaim, 2012). Without farmer groups or cooperatives to give them a stronger voice, women are left to deal with changing prices on their own. For example, mushrooms can sell for 1,500 to 3,000 MK depending on the buyer. This kind of price difference is common in many parts of Sub-Saharan Africa, where women face more problems in markets (John, 2013). But in Salima, these problems are made worse by strong gender rules and weak connections to support systems.

In short, the marketing methods used by women in Salima show both creativity and limitations. Their local networks bonding social capital help them survive in tough conditions, but without

outside help or better tools, it is hard for them to grow their businesses. This challenges the idea that formal models like cooperatives always work best. Instead, there is a need to find new ways that combine the women's local strengths with outside support to help them succeed.

5.3. Marketing Barriers and their Impact

Women mushroom farmers in Salima district face several serious problems that make it hard for them to sell their mushrooms profitably and in a way that supports long-term growth. These marketing barriers are closely connected and often make each other worse, creating a difficult cycle that reduces the farmers' chances of earning a steady income or improving their businesses over time.

One of the biggest problems is the lack of structured markets. These women sell their mushrooms in informal and often unpredictable settings. Without formal systems like contracts or cooperatives, they depend on local hotels, restaurants, and individual buyers. This causes frequent price changes, especially when too many farmers are selling at the same time. During these times of oversupply, prices drop sharply, and farmers are forced to sell their mushrooms at a loss. Wakchaure (2011) noted that the global market for fresh mushrooms is poorly organised, often compelling producers to rely on direct sales to customers. This lack of structured distribution channels hampers farmers' ability to markets or secure favourable pricing.

This situation is supported by Social Capital Theory, which shows that important connections to institutions and formal networks are important in helping farmers build stable and fair markets. Without these connections called linking social capital farmers remain at risk of being exploited by buyers who offer unfair prices. Addressing these barriers requires targeted interventions to create structured market systems that empower women farmers, enhance their bargaining power, and link them to sustainable and profitable markets.

Transportation is another major challenge. Most farmers use bicycles to deliver their mushrooms, which are too slow and not suitable for carrying perishable goods. When it is hot, they sometimes rent motorcycles to reduce the chance of the mushrooms spoiling, but this adds extra cost and pressure. Poor road conditions make things worse, causing delays that result in damaged products. These transport problems not only increase the cost of selling mushrooms but also limit farmers to nearby markets. This prevents them from reaching customers who might pay more. On the same note, researchers like Rai and Arumuganathan (2008) and

Marshall and Tai Nair (2009) agreed that inadequate transportation infrastructure is a leading cause of mushroom damage, increasing costs and delivery times, and ultimately reducing farmers' profitability. On their finding, they also revealed that unreliable roads and limited transport options hinder farmers' access to larger markets, thereby restricting their customer base. They concluded that inefficient transportation systems raise costs and time associated with getting mushrooms to market, which erodes farmers' profits.

Ongoche et al. (2017), Barref et al., (2001) also note that financially constrained farmers often rely on inefficient local transport, which exacerbates post-harvest losses as mushrooms degrade during transport. As a result, a significant portion of the harvest may spoil before reaching its destination, leading to considerable financial losses.

Storage is also a big issue where mushrooms spoil quickly and need to be kept in cool, controlled environments. However, most farmers use plastic buckets that do not keep the mushrooms fresh. As a result, mushrooms often spoil, especially when they are being moved from one place to another. This damages the farmers' reputations, as buyers begin to doubt their ability to provide quality mushrooms. Researchers such as Arumuganathan and Rai (2008); Wakchaure (2011) highlighted that inadequate storage infrastructure forces farmers to sell quickly, often at unfavourable prices. They have pointed out that if affordable storage systems like simple cooling units were made available, farmers could reduce their losses and build more reliable relationships with buyers.

This aligns with Retnaningsih's (2018) assertion that inadequate storage infrastructure limits marketing options and reduces profitability. The rapid deterioration of mushrooms not only diminishes their quality but also results in financial losses, as farmers struggle to sell their produce under favourable conditions. The reliance on substandard storage techniques underscores a critical gap in resources and knowledge, significantly hindering the growth potential of mushroom farming in Salima district.

Pricing is another area where farmers struggle. Many women report that they are sometimes forced to sell their mushrooms for as little as 1,500 Malawian Kwacha (MK), even though the usual range is between 2,000 and 3,000 MK. Because they sell individually and don't belong to cooperatives, they have no collective power to insist on fair prices. Studies have shown that farmers who are in cooperatives can often negotiate better prices, but women in Salima have little access to such groups, which leaves them vulnerable to buyers who control the price. A

study by Wiand et al., (2021) agreed that, the need for balance between affordable prices for consumers and sustainable income for farmers is crucial, as unregulated pricing can place farmers in a precarious financial position. In the case of Salima district, particularly in the Chinguluwe and Tembwe EPAs, farmers face similar barriers where the absence of standardized pricing mechanisms leaves them vulnerable to market fluctuations.

To address these barriers, developing a more structured pricing framework and collective bargaining mechanisms could be crucial. Establishing cooperative systems where farmers can collectively agree on pricing standards or pool resources to negotiate better deals would help stabilize incomes. Equally important is raising consumer awareness about the benefits of mushrooms through targeted marketing and education campaigns, which could enhance demand and justify fairer pricing. By addressing these issues, mushroom farmers in Salima District can work towards more sustainable pricing strategies that support long-term profitability and resilience.

