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Mashego, Nontethelelo Nokulunga

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Challenges faced by small and medium poultry farmers in the Lowveld district of Mpumalanga, South Africa

Nontethelelo Nokulunga Mashego

1758279

1758279@students.wits.ac.za

+27 83 644 3197

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DECLARATION

THIS DECLARATION IS TO BE ATTACHED TO ALL ASSIGNMENTS	
Student details	
Student Number: 1758279	Student name: Nontethelelo Nokulunga Mashego
Email address: 1758279@stidents.wits.ac.za	

Assignment details	
Course Code: BUSA7406 A	Course Name: Critical Enquiry Skills
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LIST OF ACRONYMS

CAGR	Compound Annual Growth Rate
DOCs	Day-old-chicks
GDP	Gross Domestic Product
NDP	National Development Plan
NIBUS	National Informal Business Upliftment Strategy
RSA	The Republic of South Africa.
SAPA	South African Poultry Association
SBDI	Small Business Development Institute
SMEs	Small and Medium Enterprises
SMMEs	, Small, Micro, and Medium Enterprises

ABSTRACT

Poultry is an essential source of protein for many South African households, and poultry farming plays a crucial role in ensuring a consistent supply of poultry products and contributing to food security. However, small- and medium-sized poultry farming enterprises face challenges in sustaining and developing their businesses despite high market demand and low entry barriers. To understand the factors that impede the development and sustainability of these enterprises in the Lowveld district of Mpumalanga, this study explored the contributing factors through an interpretative qualitative research approach. The study targeted small and medium-sized poultry farming enterprises in local communities in the Lowveld region of Mpumalanga. A sample size of 11 participants was selected through convenience sampling. Semi-structured interviews were conducted, guided by interview guide covering elements of the Domains of Entrepreneurship as the theoretical framework. This study aimed to identify developmental challenges faced by small- and medium-sized poultry farming enterprises in this region. The main themes that emerged from the research study include 1) Market Dynamics, 2) Networks and Collaboration and 3) Skills and Training, 4) Government Policies and Support, and 5) Location and Accessibility. From the identified themes, it was established that the factors that hinder the growth and sustainability of small and medium poultry enterprises in the Lowveld region of Mpumalanga is lack of collaboration amongst local poultry farmers, the lack of effective networks between small and medium enterprises and large commercial farmers, lack of business management skills, government policy restrictions and limitations, lack of capital to fund small and medium poultry enterprises, unavailability and inaccessibility of government support programmes, and hindrance placed by business location towards accessing supply chain and distribution channels for small and medium poultry farmers based in rural and desolate communities.

Keywords: Poultry farming, entrepreneurship, developmental challenges, small and medium-sized enterprises

1. INTRODUCTION

1.1 Statement of purpose

The purpose of this research was to examine contributing factors that impact the progress of small and medium-scale poultry farmers in the nearby districts of Mpumalanga's Lowveld area in South Africa. The study sought to comprehend the obstacles that hinder their expansion as self-sufficient and profitable ventures. By conducting a qualitative research within the local areas and townships of the Lowveld region in Mpumalanga, this research probed into the factors that obstruct the growth of small and medium-sized businesses in the poultry industry.

1.2 Background of the study

1.2.1 The province of Mpumalanga

Mpumalanga is a well-known region that is referred to as the "place of the rising sun." It is also considered as one of the most important agricultural areas due to its favourable climate (MEGA 2023; South Africa 2023). The province's climate is characterised by low-lying subtropical weather, broad-leafed and thorn trees, and open woodlands (MEGA 2023). Although mining and energy dominate the province's Gross Domestic Product (GDP), agriculture remains one of the three most significant sectors in the region, contributing 3.4% to the GDP (Mpumalanga Business, 2021). The economy of Mpumalanga is diverse, offering opportunities for beneficiation from raw materials and mineral resources, and excellent tourism sites (MEGA, 2023). The province has a population of around 4.1 million and shares borders with Mozambique and Swaziland (MEGA, 2023; Mpumalanga Business, 2021). It is made up of three District Municipalities, namely Ehlanzeni, Nkangala, and Gert Sibande district municipalities. Enhlanzeni District municipality, which includes the towns of Mbombela, Malelane, White River,

Sabie, Lydenburg, Barberton, Hazyview, and the greater Bushbuckridge area surrounding the Kruger National Park, represents the Lowveld district of the province (Mpumalanga Business, 2021).

The Ehlanzeni District has a population of around 1.7 million, and improving food security for low-income families in the province remains a challenge. As a result, the provincial government committed to investing in agriculture (Mpumalanga Business, 2021; Sekole et al., 2023). This included the development of agri-business hubs in all three of Mpumalanga's districts, with the aim of connecting small-scale farmers and cooperatives to the formal economy (Mpumalanga Business, 2021; Sekole et al., 2023). The social-economic status of the people of Mpumalanga needs improvement, as they continue to face challenges such as unemployment, poverty, and corruption (Sekole et al., 2023). To address this, the province established the operational Mkhuhlu Agri-hub in Bushbuckridge, the partly operational Mkhondo Agri-hub in the Gert Sibande District and had planned to establish the Nkomazi hub in the foreseeable future (Mpumalanga Business, 2021). Among the province's agri-business development initiatives was the recommissioning of the Bushbuckridge poultry abattoir, as a vital function in the value chain of poultry production (Mpumalanga Business, 2021).

1.2.2 Poultry Farming

The poultry industry comprises various activities that range from breeding, hatching, growers, processing, distribution, and consumption (Garrigus, 2022). Poultry farming refers to the domestication of birds, such as ducks, chickens, geese, turkeys, and other indigenous breeds, for meat or egg production (Garrigus, 2022; Nkukwana, 2018). This industry is amongst the fastest-growing sector in emerging economies, with a projected global market value of $422.97 billion in 2025 (Yildiz, 2021). The production of poultry meat products represents a significant segment of the agricultural industry and can be an easier and less expensive business venture to establish, making it an easy space for small and start-up businesses to thrive (Nkukwana, 2018; Statistics South Africa, 2022).

As the demand for food security and the need to alleviate poverty in communities grows, poultry remains the most affordable and easily accessible source of animal protein globally (Nkukwana, 2018; Small Medium Enterprise South Africa, 2022). Poultry products are a staple in the majority of South African households, and with an increasing population and urbanization, the demand for poultry products continues to rise (Nkukwana, 2018). However, most poultry start-up businesses struggle to sustain for longer, and those that do fail to expand from informal trading to growth enterprises (Cant & Rabie, 2018; Nkukwana, 2018).

Chicken meat products and eggs are a crucial source of protein for many South African households, with an estimated 18 million households comprising around 3.34 persons (Statistics South Africa, 2021). This suggests that as the population continues to grow, there will be a rise in the demand for poultry products (Nkukwana, 2018). Studies in other African countries, such as Senegal and Ghana, have found that the demand for poultry meat products and eggs far exceeds the supply, and the same is true in the South African context, where population growth places unprecedented pressure on the supply of poultry products (Chibanda et al., 2022; Nkukwana, 2018; Omondi, 2018).

1.2.3 Social and Economic Development

Reducing poverty and unemployment are crucial goals for the South African government (National Planning Commission, 2023). To achieve this, the government and other economic entities have encouraged the development of small and medium-sized enterprises. The aim is to boost economic activity, create jobs, and address the social challenges resulting from high unemployment rates and poverty (South African Government, 2020). Among the business opportunities that hold promise for small-scale farmers is commercial poultry farming and production, which can yield high volumes of produce (Nkukwana, 2018). However, despite the potential benefits, small-scale producers often struggle to penetrate and thrive in the retail market (Nkukwana, 2018).