Packaging is also a challenge that face women mushroom farmers in Salima district. Most of the mushrooms are sold in cheap plastic bags that do not protect them from heat, rain, or physical damage. Buyers especially those from hotels and supermarkets see poor packaging as a sign of low-quality products, so they are less likely to buy. The women farmers understand that better packaging could help attract more buyers and higher prices, but many cannot afford to make these improvements. Scholars such as Aditya and Bhatia (2020) emphasised the role of advanced packaging techniques, such as controlled and modified atmospheric packaging, in preserving freshness, extending shelf life, and enhancing market competitiveness for agricultural products like mushrooms.

Furthermore, Marshall and Tan Nair (2009); Alice and Kustudi (2004) agreed that the use of substandard packaging materials further exacerbates spoilage issues, impacting the farmers' profitability. Mushrooms, being highly perishable, require packaging that preserves their freshness and protects them from environmental factors, and the current methods fall short in meeting these needs. This lack of proper packaging not only diminishes product quality but also limits the farmers' ability to compete in higher-value markets where quality, presentation, and proper packaging are essential. Their study also found that small-scale farmers, including mushroom producers, often struggle with packaging and branding, frequently resorting to rudimentary methods that fail to appeal to customers. They concluded that attractive and

functional packaging is essential for drawing buyers' attention and meeting customer expectations.

To address these packaging related barriers, training and access to affordable, eco-friendly packaging solutions are critical. Packaging innovations such as biodegradable boxes, ventilated trays, or sealed pouches designed specifically for mushrooms can help preserve quality while appealing to environmentally conscious customers. Collaborating with organisations that support small-scale farmers could provide subsidies or technical support to procure such materials. Furthermore, equipping farmers with skills to brand and label their products could enhance the marketability of mushrooms, improve customer perception and open doors to higher-value markets. By focusing on packaging strategies, women mushroom farmers in Salima can elevate their competitiveness and secure more sustainable livelihoods.

Limited knowledge and skills also prevent farmers from doing better in the market. Some farmers use WhatsApp to advertise their produce, but most do not have the skills to use digital tools for finding new markets or improving their marketing techniques. FAO (2020) highlighted the transformative potential of training programs in raising awareness about the benefits of mushrooms, which could stimulate both increased production and consumption. Many also struggle with choosing good mushroom seeds and handling mushrooms after harvesting, which affects the quality of what they sell. Although training programs could help fill these gaps, such programs are not widely available in the area.

Scholars such as Chioza and Ohga (2014) and Rai and Arumuganathan (2008) emphasised on the significance of cultivating expertise in various aspects of mushroom production to overcome barriers and improve outcomes. However, they argue that lack of cultivation knowledge and an understanding of the economic, nutritional, and medicinal benefits of mushrooms severely affects the growth in Malawi. Furthermore, a study by Marshall and Tan Nair (2009) found that farmers may not be aware of optimal cultivation conditions, pest control methods, or advanced preservation techniques, which contribute to poor outcomes. Furthermore, the farmers' limited access to quality inputs, such as certified mushroom spawn, forces them to rely on substandard materials, hindering productivity and quality.

These barriers are all connected and feed into each other. For example, poor transport leads to spoilage, which lowers profits. With low profits, farmers cannot invest in better storage or packaging. Without proper training, they continue using methods that do not work well. Market

Orientation Theory emphasizes the need to match what is being sold with what customers want, but these barriers make it nearly impossible for the women to meet the needs and expectations of buyers.

The marketing challenges faced by women mushroom farmers in Salima come from deep problems in the systems they work in and the roles they are expected to play. These problems cannot be solved by small changes alone. Real improvement will require big steps, such as fixing roads, creating better storage options, supporting cooperatives, and offering training that is focused on their real needs. If these changes are made, women farmers can break the cycle of poor sales and low profits, reach better markets, and build more stable and successful farming businesses.

5.4. Strategies for Improving Market Access and Profitability

The findings from Salima District highlight both grassroots innovations and systemic gaps in addressing marketing barriers faced by women mushroom farmers. To enhance market access and profitability, strategies must integrate local ingenuity with institutional support, guided by the principles of Social Capital Theory and Market Orientation Theory. A critical starting point is the strengthening of farmer-led initiatives. Women in Salima have already begun forming self-help groups, such as the Chikumabanja and Tadala Women Groups, to pool resources, share knowledge, and negotiate collectively. These groups exemplify the power of bonding social capital, where trust and collaboration within communities foster resilience. By formalising these groups into cooperatives, farmers could amplify their bargaining power, reduce transaction costs, and access bulk strategies proven effective in neighbouring countries like Uganda and Tanzania. However, the current informal structure limits their impact, underscoring the need for training in cooperative management and linkages to external networks.

Value addition, particularly through sun-drying mushrooms, emerges as a practical strategy to overcome storage and perishability challenges. Farmers in Salima have adopted this low-cost method to extend shelf life and tap into niche markets, such as urban consumers or exporters seeking dried products. A study by Chirwa et al. (2008) highlight that smallholder farmers often sell raw agricultural produce without processing, which leads to lower returns and reduced market competitiveness. This challenge is particularly evident in the mushroom sector, where fresh mushrooms are highly perishable, and the lack of agro-processing limits farmers' ability

to access profitable markets. This aligns with Market Orientation Theory's emphasis on product differentiation and customer orientation, as value-added products cater to specific consumer preferences.

However, the lack of advanced drying technology or packaging materials restricts scalability. Interventions such as subsidized solar dryers or partnerships with agro-processors could elevate product quality, enabling farmers to command premium prices. Literature on similar contexts, such as Ethiopia's mushroom value chains, confirms that such investments significantly boost incomes and market reach (Lakdawala et al., 2025).

Digital platforms offer numerous advantages for market-led agriculture, fostering efficiency and inclusivity in agribusiness. According to FAO (2025), digital technologies enhance agricultural competitiveness, support extension services, and empower women by helping them transcend cultural and gender barriers. While farmers currently rely on WhatsApp for basic communication, expanding their digital literacy could transform these platforms into robust marketing channels. For instance, training farmers to use social media for branding, customer engagement, or accessing real-time market data would align with successful models like Kenya's M-Farm initiative. However, this requires addressing infrastructural barriers such as internet access and smartphone affordability. Additionally, integrating mobile-based payment systems could streamline transactions, reducing reliance on cash-based exchanges that often disadvantage women.

External actors, particularly the government and NGOs, play a pivotal role in scaling these efforts. Government interventions should prioritise gender-responsive policies, such as subsidising transportation costs, improving rural road networks, and establishing mushroom-specific market hubs. Programs to enhance linking social capital such as connecting farmers to national agricultural extension services or export markets could mitigate the isolation of Salima mushroom farmers. NGOs, on the other hand, are uniquely positioned to bridge gaps in training and resource access.

Rai and Arumuganathan (2008) argue that NGOs are also crucial in providing training in sustainable and innovative cultivation practices, such as utilising locally available biomass for mushroom production. Chioza and Ohga (2014) further highlight the role of NGOs in introducing solar-powered drying systems and other affordable technologies to enhance the productivity of mushroom farmers. For example, partnerships with NGOs could facilitate

workshops on post-harvest handling, financial management, or digital marketing, directly addressing skill deficits identified in the study. Past initiatives, such as the now-defunct Lake Basin NGO, demonstrate the potential of such collaborations, though their sustainability depends on long-term funding and institutional commitment.

A recurring theme in the findings is the tension between farmer-led solutions and top-down interventions. While literature often emphasizes formal cooperatives or high-tech solutions, Salima's context demands hybrid approaches. For instance, blending traditional sun-drying techniques with modern packaging standards could create products that appeal to both local and premium markets. Similarly, coupling WhatsApp-based networking with structured market information systems would allow farmers to retain their adaptive practices while gaining access to broader opportunities.

Ultimately, the path to sustainable market access lies in addressing the intersection of structural and gendered barriers. Empowering women through education, access to credit, and leadership roles in cooperatives can challenge entrenched inequalities. Simultaneously, investments in infrastructure and technology must be designed with local realities in mind affordable, scalable, and culturally appropriate. By fostering synergies between local agency and institutional support, stakeholders can create an enabling environment where women mushroom farmers in Salima not only survive but thrive in competitive markets.

5.5. Summary of the chapter

Chapter five summarized the key findings of the study and presented recommendations based on the insights gained. The conclusions reaffirm the study's alignment with its objectives by assessing marketing practices, identifying Barriers, and proposing strategies to enhance market access and profitability. The recommendations emphasize practical interventions for policymakers, practitioners, and stakeholders, advocating for policies that support women farmers, investment in market linkages, and capacity-building programs. Through these efforts, the study aims to contribute to the development of a more inclusive and sustainable mushroom farming sector in Salima District.

The next chapter presents conclusion and recommendations. The conclusions are derived from the analysis and discussions presented in earlier chapters, ensuring that the recommendations are grounded in the research context. By reflecting on the study's objectives and answering the

research questions, this chapter aims to provide a comprehensive overview of the research's significance, while offering actionable suggestions for policymakers, practitioners, and scholars.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter brings together the main findings, insights, and implications from the study on women mushroom farmers in Salima district, Malawi. Building on the earlier chapters that discussed marketing practices, challenges, and possible strategies, this final chapter pulls together the important conclusions, lessons, and recommendations that have emerged. The purpose of this chapter is to reflect on the study's main goals: understanding how women market their mushrooms, identifying the barriers they face, and exploring possible solutions. It also connects these findings to wider academic debates and policy discussions. By answering the research questions and linking the results to the theoretical frameworks used, this chapter emphasizes the importance of supporting women mushroom farmers through targeted actions. It highlights how the study contributes to a better understanding of gender roles within agricultural value chains and suggests ways to promote sustainable development. The recommendations made here aim to guide policymakers, development workers, and agricultural stakeholders in creating better opportunities for women farmers. Ultimately, this can help strengthen women's economic empowerment and grow the mushroom farming sector in Malawi.

6.2 Conclusion

The study clearly shows that women mushroom farmers in Salima district face several serious challenges that make it hard for them to fully participate in markets, earn good profits, and sustain their businesses. The main problems include poor access to markets because there are no organized distribution systems, lack of good storage and transportation facilities, and limited access to financial resources. These issues are made even worse by gender-related challenges, such as restrictions on women's movement, unequal access to training and institutional support.

Despite all these difficulties, the study also shows the remarkable resilience and creativity of the women farmers. Many of them have found grassroots solutions, such as forming self-help groups, using WhatsApp to connect with customers, and sun-drying mushrooms to make them last longer.

The findings match what Social Capital Theory explains: when women lack strong social networks that connect them to formal markets, financial institutions, and experts, it becomes difficult for them to succeed. Similarly, Market Orientation Theory helps to explain the situation, showing that there is often a gap between what farmers produce and what the market demands. Without good information about pricing and consumer needs, farmers struggle with unstable prices and unpredictable markets. The lack of cooperatives or organisations that help farmers bargain collectively also leaves them vulnerable to being exploited by middlemen, trapping them in informal markets where profits are low.