1.2.4 Small and Medium Enterprises

The government and businesses in South Africa have prioritised the development of small and medium enterprises (SMEs) to create jobs and boost economic growth (Mpumalanga Business, 2021). Various investment incentives have been introduced, including programs like the Small Medium Enterprise Development Programmes (SMEDP), Isivande Women's Fund, and SEDA Technology Programme (STP) (Mpumalanga Business, 2021). Compliance with the B-BBEE Act involves meeting the five elements of a BBBEE scorecard, including Ownership, Management Control, Skills Development, preferential procurement, and Socio-economic Development (Small Medium Enterprise South Africa, 2018) This approach strengthens and diversifies a corporation's supply chain, promotes economic change and job creation through SME development, and enables businesses to benefit from a good B-BBEE score (Small Medium Enterprise South Africa, 2018).

1.3 Research problem

The poultry industry plays a crucial role in economic growth by offering affordable poultry products, ensuring food security, and reducing poverty and unemployment (Aboah & Enahoro, 2022; Omondi, 2018). It also holds immense potential for unlocking the township economy (Cant & Rabie, 2018). Unfortunately, small and medium-scale poultry farmers often struggle to survive beyond their first year, despite favourable entrepreneurial conditions (Aboah & Enahoro, 2022). To comprehend the reasons for this setback and the lack of progress in local communities, this study sought to explore factors that contribute to this, in the Lowveld district of Mpumalanga.

1.4 Research questions

Through an interpretative qualitative study, the following research questions were investigated to assess the developmental challenges of small and medium poultry farming enterprises in the Lowveld district of Mpumalanga:

1.4.1. Which elements of the entrepreneurship value-chain are lacking in the local communities of the Lowveld region of Mpumalanga?

1.4.2 What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga?

1.4.3. How does the location of the poultry farmers affect their access to supply chain and distribution channels?

1.5 Rationale

Studies on entrepreneurship, particularly those focused on small and medium-sized businesses shown that start-up ventures play a crucial role in driving economic development (Aryal, 2021; Can't & Rabie, 2018; Leendertse et al., 2021; Myres et al., 2022; Nkukwana, 2018; Nkwapi, 2022; OECD, 2022l). However, these studies have also underscored the challenges faced by SMEs, such as limited access to funding, inadequate business management skills, and unfavourable economic policies that hinder entrepreneurship. The purpose of this study was aimed at examining the unique social, economic and other factors that impact the entrepreneurial landscape of poultry farming in the Lowveld district of Mpumalanga, South Africa. By identifying these challenges, the study aimed to inform the government, business society, and policymakers about the support structures needed to address them. Moreover, the study provides useful insights for practitioners, such as business incubators, accelerators, and consultants, to provide valuable support services for small-scale poultry farmers in the local communities.

Previous literature has discussed various models of entrepreneurship, including studies on the drivers of entrepreneurial actions and the actors that create an enabling environment for entrepreneurship (Aryal, 2021; Can't & Rabie, 2018; Kumar, 2020; Myres et al., 2022; Wurth et al., 2021). These models provide insights into the factors that drive entrepreneurial action, the role of entrepreneurs in innovation and leadership, and the sustainability of business ventures. This study sought to add to the existing body of knowledge on entrepreneurship by providing insight on themes that relate to these models.

In summary, this study aimed to highlight the challenges faced by poultry farmers in the Lowveld region of Mpumalanga and improve the scalability and sustainability of their businesses. Therefore, the objectives of the study were set to achieve the following:

Objective 1: To determine the elements of the entrepreneurship value-chain that are lacking in the local communities of the Lowveld region of Mpumalanga.

Objective 2: To investigate factors that disable the ease of doing businesses within local communities in the Lowveld region of Mpumalanga.

Objective 3: To determine how the location of the poultry farmers affect their access to supply chain and distribution channels.

1.6 Delimitations of the study

This study was undertaken through an explorative qualitative research approach by conducting interviews with poultry farmers in the local townships within the Lowveld region of Mpumalanga.

In the context of this study, poultry farming and production was limited to the production of chicken meat (broilers) and eggs, with specific focus on the growers, who operate with growing the chickens to maturity. These businesses are very popular within the local communities in the Lowveld district due to its low

entry barriers. Other farmers who operate in other activities within the value chain, such as breeding, hatching, processing and distribution, and consumption, were not part be in the scope of this research.

1.7 Definition of terms

1.7.1 Broilers

These are chickens that are raised for meat, and they are typically slaughtered at 6-7 weeks of age in the factory farms (Aboah & Enahoro, 2022; The Human League, 2023). This study's primary focus was on small and medium-sized enterprises who are engaged in poultry production.

1.7.2 Day-old chicks (DOCs)

These are poultry birds that are less than 72 hours old (Aboah & Enahoro, 2022; The Human League, 2023). Chibanda et al. (2022) define them as hatcheries from either imported breeder stocks or broiler-hatching eggs. DOCs are essential stock for broiler production, which involves growing the chicks into mature broilers that are further processed and packaged for consumption.

1.7.3 Developmental challenges

Enterprise development involves investing expertise, time, and resources to compete effectively in the market. This process includes building business connections, attracting investments, and hiring talented personnel to enhance the company’s reputation and provide more value to customers (Aryal, 2021; Cant & Rabie, 2018; Denisov, 2018; Leendertse et al., 2021; Myres et al., 2022; Nkukwana, 2018; Nkwapi, 2022; OECD, 2022). Developmental challenges relate to the factors that inhibit enterprises from achieving this sustained value creation and profitability (Holcombe R., 2021; Kumar, 2020; Nkwapi, 2022; OECD, 2022; Sekole et al., 2023l). In the context of this research study, the study focused on the obstacles that small and medium poultry businesses face in sustaining growth and profitability.

1.7.4 Entrepreneurship

According to Kumar (2020), entrepreneurship involves developing new products and exploring new markets, as well as utilizing innovative technologies to improve existing products. Additionally, entrepreneurship, as supported by Holcombe (2021) and Wurth et al. (2021), is a human action emphasising the importance of the entrepreneur as both a leader and innovator in promoting economic growth. Ogajiuba et al. (2022) also recognises that advancement and development are crucial factors for achieving entrepreneurial success.

1.7.5 Entrepreneurial Ecosystem

The term "entrepreneurial ecosystems" refers to the various interdependent factors that facilitate the establishment and expansion of new business ventures, (Stephans et al., 2022). These factors encompass a range of elements such as policies, financial assistance, cultural values, support systems, human resources, and markets. Such ecosystems serve as a platform for examining how entrepreneurial activity is driving regional growth (Wurth et al., 2021), and for promoting the creation of novel enterprises.

1.7.6 Feeds

"Feeds" describe the food that is appropriate for raising broilers (Aboah and Enahoro, 2022). They play a crucial role in the production of poultry products, as their quality directly impacts the quality of the poultry products.

1.7.7 Layers

These are the female chickens that are kept for egg production (Aboah & Enahoro, 2022; Nkukwana, 2018; The Human League, 2023). They formed part of the scope of this research, as they are greatly produced in local communities of Mpumalanga.

1.7.8 Poultry

This refers to birds that are raised for commercial or domestic purposes, for production of either meat, eggs, or feathers, and they include animals such as chickens, turkeys, geese, ducks, and other related species (Garrigus,2022; Nkukwana, 2018). However, this research was focused on chicken and egg production.

1.7.9 Point of Lay

According to Aboah & Enahoro (2022), Nkukwana (2018) and The Human League (2023), the term "point -of-lay" refers to a chicken that has reached the age or stage of laying eggs. The focus of this study included egg production, which is achieved through farming layers.