To fix these problems, we need comprehensive solutions. Infrastructure must be improved, policies must specifically address women's needs, and training programs must be put in place to build women's skills. Strengthening social networks, providing better access to technology, and encouraging collaboration between institutions can help remove these barriers. Supporting women in the mushroom sector is essential not just for reducing poverty and ensuring food security, but also for promoting gender equality and helping Malawi's agricultural sector to grow in a sustainable way.

6.3 Contribution to knowledge

This study makes important contributions to both academic knowledge and practical work in the areas of gender, agriculture, and rural development. From a theoretical point of view, it shows how Social Capital Theory and Market Orientation Theory can be applied in real-life situations, particularly in low-resource settings like Salima. It highlights how gendered social networks and market conditions shape agricultural outcomes. By focusing on mushroom farming a non-traditional and high-value crop the study also fills a major gap in existing research, which has mostly concentrated on common crops like maize or cotton.

On an empirical level, the study gives detailed insights into the daily experiences of women farmers in Malawi. It shows how a combination of barriers such as lack of mobility, financial exclusion, and poor infrastructure limit their ability to participate in markets. The research challenges the belief that informal networks alone are enough for women to succeed in markets. Instead, it stresses the need for stronger institutional connections and supportive policies. The study also documents innovative strategies used by women farmers, like using WhatsApp for marketing and leading their own mushroom-drying initiatives, offering a positive story of women's ability to adapt and overcome challenges rather than just focusing on what they lack.

Practically, the research offers a clear plan for designing gender-sensitive interventions in the mushroom value chain. It recommends setting up cooperative groups, introducing digital literacy programs, and investing in infrastructure that supports women farmers. These recommendations aim to make sure that women have better access to resources, training, and market opportunities. Additionally, the study adds to global discussions about sustainable agriculture by showing how mushrooms being resilient to climate change and highly nutritious can provide new livelihood opportunities and improve food security in rural areas. For scholars and researchers, the conceptual framework and methods used in this study offer a model that can be replicated in other parts of Sub-Saharan Africa when studying gender inequalities in agricultural value chains.

In summary, this study successfully bridges theory and practice. It enriches academic conversations on gender and agriculture while offering real-world solutions that can help improve the lives of women farmers in Salima and potentially other regions facing similar challenges.

6.4 Recommendations

Marketing is extremely important for the success of women mushroom farmers in Salima District. Good strategies to improve access to markets are necessary for increasing profits and supporting rural livelihoods. As Fischer and Qaim (2012) explain, giving farmers better access to markets is at the heart of efforts to improve rural areas and boost farmers' incomes. Based on the findings of this study, this section provides detailed strategies to improve marketing practices, overcome key barriers, and create long-term solutions. These suggestions are specifically designed to match the unique challenges and opportunities faced by women farmers in Salima.

6.4.1 Enhancing Marketing Practices

To improve access to markets, it is important for women mushroom farmers to work together through cooperatives. When farmers combine their resources and negotiate as a group, they are more likely to get better prices, secure larger contracts, and lower the costs of doing business. For example, turning informal groups like the Chikumabanja Women Group into registered cooperatives would give farmers stronger bargaining power. It would also help them reach better markets, including selling to big supermarkets in towns or even exporting their mushrooms.

In addition to forming cooperatives, using digital marketing is another powerful strategy. Platforms like WhatsApp and Facebook can be used not just for chatting, but also for reaching new customers. Training programs organized by NGOs or agricultural extension officers could teach women how to use social media to promote their products, create recognizable brands, and sell directly to consumers. This would help women farmers expand their market beyond their immediate communities.

Financial support and better infrastructure are also key to success. The government should offer low-interest loans with repayment plans that are flexible enough to meet the needs of women farmers. This financial support would help women invest in important items like high-quality spawn (mushroom seeds), good packaging materials, and reliable transportation.

At the same time, the government and other partners should invest in rural infrastructure. Fixing roads that connect Salima to cities like Lilongwe would make it easier and cheaper to transport mushrooms to bigger markets. Improving access to clean water would also make it easier to prepare the substrate (the material mushrooms grow in), which would boost production and reduce losses after harvesting.

Another helpful step would be to create a simple market information system. Partnering with mobile phone companies could allow farmers to get real-time updates on market prices, customer demand, and selling opportunities. With this information, farmers can better plan their production and sales.

6.4.2 Addressing Marketing Barriers

One of the biggest barriers facing women mushroom farmers is lack of access to affordable finance. Most women cannot get loans easily because banks require high-interest payments and strict guarantees, like land or other property, which many women do not have. To solve this problem, policymakers should design special financial products that fit women's needs. For example, loan guarantees or group loans could make banks more willing to lend to women without heavy conditions.

Infrastructure challenges also need urgent attention. Many farmers lose a lot of their mushrooms after harvesting because they lack proper storage facilities and reliable transport. Building affordable cold storage units in farming communities would help keep mushrooms

fresh longer and reduce waste. Similarly, providing subsidies for purchasing motorcycles for farmer groups could help them transport their products quickly and cheaply.

There is also a strong need for policy changes. Mushroom farming should be officially included in Malawi's National Agriculture Policy. Women should be given clear and fair chances to join agricultural programs. For example, at least 50% of government subsidies for agricultural inputs could be reserved for women-led farming businesses. This would help correct the historical imbalance where women farmers often received less support than men.

Partnerships with NGOs are also crucial. NGOs could help by setting up village-level training where women farmers can learn how to check spawn quality, manage diseases, and adopt better production methods. This would address some of the technical challenges that the study found were limiting women farmers' success.

6.4.3 Strategies for Sustainable Market Access

For women mushroom farmers to continue making good profits in the long term, there must be strong focus on building their skills and creating strong partnerships with other stakeholders. One important step is offering specialized training. Farmers should learn about value addition techniques ways to improve and diversify their products. For example, drying mushrooms, making mushroom powder, or using eco-friendly packaging can open up new markets, such as health-conscious consumers and organic food stores.

Training sessions on financial management and business planning would also be important. These could be offered jointly by NGOs and local banks. Women would learn how to manage their earnings, reinvest profits wisely, and enter formal markets with confidence. Building strong partnerships between different players is just as important. Public-private partnerships could connect farmers to reliable buyers like large supermarkets (e.g., Shoprite) or hotel chains along Lake Malawi. This would guarantee consistent demand for mushrooms. For instance, the government could help arrange contracts where farmers supply dried mushrooms to school feeding programs. Such agreements would give farmers a steady income.

NGOs can also partner with technology companies to create digital apps that help farmers track prices and market trends. For example, Kenya's M-Farm app provides farmers with real-time market information this could be replicated in Malawi to help mushroom farmers sell more effectively.

Lastly, farmers need better ways to sell directly to customers. Setting up farmers' markets in cities like Lilongwe or linking women farmers to online marketplaces like Jumia would allow them to bypass middlemen and earn higher profits. A mix of cooperative bulk sales and direct consumer sales would allow farmers to diversify their income sources, build strong customer relationships, and create long-term business stability.

6.4.4 Implementation Outlook

If these recommendations are put into action through strong cooperation between the government, NGOs, and private businesses, they could break down the barriers that have been holding women mushroom farmers back. Women would have more control over their businesses, earn higher incomes, and contribute more to the local economy.

By combining local innovation with institutional support, women mushroom farmers in Salima District can move from being small-scale producers to becoming competitive business owners. This transition would not only improve their personal livelihoods but would also help drive sustainable rural development across Malawi.

6.5 Areas for Further Study

While this study has generated critical insights into the marketing practices, barriers, and strategies of women mushroom farmers in Salima district, several dimensions remain underexplored and warrant further investigation to deepen academic understanding and inform more effective policy interventions.

Firstly, broader external factors such as national economic policies, climate variability, and global market dynamics were not comprehensively addressed, yet they are likely to shape the long-term viability of mushroom farming. Future research could examine how Malawi's trade policies, regional integration agreements, or export strategies influence women's access to cross-border markets. Similarly, climate-focused studies could investigate the impacts of rising temperatures and erratic rainfall patterns on oyster mushroom yields across Salima's agroecological zones, generating actionable knowledge for promoting climate-resilient farming systems.

Secondly, the intersection of gender dynamics and agricultural decision-making represents a critical area for further exploration. Although this study focused primarily on women, a

comparative analysis of men's and women's roles along the mushroom value chain could elucidate how gendered norms influence access to resources, market participation, and profitability outcomes. For instance, a mixed-methods approach could investigate the mechanisms through which men disproportionately access high-value market linkages, despite women's dominance in production, thereby exposing systemic inequalities within agricultural markets.

Thirdly, the role of social capital in influencing market orientation and success warrants deeper investigation. Building on the study's theoretical framework, future research could assess how participation in gender-specific networks such as women's cooperatives versus male-dominated trader associations affects farmers' access to credit, technology, and premium markets. Quantitative studies that correlate social capital indicators (e.g., trust, group membership, frequency of interactions) with business performance could provide empirical evidence to guide the design of targeted interventions aimed at strengthening market access.

Fourthly, the efficacy of policy interventions in addressing gender disparities within the agricultural sector remains insufficiently studied. Evaluative research could assess the extent to which Malawi's National Agriculture Policy and various NGO-led initiatives have succeeded in reducing gender gaps in access to training, subsidies, infrastructure, and financial services. Gender-disaggregated data collection and analysis would be essential in identifying gaps and proposing corrective measures. Comparative case studies examining successful gender-responsive policies from neighbouring countries, such as Tanzania's experiences with women-led horticultural cooperatives, could also offer valuable insights for tailoring interventions to the Malawian context.

Finally, there is a strong need for long-term studies that track the impacts of specific interventions over time. For example, researchers could monitor what happens to women farmers' incomes, decision-making power, and market access 5 to 10 years after interventions like forming cooperatives, using digital marketing tools, or receiving post-harvest training. Such longitudinal studies would offer valuable insights into which strategies truly lead to sustainable empowerment and market growth for women farmers.

Pursuing these areas of research would not only fill significant gaps in the current literature but also contribute to the design of more gender-equitable, climate-resilient, and economically inclusive agricultural development policies in Malawi and beyond.

APPENDICES

Appendix 1: Data collection tools

MAFUNSO

Cholinga 1: Kuwunika msika womwe ungakhalepo kwa alimi a bowa m'boma la Salima

1. Mumagulitsa kuti katundu wanu?
.....
.....
2. Kodi anthu kapena makasitomala amadziwa bwanji za katundu wanu?
.....
.....
3. Kodi msika ndi wodalirika bwanji?
.....
.....
4. Ndani amakonza mtengo?
.....
.....
5. Kodi mumawona bwanji mwayi wopeza misika yam'deralo, zigawo, ndi mayiko?
.....
.....
6. Mumapeza bwanji makasitomala atsopano?
.....
.....
7. Kodi mumatenga masiku angati kuti mugulitse bowa wopangidwa?
.....
.....