1.7.10 Small and medium enterprises (SMEs)

Small and medium enterprises (SMEs) are defined by the Department of Small Business Development (2019) as separate and distinct corporate entities, including their branches or subsidiaries, as well as any cooperative enterprises managed by one or more owners, that primarily operate in any area or subsector of the economy and are categorized as micro, small, or medium enterprises (Department of Small Business Development, 2019; Denisov, 2018). This study included informal and unregistered businesses operating in the informal market under the SME category. SMEs are classified based on their number of employees, annual turnover, and gross asset value (Cant & Rabie, 2018; Department of Small Business Development, 2019; Denisov, 2018), as outlined below:

Table 1: SME Categories (Department of Small Business Development, 2019)

Size	Employees	Annual Turnover	Gross Asset Value
Medium	Less than 200	< R25 Million	< R8 Million
Small	Less than 50	< R10 Million	< R3 Million
Very Small	Less than 10	< R2,5 Million	< R700 000
Micro	Less than 10	< R50 0000	< R100 000

For the purpose of this study, "small enterprises" defined businesses with a turnover of less than R10 million and an asset turnover of less than R3 million. This definition covers micro and very small enterprises, which are encompassed in the SMME acronym. As a result, "SME" and "SMME" have the same meaning in this study.

1.8 Assumptions

The following assumptions were made for this study: success of this study:

- The participants were honest and truthful in their responses.
- The participants accurately and truthfully described their own realities.
- The number of participants is adequate to obtain sufficient data.
- The participants participated eagerly without any or perceived conflict of interest.

1.9 Chapter Outline

Chapter 2 of this study will cover a literature review, which will summarise both the theoretical and empirical findings of previous studies on poultry production systems and entrepreneurial ecosystems in local communities. The theoretical framework will also be introduced as a means to investigate the research questions relevant to this study. In Chapter 3, the research methods and approaches to be used to collect and analyse data will be outlined. Chapter 4 will present and discuss the study's findings and evidence. Chapter 5 will present the discussion of audit findings in line with the research questions. Chapter 6 will conclude the study by highlighting key learnings, potential solutions to the research questions, and any research gaps that require further exploration.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Empirical Review

2.1.1 Introduction

The purpose of the literature review is to outline the empirical review of previous studies that support the rationale of this study. The empirical review assessed the poultry farming production systems, and the current ecosystems for township SMMEs to understand the gaps that are relevant to the developmental challenges of small and medium-scale poultry farmers within local communities. \

2.1.2 Discussion of Literature Review

2.1.2.1 Geographic Domestic Product of Mpumalanga

The province of Mpumalanga is dominated by the mining industry as the leading industry within the province, with the largest contribution to the province's geographic domestic product (GDP) (Statistics South Africa, 2021). In 2019, Mpumalanga was contributing 8% to the national economy, and this had shrunk by 0.4% from the previous year (Statistics South Africa, 2021). According to Statistics South Africa (2021), other industries collectively represent an even larger portion of the GPD which confirms the significant presence of other industries, such as tourism, energy, and agriculture, amongst others, although they are not dominating.

Unemployment is common in Mpumalanga townships, reducing the buying power of most locals and constraining the affordability of the accessible market due to low levels of household income (Cant & Rabie, 2018; Sekole et al., 2023). This suggests that entrepreneurs operating within these environments need to have the commitment and passion to sustain their business despite the negative environmental and social factors that exist (Cant & Rabie, 2018). Some of the

entrepreneurs opted to establish their businesses as a primarily source of income. (Cant & Rabie, 2018; OECD, 2022; Wurth et al., 2021). In some instances, it is the only skill that they possess, but they lack knowledge about the markets or other options for business expansion opportunities (OECD, 2022). Such entrepreneurs choose to hang on to their business for survival as opposed to business development (Cant & Rabie, 2018; Wurth et al., 2021).

2.1.2.2 Small Medium Enterprises

Small and medium-sized enterprises (SMEs) are acknowledged as significant drivers of economic growth, mainly due to the support they receive (Statistics South Africa, 2020). The 2019 Annual Financial Statistics (AFS) survey conducted by Statistics South Africa (2020) revealed that the formal business sector across all industries in South Africa yielded a turnover of R10.5 trillion in the same year. Notably, SMEs contributed 32% to the overall turnover, highlighting their crucial role in the country's economy (Statistics South Africa, 2020).

Aryal (2021) discussed two models of entrepreneurship: causal and effectual models suggesting that the causal way of entrepreneurship results in pre-planned steps to achieve specific goals, while the effectual model requires sufficient means to accomplish a goal, and goals are subject to change. Wurth et al. (2021) further described productive entrepreneurship as contributing to a country's output and supports social and ecological value, emphasising that entrepreneurs are leaders, innovators, and community members who challenge established patterns and create new practices (Holcombe, 2021; Hunter et al., 2019; Kumar, 2020; Stephans et al., 2022).

In the study around government support, business style, and entrepreneurship sustainability, Ogajiuba et al. (2022) found that a company's location, can aid SMEs in operating more efficiently because different regions have different resource and capacity profiles for firms. In semi-urban and rural settings, SMEs are challenged with power shortages, a lack of capital, and poor management

abilities, and business location and government support have an impact on business strategies in South Africa (Ogajiuba et al., 2022). Entrepreneurship sustainability is impacted by location-based disparities in government assistance for SMEs (Cant & Rabie, 2018; Nkukwana, 2018).

According to a study carried out in Dar El Salam, young women entrepreneurs are challenged by shortage of skilled labour, insufficient raw materials, limited customer base, social-cultural issues, and low revenues that hinder their entrepreneurial success (Nkwapi, 2022, p22). The Tanzanian women engage in entrepreneurship due to both push and pull factors, which is similar to small-scale poultry production entrepreneurs in South Africa (Nkukwana, 2018; Nkwapi, 2022). The pull factors include promoting youth entrepreneurship, boosting Tanzanian manufacturing, and supporting women, while the push factors include financial independence, financial support, and personal fulfilment. These outcomes are consistent with those found in other studies (Nkwapi, 2022; Ogajiuba et al., 2022).

Small and medium-sized enterprises (SMEs) face ethical challenges when dealing with large corporations, including delayed payments, difficult access to supplier databases, bullying, and other delaying tactics that further complicate the economic environment for SMEs (Myres et al., 2022). These challenges have led some SMEs to avoid working with large corporations altogether. Additionally, some SMMEs have reported being vulnerable to corruption, bribery, and discrimination (Cant & Rabie, 2018; Myres et al., 2022). To address these issues, the National Small Enterprise Amendment Bill 2020 proposed the establishment of an ombud service that would provide legal support and services to SMEs, resolve disputes, and enforce contracts due to the prevalence of unfair practices towards SMEs (Statistics SA, 2022).

2.1.2.3 Development and Sustainability of Township SMEs

A study conducted by Cant and Rabie (2018) on the sustainability of small and medium enterprises (SMEs) in South African townships found that while there is potential for these businesses to thrive, their sustainability is heavily influenced

by environmental and economic factors unique to each business and specific township areas (Aryal, 2021; Kumar, 2020; Wurth et al., 2021). Diverse customer base, potential for social and infrastructural development, and untapped markets, highlight the potential for sustaining businesses in township areas (Cant & Rabie, 2018; Meuwissen et al., 2019). However, lack of funding, support from locals, infrastructural development, unemployment, space constraints, crime, and corruption counteract the perspective on the sustainability of enterprises (Cant & Rabie, 2018; Nkwapi, 2022; OECD, 2022; Ogajiuba et al., 2022).