Cholinga 2: Kuzindikira zovuta zamalonda ndi momwe zimakhudzira phindu ndi kukhazikika kwa alimi a bowa m'boma la Salima

1. Kodi pali zovuta ziti zamalonda zomwe mumakumana nazo pogulitsa bowa?
.....
.....
2. Kodi mtengo wopangira 1 kilogalamu ya bowa ndi wotani?
.....
.....
3. Kodi mtengo wogulitsira wa 1 Kilogalamu ya bowa ndi wotani?
.....
.....
4. Kodi mumasunga bwanji bowa akapangidwa?
.....
.....
5. Kodi njira yolipirira imagwiritsa ntchito chiyani?
.....
.....
6. Kodi mayendedwe opita ndi kuchokera kumsika ndi otani?

.....
.....
7. Kodi mumalongeza bwanji ndi kuyika chizindikiro pa bowa wanu?

.....
.....
8. Kodi mumakumana ndi zovuta zotani polongeza?

.....
.....
9. Ndi bowa wopangidwa wotani womwe amawola chifukwa chosowa msika?

.....
.....
10. Kodi mumapindula bwanji kudzera mu kupanga bowa?

Cholinga 3: Kuwunika njira zomwe zingatheke popititsa patsogolo mwayi wopezeka pamsika komanso phindu kwa amayi omwe amapanga bowa m'boma la Salima

1. Kodi mumapeza kuti zothandizira ndipo zimakhala zothandiza bwanji?

.....
.....
2. Kodi thandizo lochokera ku boma ndi mabungwe omwe siaboma limathandizidwa kangati?

.....
.....
3. Kodi mukuganiza kuti ndi chithandizo chamtundu wanji chomwe chingathandizire kupeza msika komanso phindu?

.....
.....
4. Kodi mumagwiritsa ntchito njira ziti kuti mupititse patsogolo kupanga bowa?

.....
.....
5. Kodi mumagwiritsa ntchito bwanji ukadaulo wa digito popititsa patsogolo mwayi wamsika?

.....
.....
6. Kodi zikhulupiriro za chikhalidwe cha anthu ndi kukondera kwa amuna ndi akazi zimakukhudzani bwanji monga opanga bowa kuti mupeze misika ndi phindu?

Appendix 2: MZUNIREC approval



MZUZU UNIVERSITY

DIRECTORATE OF RESEARCH

Mzuzu University
Private Bag 201
Luwinga
Mzuzu 2
MALAWI
TEL: 01 320 722
FAX: 01 320 648

MZUZU UNIVERSITY RESEARCH ETHICS COMMITTEE (MZUNIREC)

Ref No: MZUNIREC/DOR/24/190

17/10/2024.

Christina Phenes Mgimba
Mzuzu University,
P/Bag 201, Luwinga,
Mzuzu 2.

Email: tinamgimba438@gmail.com

Dear Christina,

**RESEARCH ETHICS AND REGULATORY APPROVAL AND PERMIT FOR
PROTOCOL REF NO. MZUNIREC/DOR/24/190: ASSESSING THE EFFECTS
OF WOMEN ACCESS TO LAND AND MUSHROOM PRODUCTION IN SALIMA
DISTRICT, MALAWI.**

.

Having satisfied all the relevant ethical and regulatory requirements, I am pleased to inform you that the above referred research protocol has officially been approved. You are now permitted to proceed with its implementation. Should there be any amendments to the approved protocol in the course of implementing it, you shall be required to seek approval of such amendments before implementation of the same.

This approval is valid for one year from the date of issuance of this approval. If the study goes beyond one year, an annual approval for continuation shall be required to be sought from the Mzuzu University Research Ethics Committee (MZUNIREC) in a format that is available at the Secretariat. Once the study is

finalised, you are required to furnish the Committee with a final report of the study.

The Committee reserves the right to carry out compliance inspection of this approved protocol at any time as may be deemed by it. As such, you are expected to properly maintain all study documents including consent forms.

Wishing you a successful implementation of your study.

Yours Sincerely,



Wanangwa K. Msowoya
MZUNIREC Secretariat
FOR: MZUNIREC CHAIRPERSON



Mzuzu University Research Ethics Committee
Directorate of Research
Mzuzu University
P/Bag 201
Luwinga
Mzuzu 2
Email: mzunirec@mzuni.ac.mw
Cell: +265 (0) 99 5 48 32 93

Appendix 3: Permission Letters from Salima District



SALIMA DISTRICT COUNCIL

0993-686-732
info@salimadc.gov.mw
Salima District Council
Private Bag 15,
Salima, Malawi

10 Sept 2024

To: Whom it may concern

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT A RESEARCH ON MUSHROOM PRODUCTION IN SALIMA DISTRICT FOR POSTGRADUATE STUDIES

Refer to above captioned subject matter.

The bearer of this letter, Christina Phenes Mgimba with Reg. No. MTCD 1423, a postgraduate student from Mzuzu University has been given permission by our office to conduct a research on mushroom production.

May you please assist her to enter into your village for the above named purpose.

Should you require further information, please do not hesitate to contact the undersigned.