According to Cant and Rabie (2018), entrepreneurs who are likely to succeed for over three to five years are those who are passionate about what they do and possess a growth mindset. Identifying expansion opportunities outside of the township environment enables them to access high-value markets and become profitable enough to counter the negative factors within the township environment (Cant & Rabie, 2018; Wurth et al., 2021). Therefore, focusing the business both within and outside of the township are suggested to be good strategies for sustaining township enterprises. (Cant & Rabie, 2018; Holcombe, 2021; Kumar, 2020; Zamani et al., 2022).

2.1.2.4 Poultry production systems

The production of poultry can involve hatching and selling day-old chicks to commercial producers or raising layers for egg production, as well as selling indigenous chickens, which is popular in Sub-Saharan Africa (Aboah & Enahoro, 2022; Chibanda et al., 2022; Nkukwana, 2018; Omondi, 2018). Poultry can be produced through free-range or deep litter systems, or a combination of both (Omondi, 2018). While the free-range system is less costly, it is also more prone to disease outbreaks and high bird mortality rates (Omondi, 2018; Chibanda et al., 2022). Backyard poultry production systems typically begin with receiving day-old chicks and growing them until they reach maturity (Aboah & Enahoro, 2022; Chibanda et al., 2022). Day-old chicks take 5 weeks to develop to mature chicks that can be restocked after 24 weeks. Growers take 14 weeks to become productive layers. Once egg layers stop hatching at full capacity (below 50% of

full capacity), these become slaughtered for consumption or sold live on the informal market (Aboah & Enahoro, 2022). Therefore, a vaccination schedule is recommended at different growth stages of the birds to limit the risk of mortality. (Aboah & Enahoro, 2022)

However, chicks are susceptible to diseases, predators, and pests, which can result in mortality, thus vaccinations are recommended at different growth stages to limit this risk (Aboah & Enahoro, 2022). Farmers' decisions to vaccinate their birds depend on their expected profit, but many farmers in rural areas have limited access to veterinary services or preventative measures (Aboah & Enahoro, 2022, Omondi; 2018).

To produce poultry, it's important to provide the birds with proper feed and water for their nutrition and growth process, and this includes considering the profitability of the production activities when determining the feed rations (Aboah & Enahoro, 2022; Chibanda et al., 2022; Zamani et al., 2022). Farmers who do not make enough profit may struggle to buy the necessary amount of feed, and the birds' health is influenced by their diet, water intake, and vaccination (Aboah & Enahoro, 2022; Zamani et al., 2022).

Small and medium-scale farmers can raise and sell between 20 to 500 chicks in 3 to 4 weeks, while mature birds can lay an average of 3 to 6 eggs per week (Aboah & Enahoro, 2022). The costs of feeding, water, and vaccination directly impact the profitability of poultry production. Disease outbreaks can also greatly affect the birds and the farmer's revenue, making it crucial to prioritize recovery and lifetime immunity of the birds (Aboah & Enahoro, 2022; Zamani et al., 2022). However, small-scale farmers of back-yard poultry production systems are challenged with limited access to vaccines and preventative measures, leaving them vulnerable to severe losses due to disease outbreaks sales (Zamani et al., 2022).

Excess of poultry products in the market leads to high inventory levels which, results in a decrease in unit prices (Aboah & Enahoro, 2022; Chibanda et al.,

2022; Zamani et al., 2022). As a result, consumers tend to switch to cheaper imported meat instead of locally produced chicken (Aboah & Enahoro, 2022; Nkukwana, 2018; Zamani et al., 2022). The poultry industry is facing tough competition from other countries that offer chicken imports at prices below the local cost of production, as noted by Nkukwana (2018) and Zamani et al. (2022), which is causing developmental challenges for both commercial and small-scale poultry farmers. Aboah and Enahoro (2022) found that meat production alone is more profitable than producing eggs or both. However, this may not hold true in markets where there is high demand for both egg and meat products.

2.1.2.5 Challenges Affecting the Development of Small and medium poultry farmers

According to Nkukwana (2018), poultry production is often considered an easy enterprise to start, however small and medium-scale farmers are challenged by droughts that negatively affect agricultural output and locally produced feeds, limited access to established value chains or economies of scale for necessary business support, energy load-shedding and lack of access to clean water, the distance and accessibility of markets, hatcheries, processors, and feed providers for small-scale farmers, and inadequate local industry protection.

According to Omondi (2018), having access to market information is crucial for poultry farmers to increase their profitability by selling their products at the best possible prices. However, small-scale farmers often struggle to obtain relevant market data due to limited sources or inadequate data collection measures (Omondi, 2018). This is supported by Ndlovu & Masuku (2021) who concluded that small-scale farmers are constrained from accessing formal markets due to their limited business administration and marketing skills. Additionally, they are constrained by market restrictions that pose strict standards' requirements, climatic change, financial resource constraints, limited market knowledge and high transport costs. Due to the small farms' inability to meet formal market demands, small-scale farmers in rural areas lack the ability and capability to meet

consumers' needs. overcome this challenge, it is essential to provide these farmers with access to market information and affordable transportation options, and a suitable production system to counter the effects of feed requirements, disease management, and overall production management (Chibanda et al., 2022; Omondi, 2018).

2.1.3. Conclusion on Empirical Literature Review

In Mpumalanga province, where the mining sector plays a predominant role in the economic landscape, entrepreneurs encounter significant difficulties due to elevated unemployment rates in townships. This leads to diminished purchasing power and limitations on the available market. The commitment and enthusiasm of entrepreneurs become critical in maintaining businesses amid challenging environmental and social conditions. A substantial number of entrepreneurs initiate businesses primarily for income generation, often lacking awareness of market dynamics and alternative growth prospects. This underscores the importance of tailored assistance and resources to empower entrepreneurs, promoting not only survival but also fostering sustainable business development in the demanding economic environment of Mpumalanga.

In the midst of the difficulties encountered by small and medium-sized enterprises (SMEs) when dealing with large corporations, there is a proposal for the creation of an ombud service to tackle issues like delayed payments, challenges in accessing supplier databases, bullying, corruption, bribery, and discrimination. The National Small Enterprise Amendment Bill 2020, if enacted, seeks to offer legal assistance and services to SMEs, address disputes, and enforce contracts. This demonstrates a dedication to alleviating unfair practices against SMEs within the economic landscape.

In the South African township context, the sustainability of small and medium enterprises (SMEs) relies on striking a balance between potential opportunities

and formidable challenges. Although there is visible potential for prosperous businesses in township areas, the sustainability of enterprises is significantly influenced by the unique combination of social and economic factors specific to each business and township. Promising avenues for sustaining enterprises within townships include diverse customer bases, prospects for social and infrastructural development, and untapped markets. However, challenges such as inadequate funding, limited local support, insufficient infrastructure, unemployment, space constraints, crime, and corruption pose significant obstacles to sustainability.

According to Cant and Rabie (2018), the success and longevity of township enterprises are highly influenced by the passion of entrepreneurs and their embrace of a growth mindset. Entrepreneurs who recognize expansion opportunities beyond the township environment can tap into high-value markets, thereby boosting profitability and counteracting negative factors within township settings. As a suggested strategy for sustaining township enterprises, there is an emphasis on a dual focus – developing the business both within and outside the township. This approach, endorsed by various scholars, including Cant & Rabie (2018), Holcombe (2021), Kumar (2020), and Zamani et al. (2022), is regarded as a viable method for navigating the intricate landscape and promoting the long-term viability of SMEs based in townships.

In the domain of poultry production, small and medium-scale farmers confront a multitude of challenges that hinder their success. Despite the perception that poultry farming is an accessible venture, these farmers grapple with various issues, including fluctuations in agricultural output caused by drought, a shortage of locally produced feeds, restricted access to established value chains, power outages, and a lack of clean water. Additionally, the geographical constraints associated with the distance and accessibility of markets, hatcheries, processors, and feed providers present significant obstacles for small-scale farmers.

Moreover, the absence of sufficient local industry protection exacerbates the difficulties faced by these farmers.

Market access and information play a crucial role in boosting profitability for poultry farmers. However, small-scale farmers frequently encounter obstacles in acquiring relevant market data due to limited sources and inadequate data collection measures. To address these challenges, it is crucial to empower small-scale poultry farmers by granting them access to comprehensive market information, affordable transportation options, and a well-designed production system. This comprehensive approach, which takes into account factors such as feed requirements, disease management, and overall production management, is essential for reinforcing the resilience and prosperity of small and medium-scale poultry farming enterprises.

2.1.4 Summary of the propositions and research gaps

From the literature review highlighted in this section, the following propositions were established, and research gaps were identified that re-emphasized the rationale of the research questions.

Table 2: Overview of Propositions and Research gaps noted from the literature review.

Author	Research Question	Organisational Problem	Propositions	Research gaps for consideration
Cant & Rabie (2018), Wurth et al., (2021)	Which elements of the entrepreneurship value-chain are lacking in the local communities of the Lowveld region of Mpumalanga?	Business support	Small and medium-scale farmers are challenged by droughts that negatively affect agricultural output and locally produced feeds, limited access to established value chains or economies of scale for necessary business support, energy load-shedding and lack of access to clean water, the distance and accessibility of markets, hatcheries, processors, and feed providers for small-scale farmers, and inadequate local industry protection (Cant & Rabie, 2018; Ndlovu & Masuku, 2021; Wurth et al., (2021).	1. Understanding the existence of tailored assistance and resources to empower entrepreneurs and to foster sustainable business development.

Author	Research Question	Organisational Problem	Propositions	Research gaps for consideration
Cant & Rabie (2018), Wurth et al. (2021), Nkwapi (2022) and Ogajiuba et al. (2022)		Government policies	Farmers grapple with various issues, including fluctuations in agricultural output caused by drought, a shortage of locally produced feeds, restricted access to established value chains, power outages, and a lack of clean water (Cant & Rabie, 2018; Wurth et al., 2021; Nkwapi, 2022; Ogajiuba et al., 2022).	2. Establishing the effectiveness of government policies and programmes in addressing or curbing issues experienced by small and medium poultry farmers in local communities of Mpumalanga, Lowveld region.
Cant & Rabie (2018), Holcombe, (2021),		Markets	The sustainability of enterprises is significantly influenced by the unique combination of social and economic factors specific to each business and	3. Assessing the availability of expansion opportunities for entrepreneurs to access

Author	Research Question	Organisational Problem	Propositions	Research gaps for consideration
Kumar, (2020), and Zamani et al., (2022)			township. Promising avenues for sustaining enterprises within townships include diverse customer bases, prospects for social and infrastructural development, and untapped markets (Kumar, 2020; Zamani et al., 2022).	broader markets beyond the township environments.
Cant & Rabie (2018), Nkukwana, (2018), Nkwapi (2022) and Ogajiuba et al. (2022)	What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga?	Funding Infrastructure Market dynamics	Small-scale poultry farmers must be empowered by having access to comprehensive market information, affordable transportation options, and a well-designed production system (Cant & Rabie, 2018; Nkukwana, 2018; Nkwapi, 2022; Ogajiuba et al., 2022).	4. Understanding the extent of challenges such as inadequate funding, limited local support, insufficient infrastructure, unemployment, amongst others, pose to sustainability of small

Author	Research Question	Organisational Problem	Propositions	Research gaps for consideration
				and medium poultry farming enterprises of Mpumalanga, in the Lowveld.
Cant & Rabie (2018), Nkukwana (2018) and Ogajiuba et al. (2022)	How does the location of the poultry farmers affect their access to supply chain and distribution channels?	Supply Chain, Distribution	Geographical constraints associated with the distance and accessibility of markets, hatcheries, processors, and feed providers present significant obstacles for small-scale farmers Cant & Rabie, 2018; Nkukwana, 2018; Ogajiuba et al., 2022)	5. Understanding the extent to which accessibility of small and medium poultry farmers to supply-chain and distribution channels such as affordable transportation options, well-designed production system, amongst others affects the sustainability of small and medium poultry farmers.

2.2 Theoretical Frameworks

2.2.1 Introduction

The purpose of this section was to highlight theoretical frameworks for assessing the ecosystems for local SMMEs, to understand the gaps that contribute to the developmental challenges of small and medium-scale poultry farmers within local communities.

2.2.2 Discussion of Theoretical Frameworks

2.2.2.1 Theory One: Competitive General Equilibrium Framework

According to Holcombe (2021), the economic equilibrium framework suggests that in a state of equilibrium, all opportunities for profit have been exhausted due to competition, resulting in businesses making typical profits. However, Holcombe (2021) argues that this framework does not support entrepreneurship, as individuals would not engage in entrepreneurial activities if they believed that the model accurately represented the real economy, as they would not perceive any profitable opportunities and could ultimately incur losses. The Competitive General Equilibrium framework, as demonstrated by Holcombe (2021), assumes that entrepreneurial activities are dependent on constant and stagnant market conditions. However, this perspective ignores the role of various supporting actors and the market's adaptation to policies influencing competition (Zamani et al., 2022).

2.2.2.2 Theory Two: The Systems Dynamic Model

A type of simulation model called systems dynamics models use predicted relationships between different activities and processes to create continuous simulations (Systems Dynamics Society, 2023). Researchers, Aboah and Enahoro (2022) applied this model to study the factors that influence change in

Ghana's backyard poultry farming system and how it affects farm households' income.