Yours faithfully:

Signature: 

Name: Auce Kapinda

Designation: AEDC

0995317490

AGRICULTURAL EXTENSION
DEVELOPMENT CO-ORDINATOR

09 SEP 2024

CHINGULUWE E. P. A
P. O. BOX 491 SALIMA

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STUDENT RESPONSE ON EXAMINER'S COMMENTS



Student Name : **CHRISTINA PHENES MGIMBA**

Student ID : **MTCD 1423**

Date : **December, 2025**

Comments	Response	Page No.
Compliance with Comments Raised During Thesis Presentation		
Research did not focus on demand. Find out whether mushrooms are demanded in the area locally	Addressed	Page number 32
Quantify the underdevelopment of mushroom industry in Salima	Addressed	Page number 16-18
Objective 2 and 3 are compound consider revising them	Revised	On page number 4
The study topic has to be revised to be in tandem with the results since there are no elements of profitability or sustainability in the study	Revised	Font page
Include methodological matrix in the document	Included	Page number 30
Compliance with Examiners' Comments: Examiner 1		
To improve flow, the introduction section (1.1) should also highlight what is contained in this chapter.	Improved	Page number 1.
Abstract; include specific objectives of the study to understand the context of the results and recommendations.	Done	XII
Acknowledgment; Should be in order of importance (as in salutations).	Done	IV

Not included although some abbreviation have been used for more than two times e.g. NGOs, EPAs and MK.	Included	V
To improve flow, the introduction section (1.1) should also highlight what is contained in this chapter.	Revised	Page Number 1
The background section lacks adequate background information. Give a broader overview of mushroom production globally and nationally, including a background of mushroom production in Salima. Provide statistics if available. Link the problem to global and national goals, policies and strategies.	Addressed	Page number 2-3
The problem statement does not describe the magnitude of the problem for example by highlighting its consequences. Research gap is missing. There is need to highlight the studies that have been conducted around this topic and indicate the research gap in relation to the study objectives.	Addressed	Page number 3
The study objectives can be improved. Ideally research does not identify challenges. Research is motivated by existing challenges. Stick to the term examine. Moreover, the third specific objective (examine potential solutions and strategies) is an obvious output from any research and can therefore not be an objective.	Revised	Page number 4
Justify the study by identifying the users and beneficiaries of the information generated by this research. Also explain how the information will be used. Highlight the study's contribution to academic knowledge and identify the national goals, policies and strategies to which the findings are contributing to.	Justified and highlighted	On page number 6

Theoretical framework section should also provide a theoretical background to marketing challenges in agricultural produce and their associated solutions.	Revised	Page number 9-12
Empirical literature review section seems to provide a theoretical background to marketing challenges in agricultural produce and their associated solutions. Unfortunately, it is also linking them to the practice of women farmers in Salima, making it sound like a discussion chapter.	Revised	Page number 13-19
Empirical review of related studies is missing. Review related studies by providing a brief background of each study (where and when), summary of objectives, methodology (data collection and analysis), and results. Then a critique of the study is also key. In critiquing a study, highlight the strengths/weaknesses and similarities/differences with the current study or other related studies.	Revised	Page 13-19
Describe the study area in relation to mushroom production and marketing.	Described	On page number 22
Justify choice of the study area.	Justified	On page number 22-23
How were the two EPAs selected?	Justified	Page number 23-24
Justify the choice of women farmers only i.e. why were men not included?	Justified	Page 22-23
Sampling methods and size are not clear. All data collection tools have not been described or appended, and there is no description of how data was collected?	Cleared	Page number 25-26

Append the data collection tool.	Ok	Page 26-29
How was thematic analysis done, and was it done manually or was a software package used?	Thematic was manually done	Page number 29
Append ethical approval letter from MZUNIREC.	Appended	Page 70
Separate results from discussion (see theses template).	Separated	Chapt 4 and Chapt 5(Pg 33-59)
It is unethical to have people's pictures in a report unless written consent was provided. Moreover, the pictures do not seem to relate to the study because of the presence of men as part of women mushroom farmers	Removed	All
Though the study's focus was on marketing it has identified and discussed production as a challenge which is out of its scope.	Addressed	All
Instead of presenting and discussing identified strategies for improving market access and profitability, the candidate has proceeded to highlight the roles of government and NGOs. And the issues identified and discussed seem to come from literature and as such do not relate directly to the challenges identified and discussed in this chapter	Addressed	Chapter 4 and 5 (page 33-59)
In terms of presentation the results and discussions are quite repetitive making it boring to read.	Addressed	Chapter 4 and 5(Pg33-59)

See above under (10) for discussion.	Separated	Chapter 4 and 5(Pg33-59)
The recommendations are not written in a series of short, sequentially numbered statement and are not directly linked to the specific objectives as such are difficult to pick.	Addressed	Page number 61-63
Number of works have been cited but not included in the reference list.	Included	Page number 72-76
It is surprising that out of 47 works listed in the references section, 23 have not been cited in the thesis (hence need to be deleted).	Addressed	Page number 72-76
Number of works have incomplete information.	Addressed	All
Needs editing and proof-reading.	Done	All
Compliance with Examiners' Comments: Examiner 2		
The abstract need to be more focussed to tap the key issues yet briefly. For instance: Background: 1 sentence only to capture one key problem motivating the study and indicating the objective of the study. Then, the study type, design, sample size of the population and methods of analysis adopted to address the objectives. Then, the key findings that the study found that are critical to each objective. What are the overall recommendations that are in-line with the critical results concluded. I suggest revision.	Addressed	Page XII