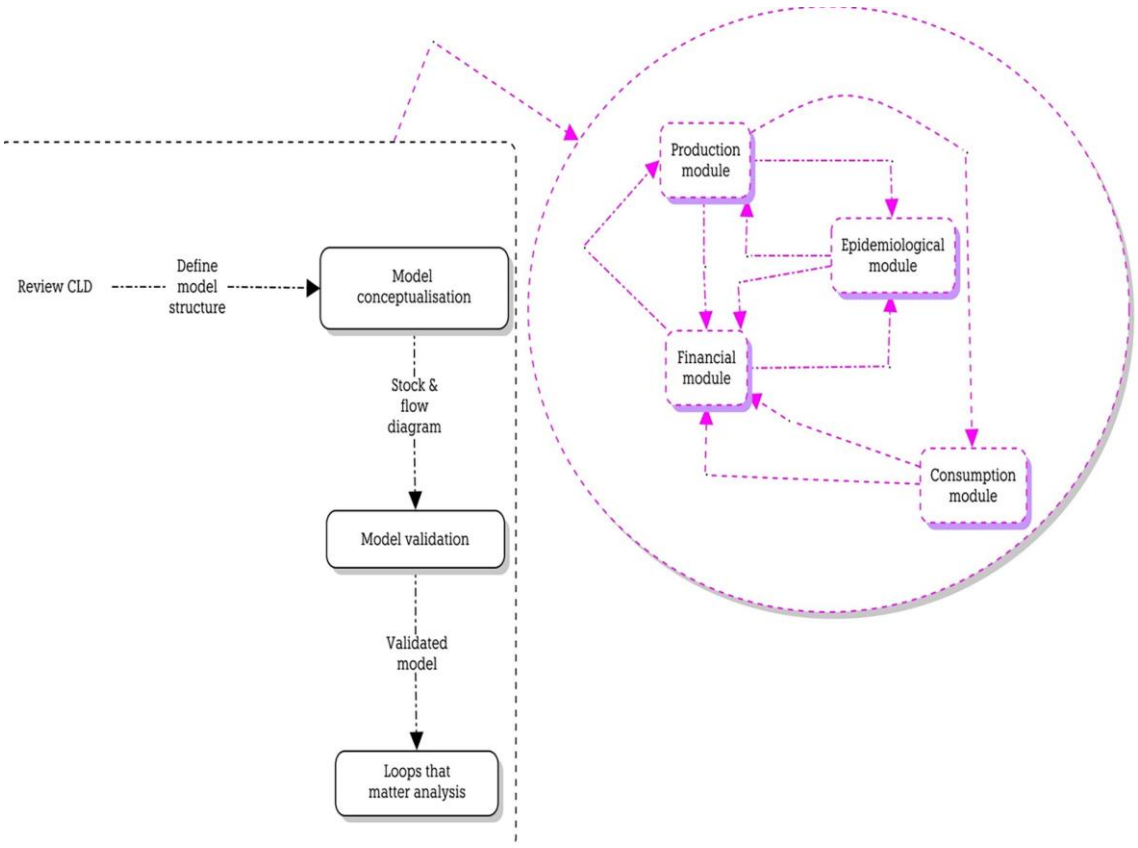


Figure 1 The modelling process (Aboah & Enahoro, 2022)

This method is useful for identifying critical change drivers and profitable strategies in meat and egg production, but it was not utilized for this study due to its requirement for a thorough analysis of the farming system's resilience, internal and external interdependencies, and potential shocks and stresses (Aboah & Enahoro, 2022), Meuwissen et al., 2019).

2.2.2.3 Theory Three: Domains of Entrepreneurial Ecosystem

Entrepreneurial ecosystem domains have recently received a lot of attention, with researchers delving into the six original domains established by Isenberg in previous studies on entrepreneurship (Aryal, 2021; Kumar, 2020; Leendertse et al., 2021; Stephans et al, 2022). Stephans et al. (2022) studied the dimensions

of entrepreneurial ecosystems further in their work on "Entrepreneurial Ecosystems: Multiple Domains, Dimensions and Relationships." They defined entrepreneurship ecosystems as an ongoing process that enables entrepreneurs to acquire resources, knowledge, and support to improve their competitive advantage and ability to grow (Stephans et al., 2022, p.2). Aryal (2021) supported this definition and emphasized that it involves the cooperation of multiple actors to foster an entrepreneurial atmosphere. Leendertse et al. (2021) identified key elements in the geography of entrepreneurship in Figure 2 to measure the existence of these ecosystem domains. These elements stem from the expanded ten domains, which include Policy, Finance, Culture, Supports, Human Capital, Markets, Entrepreneurial Education, Business Networking, Infrastructure, and Business Incubators (Aryal, 2021; Stephens et al., 2022).

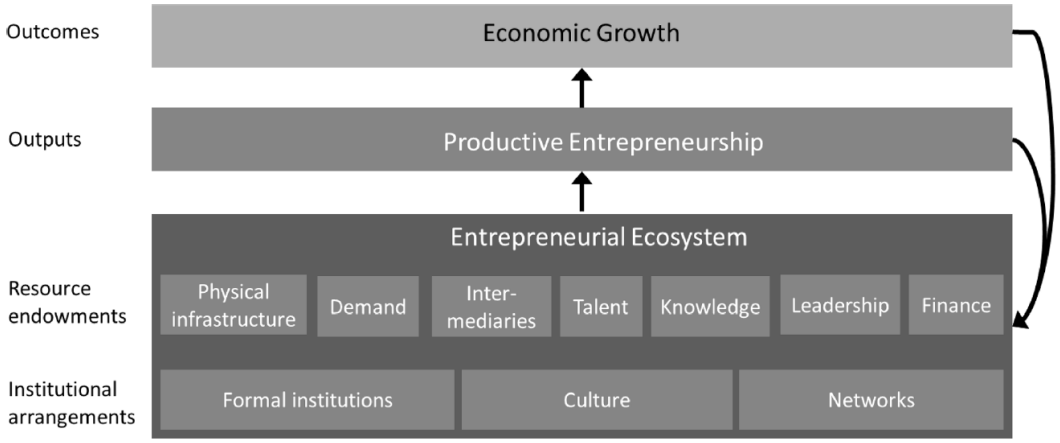


Figure 2: Elements of outputs and outcomes on the entrepreneurial ecosystem (Leendertse et al., 2021)

Formal institutions

The growth of entrepreneurship and the allocation of resources to support it are impacted by formal institutions such as government bodies and business regulations (Leendertse et al., 2021). The success of enterprises depends on the effectiveness of these institutions, which can be measured by their ability to

facilitate smooth operations within their respective regions (Aryal, 2021; Stephens et al., 2022).

Culture

The concept of culture is linked with how individuals perceive and appreciate entrepreneurship in society (Leendertse et al., 2021). This plays a significant role in determining the level of support and encouragement given to entrepreneurial innovations, as well as the social norms that facilitate business activity (Leendertse et al., 2021). The culture of entrepreneurship can be assessed by looking at factors such as entrepreneurial motivations, innovations, and creativity (Aryal, 2021; Stephens et al., 2022)**.**

Networks

Sharing and distributing information, capital, and labour is possible through networks, which are considered to be social capital, as they connect entrepreneurs to the appropriate channels that are crucial for business ventures to succeed (Leendertse et al., 2021). Effective networks are evident in the collaboration of small and medium enterprises on innovative projects (Aryal, 2021; Stephens et al., 2022).

Infrastructure

The presence of infrastructure plays a crucial role in promoting entrepreneurship, such as efficient distribution of goods and services through convenient access to transportation routes (Aryal, 2021; Stephens et al., 2022). Additionally, with the growth of the digital world, digital infrastructure such as the internet, is also becoming a vital element (Leendertse et al., 2021).

Finance

Having access to financial institutions is essential for investing in entrepreneurial projects or business venture start-ups (Leendertse et al., 2021). The availability of venture capital and the accessibility of funding are significant factors for

indicating the effectiveness of this element (Leendertse et al., 2021; Stephens et al., 2022).

Leadership

Effective ecosystems that harness entrepreneurial value chains require strong leadership, and this can come from individuals or collective efforts that guide entrepreneurial systems and structures (Leendertse et al., 2021; Aryal, 2021; Stephens et al., 2022).

Talent

Having access to a skilled and knowledgeable workforce is crucial for entrepreneurial success, as it adds value through human capital (Aryal, 2021), Leendertse et al., 2021, Stephens et al., 2022).

Demand

A correlation exists between the availability of a market with buying potential and the demand for products and services, as stated by Leendertse et al. (2021). According to Aryal (2021) and Stephens et al. (2022), access to markets with financial resources and disposable income reduces the obstacles for novice entrepreneurs.

Knowledge

Entrepreneurs can gain access to essential market information for business growth and development by utilizing knowledge obtained from private and public sources through research and development projects (Aryal, 2021; Leendertse et al., 2021; Stephens et al., 2022).

Intermediaries

According to recent studies by Leendertse et al. (2021), intermediaries who offer support services can greatly aid in the growth of entrepreneurial ventures while simultaneously reducing the barriers to entry for new businesses. The existence

of general support services and entrepreneurial support structures such as business incubators and accelerators also provide a safety net that fosters innovation, as noted by Aryal (2021) and Stephens et al. (2022).

Tackling the weakest elements of entrepreneurial ecosystems is likely to provide the most efficient and effective way of improving the overall quality of the entrepreneurial ecosystem and stimulating productive entrepreneurship (Leendertse et al., 2021).