1.1 Introduction is defeating the whole purpose. I suggest that background of the study start from that end. This is because the introduction is also the chapter of the study		Page number 1
Technically, I have noted that the paragraphs herein presented are lacking current references. And even no references at all. This is not good for a study of this nature. For instance <i>“Most people in Malawi have known and used wild edible mushrooms as food since time immemorial. These wild edible mushrooms are seasonal, available only during the rainy season (November to March)”</i> lack references that is current 2023 upwards.	Addressed	Page nuber 1-3
” While wild edible mushrooms are popular, most people are not familiar with the cultivated ones” reference 2022.	Addressed	Page number 1-3
“This could be attributed to limited availability and lack of awareness on the economic benefits at household level, over and above its nutritional and medicinal benefits. In opinion you are concluding the study instead of motivating why the study. I suggest revision of this section.	Addressed	Page 3-4
Also, there is need motivate the reasons why Malawi, why Salima, of other countries and District This motivation is imperative and must be included. I suggest revision.	Revised	On page 22 and 23
To identify the key marketing challenges faced by women mushroom farmers in Salima district and to propose strategies for overcoming these challenges. This MUST be set to “ To examine the women’s	Revised and removed	On page number 4

marketing barriers affecting mushroom production in Salima district of Malawi. Issues of proposed strategies MUST be removed.		
To assess the marketing practices of women on mushroom production in Salima District. I suggest that these women are already farmers. Therefore needs not be qualified like that.	Addressed	Page number 4
<i>To analyze the major marketing challenges and their impact on the profitability and sustainability of women mushroom farming.</i> It appears complicated.	Revised	Page number 4
To examine potential solutions and strategies for improving market access and profitability for women mushroom producers. Not a good objective. As the study by nature is going to achieve that. I suggest deletion on this objective.	Revised	Page number 4
The candidate need to correct the grammar so that it is sensible enough. For example, “This chapter reviews relevant literature...” would have been the chapter presents a review of relevant literature.	Corrected	All
“to examine social, economic, and institutional factors affecting market access and profitability” This would have been the main objective of the study.	Addressed	Page number 4
On the theories, there is need for the candidate suggest how the theory have been used by different scholars in line with Mushroom or plant production in general terms. Add one or two studies.	Theories suggested	On page number 9-12
The literature is well set however, the barriers/challenges associated with the marketing and its relativeness to the mushroom production literature is	Addressed	Page 13-19

inadequately presented. Thus, requires extensively addition so that the hypothesis of the study are defined in the literature gaps.		
The topic is emphasizing on the marketing challenges. However, in the conceptual framework, there is parameter to measure challenges but are indicated as intermediaries. Is that the correct way? I suggest inclusion	Addressed	Page number 19,20
Also, I have observed that the dependent variable is misplaced. For instance, How can we operationalize the building Infrastructures, Financial Support and roles of the NGO in the dependent variable. Also, Profoundly, I have noted that access to market is dependent variable. Yet, the topic is talking about the mushroom production. Why is Mushroom production forgotten. I suggest re-conceptualization of the conceptual framework so that it has better connectivity to the subject matter.	Revised	On page 19,20
The sample size formula has just been used. Yet, computation to derive the sample size of 99 respondents is not shown. There is a bit of the confusion in here, as to determine the sample size and it is not clear.	Revised	On page number 25-26
On the analysis, the mixed method is missing some important dimension of the quantitative part of the study. Is it by design? If the qualitative part of the study is to remain, then its 100% qualitative analysis and the document must change to reflect that. Revise.	Revised	All
There is need to describe in detail the approach and stages the study used for data analysis. This is not adequately discussed to enlighten the readers.	Described	Page number 29-30

In the results the challenges is not coming out clear. From the presented work it appears the marketing factors are general and connection to the challenges is inadequately presented. I suggest revision.	Revised	On page number 32-48
Also, there is need for the results be presented in logical order of the objectives and or the conceptual framework.	Addressed	Page number 32-48
I have noted that the discussion and synthesis of the results is inadequate. I suggest that the candidate reconstruct this section and must include the most recent literature to substantiate the findings.	Addressed	Page 32-48
Conclusions must be read summary of the chapter. This is because the conclusion is the stand-alone chapter at the end. This must be reflected in the entire thesis so that the conclusion is only associated with the last chapter of the study.	Addressed	All
In the conclusion, I suggest that the candidate be able to isolate the key findings guided by each objective of the study. This is to isolate key issues that the study found in the results. The candidate must rework on this section.	Addressed	Page number 59-60
Similarly, the recommendation must be a reflection of the issues that have been concluded in the introductory chapter in that the candidate MUST answer the “SO WHAT” question.	Addressed	Page number 61-63

CONFIRMATION OF ACADEMIC PROOFREADING



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21st November, 2025.

TO WHOM IT MAY CONCERN

SUBJECT: Confirmation of Academic Proofreading of Christina Phenes Mgimba's Thesis

This letter serves to certify that I have professionally proofread Christina Phenes Mgimba's Thesis titled **"Women's marketing barriers that affect mushroom production in Salima district, Malawi."**

As an academic practice, focus was mainly on content editing so that the research is well presented. Language and grammar issues have been fixed. Certain sections had informal language usage and those were rectified. Spellings and mistakes have been corrected with some suggested corrections placed in the comments section of the editorial work which is made available to the student and can be incorporated into the work with guidance from the supervisor(s).

The work was also checked for consistency in the style of writing, especially, font type, font size language use and spellings adherence to British English. The candidate had written mainly in American English, and that has been rectified. There were some inconsistencies in formatting and these have been pointed out, with some minor ones rectified. Referencing was not tackled as it is the duty of the university library.

I am certain that once the student has made the suggested corrections and edits, the thesis will be in the best possible form for submission.

I wish the student and those working with her the best as the work is being finalised.

For any information, please email me at ndalama.d@mzuni.ac.mw and/or call me on +265 (0) 881 224 519

Sincerely,

Deborah Ndalama Mtawali (Mrs.)
Language and Content Editor, and Lecturer
Mzuzu University