2.2.3 Conclusion on Theoretical Framework

The study sought to assess the entrepreneurial ecosystem of the poultry production enterprise in the Lowveld district of Mpumalanga. To understand the elements of entrepreneurship value-chain of small and medium poultry farmers in the local communities of the Lowveld region of Mpumalanga, or lack thereof, the 10 elements of the Domains of Entrepreneurship Ecosystem as outlined by Leendertse et al. (2021) are suitable frameworks to assess the research outcomes in line with the research objectives. The 10 key elements of the entrepreneurship ecosystem outlined by Leendertse et al. (2021) were used to conclude on the research objectives and to identify research gaps I Chapter 5.

3. RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the methodology used to address the research questions is explained. The following sections clarify the research paradigm, approach and their relevance to this study. Additionally, the section highlights the research design instrument used to collect data, and how it was created, the sample frame, and the data collection methods that were utilized in this research approach. Data analysis techniques employed to interpret the collected data are also explained as well as the ethical considerations that were implemented to ensure credibility and integrity of this study.

3.2 Research Approach

When seeking to arrive at a conclusion about a problem, utilizing a qualitative approach proves to be most effective (Hunter et al., 2019). This approach adopts a humanistic perspective to better comprehend people's attitudes, behaviours, and social interactions (Muzari et al., 2022). Participants are given the ability to share their experiences and express abstract aspects of their encounters, allowing researchers to delve into their inner humanistic issues (Muzari et al., 2022). However, unlike quantitative research which examines numerical quantities that are replicable and have generalizations associated with them, a qualitative study cannot be generalized as it is conducted within specific parameters. Additionally, the replication and objective verification of data may prove to be challenging as this approach is human-centred and subjective in its interpretation (Hunter et al., 2019; Muzari et al., 2022; Yong et al., 2021).

A qualitative approach was used for this study, as it enabled exploring the impact of external factors in the entrepreneurship ecosystem on the entrepreneurial actions of small and medium-scale poultry farmers, which sees them struggle to

sustain or grow their enterprises in the local communities of the Lowveld district. This approach was most appropriate due to its humanistic and holistic characteristic, which enabled interpretation of the data from the words and perspective of the participants (Hunter et al., 2019; Muzari et al, 2022). Through an inductive qualitative approach, holistic and meaningful data was obtained from the participants, and it was later analysed and interpreted to generate themes related to the research questions (Young et al., 2020). On the contrary, a deductive approach would involve statistical data to test or confirm a hypothesis within the parameters of a predetermined theoretical framework, which would not be aligned to the purpose of this study (Hunter et al., 2019; Young et al., 2020).

3.3 Research Paradigm

A research paradigm serves as a point of reference that researchers use to investigate a subject, and it influences the manner that a researcher collects and interprets data (Creswell & Poth, 2018).

Yong et al. (2021) presented four research perspectives: positivism, interpretivism, realism, and critical theory. Positivism is used in quantitative research to draw inferences from observable social reality (Hennink et al., 2020; Yong et al., 2021). Critical theory looks at previous systems in an effort to challenge social conceptions. According to Yong et al., (2021), realists emphasise causation in their assertion of the presence of an objective world. Through participant-researcher interactions, interpretivism seeks to reveal underlying beliefs and values (Muzari et al., 2022; Yong et al., 2021). Hermeneutics, ethnography, and phenomenology are three frameworks within which interpretive research can be situated to explore aspects of culture and human experience (Muzari et al., 2022).

A generic interpretive qualitative research was applied which enabled the collection of data that reflected the views and opinions of the participants, based on their perspectives, and lived experiences.

3.4 Research Design

This study was undertaken as interpretive qualitative research which sought to answer the “why” questions of explorative research and determine why a phenomenon or problem exists (Hunter et al., 2019; Muzari et al., 2022; Yong et al., 2021). This approach aided to provide a succinct and understandable explanation of the research findings (Hunter et al., 2019)

Semi-structured interviews were used to gather research data through open-ended questions that allowed participants to respond freely and openly about their experiences, enabling easy probing to obtain relevant information (Adosi, 2020; Hunter et al., 2019; Muzari et al, 2022; Yong et al., 2021). The sample frame comprised participants who are not literate nor fluent in English and semi-structured interviews assisted to easily relay the questions to gather the relevant data in their vernacular language, and in a relatable manner (Adosi, 2020).

3.5 Data Collection Methods

According to Hunter et al. (2019), data collection methods should communicate the decisions regarding the study design, how information is collected from participants, and how participants are selected, amongst other considerations (Hunter et al., 2019).

Semi-structured interviews were used to collect data, which was guided by an interview guide of open-ended questions. Open-ended questions provide flexibility and ease for follow-up questions to facilitate gathering the right quality of information with the necessary depth and substance needed to explore the research questions (Hennink et al., 2020).

Participants were approached from a networking communication platform of local poultry farmers, as well as through referrals from other local well-known farmers. Permission was sought from the Administrator of the networking communication platform and an invite was issued to the group, inviting farmers who were interested to participate in the study. Similarly, participants who were identified

through referrals were approached and invited verbally to participate in the study. All participants participated freely. The objective of the study and its intended purpose was communicated to the participants on the initial invitation. All positive responses were followed up by confirming the contact details of the potential participants. Meetings were scheduled for a set date with the interested participants, but in most instances the participants agreed to be interviewed immediately. Majority of the participants were interviewed from their place of business operations, with few exceptions that were undertaken virtually. This assisted to understand the context of the farming activities that they operate. All meetings were recorded and transcribed, and the data collected was safely stored via a password-protected laptop for safeguarding collected data. Data was collected over a time frame of two months.

In descriptive qualitative studies, focus groups and the observation of certain target events may be employed to gather data. However, these may not be easy to carry out for this study as the focus groups will require the participants to be present in one location at the same time. The observation data collection method is also not appropriate as it is dependent on observing the behavioural patterns of participants and the running of actual business processes. The interpretation of data collected from observation methods is very subjective and is greatly influenced by the perspectives and points of reference of the observer (Adosi, 2020; Hennink et al., 2020). A case study data collection method was not opted for, as it would take longer to analyse the data, and it requires more resources to gather the evidence (Yong et al., 2021; (Hunter et al., 2019). Similarly, a case study method would have been appropriate, but would have required more time and resources to implement (Adosi, 2020; Muzari et al., 2022).

3.6 Population and Sample

3.6.1 Population

The context of the study focused on understanding the factors that negatively affect the growth of small and medium poultry farmers based in the Lowveld

region of Mpumalanga. By definition and size, these entrepreneurs are categorized as small and medium enterprises (SME South Africa, 2022; South African Government, 2020).

According to the OEDC (2022) study of South Africa's SMME landscape, 2,6 million SMEs are estimated in South Africa, which comprises 37% of formal enterprises, 54% of micro-enterprises, and 15% that are in rural areas (OECD, 2022). According to a study conducted by SEDA (Clockwork, 2023), 2 182 283 SMMEs were identified, and three percent of the entrepreneurs operate in the agricultural sector, whilst 9.6% of the overall landscape of the SMME are in Mpumalanga.

Therefore, the study targeted small and medium-sized enterprises of poultry farmers in local communities of the Lowveld area in Mpumalanga. This included informal traders who operate domestic poultry businesses, businesses that operate in informal markets, and formal enterprises whose businesses are formally registered with the CIPC or who operate at a specified place of business. This target group well represents the definition of small-and-medium enterprises.

3.6.2 Sample and Sampling Methods

Based on the statistics from Clockwork (2023) and OECD (2022), three percent of the estimated number of SMEs based in Mpumalanga operate in the agricultural sector. These formed the sample frame that was targeted for data collection.

A sample size between 14 and 16 participants is recommended by other exploratory-descriptive studies, in which a smaller sample size is regarded as appropriate for qualitative research studies that seek to uncover in-depth information about the research question(s) (Hunter et al., 2019; Muzari et al., 2022; Shaheen et al., 2019). A sample size of 11 participants was used, which represented the small and medium-sized poultry farmers. It was sufficient to collect quality information related to the study’s research questions, and it was appropriate for the aim of this study.

A convenience sampling method was used to collect data, in which poultry farmers in and around the local communities of the Lowveld were identified and approached to participate in the study. This is according to the convenience sampling technique, where the selection of participants is dependent on their accessibility and availability (Shaheen et al., 2019).

Other sampling methods, such as purposeful method, theory-based sampling, and opportunistic sampling, were not considered to be appropriate based on the scope and nature of the study and the quality of data required (Shaheen et al., 2019).

3.7 The Research Instrument

The research instrument utilised in this study is semi-structured interviews guided by an open-ended interview design. Semi-structured interviews allow for a certain degree of flexibility, enabling the researchers to ask follow-up questions and delve deeper into the responses (Hunter et al., 2019). The open-ended nature of the questions provided participants with the freedom to express themselves, contributing to the collection of rich and in-depth information, aligning with the study's research questions.

The interview guide was structured according to the research questions and propositions identified in Chapter 2 which allowed collection of information that is relevant to the purpose of this study. The interview guide further categorised the questions according to the relevant elements of the Domains of Entrepreneurship Ecosystem, as the relevant theoretical framework used to direct the research instruments towards the objectives of this study. These elements include 1) Entrepreneurship culture, 2) Leadership, 3) Networks, 4) New Knowledge, 5) Talent, 6) Demand, 7) Formal institutions, 8) Finance, 9) Intermediate services and 10) Outputs Leendertse et al. (2021). Refer to *Appendix A* for the Research Instrument.

3.8 Procedure for Data collection

Participants were approached on the Networking Communication Platform and others were approached physically in their places of business, based on referrals from other participants. In some instances, participants were contacted telephonically to request their participation. The purpose of the study was explained to all the participants and subsequently they were invited to participate in the study. All participants accepted the invite voluntarily and interviews were undertaken immediately after they have accepted.

Data was collected through face-to-face semi-structured interviews and in virtual meetings where face-to-face meetings were not possible. Interviews were held in the participants' business premises or in their preferred meeting place. The interviews were recorded through the Microsoft Teams program which assisted to save all audio files. However, some audio did not save correctly and completely due to network connections issues that was impacted by some of the business locations, however all discussions and responses were recorded. After every interview, the discussions were transcribed for each participant in line with the interview guide. All audio files and transcripts have been stored in a password-protected laptop to ensure the confidentiality and credibility of the data collection process. All data sets have been stored in original transcripts of the discussions. In all the interviews, the participants were guaranteed confidentiality. No personal or demographic information was collected for the purpose of the study.

3.9 Data Analysis and Interpretation

Through a non-probabilistic thematic analysis, an inductive approach was applied to analyse data from participants by identifying codes that later translated to themes that are relevant to the research questions. To capture the significance of the collected data, the thematic analysis involves studying, analysing, recognizing, categorizing, organizing, exploring, and summarizing trends, repeating themes, and classifications to induce new theories (Muzari et al., 2022; Yong et al., 2021). This methodology is used interpretively to produce descriptive

data through a methodical process of transcription, coding, and analysis as a bottom-up approach to identifying trends and themes and the relevant theory that concludes the research objectives (Hunter et al., 2019; Muzari et al., 2022; Shaheen et al., 2019; Zammit 2020). To achieve the aim of this study, this methodology was applied which involved 1) studying the participants' responses to understand every word that was said, 2) analysing the responses and the context that they presented, 3) identifying the codes directly from the participants' transcripts, 4) re-organising the codes into groups that represent common meaning, 5) categorising the grouped codes into sub-themes, 6) exploring the pattern of the issues that informed the sub-themes and identifying commonalities in the sub-themes in line with the purpose and context of this study, 7) re-grouping the sub-themes into key themes that are outlined in the next chapter which form the basis of the conclusion of this study.

3.10 Ethical Considerations

In every research project, it is crucial to protect human participants by using the proper ethical standards (Arifin, 2018). Ethical considerations assist in maintaining a balance between the potential hazards and the expected benefits of the research by protecting human subjects. They ensure that the rights of research subjects are safeguarded, Academic integrity is preserved, and they increase the reliability of the research (Bandhari, 2022) (Bandhari, 2022).

In line with ethical considerations prescribed by Arifin (2018) and Bandhari (2022), the following ethical practices were considered to manage the potential risk of dissatisfaction from participants throughout all stages of this study:

3.10.1 Ethical approval

Ethical approval of the research proposal was obtained from the Wits Research Panel prior to commencing with the data collection stage of this study. This ethical clearance from the Wits University Research Panel and the Ethics Committee

ascertained that the research objectives and design adhered to the university's ethical standards.

3.10.2 Informed Consent and Voluntary Participation

According to Arifin (2018) and Bandhari (2021), participants must be able to participate in a research study, they must be aware of the research, they must understand the information and relevant details pertaining to the study, and they must have the freedom to accept or reject the offer of participation. For the purpose of this study, participants were informed about the objectives of the study and the relevant information that was required for the purspose of the study. They were also advised about their right to either accept or reject to participate in the study or to withdraw from participating at any stage of the research. On that basis, a verbal consent was obtained from each participant prior to engaging in the process of data collection.

3.10.3 Anonymity and Confidentiality

Anonymity suggests that the researcher should not identify the participants or connect their individual data to them (Bandhari, 2021). Anonymity and confidentiality was maintained by withholding the identities of the participants during data collection, analysis, and reporting of the study results. During the interview sessions, privacy and confidentiality of the environment was carefully considered, and participants were given the liberty to indicate their preferred places for the interview.

3.10.4 Data Analysis and Dissemination of the Findings

Research findings must be communicated honestly, credibly, and reliably (Bandhari, 2021). To maintain the credibility of the research results, data analysis was conducted independently. The research results reflect the work pertinent to this study, and plagiarism was eliminated by referencing the work of others accordingly and by completion of a self-declaration attesting to the originality of the study.

3.10.5 Data Management

During the data collection process, participants' interviews were recorded and transcribed on a password-protected laptop and on the Microsoft Teams program. The participants' recordings and transcripts were strictly safeguarded, and they remain confidential with limited accessibility.

3.10 Trustworthyness

Four standards are used to determine whether the findings of qualitative research are generally trustworthy: a) credibility, the researcher guarantees and provides the reader with proof that the findings fairly depict the subject matter of the study; b) dependability, the researcher explains the study process in enough detail to allow the work to be repeated; c)Transferability: the researcher gives readers comprehensive contextual information so they can decide whether the results are applicable to them or other situations; and d) In order to establish confirmability, the researcher makes sure that the information received from the participants is the basis for the results, and not the researcher's interpretations or prejudice (Johnson, et al., 2020). The following process was followed to maintain validity of this study:

Credibility

Convenience sampling was used in this study, and the study represents views of participants from certain parts of the Lowveld region. Similar experiments using the same methodology in different circumstances could be valuable, to determine the extent to which the study’s findings may be true in other settings.

Dependability

This research report contains detailed information about the paradigm, method, and research design implored to carry-out the study, and the process followed of collecting and analysing the data. The audit findings are clearly presented with

recommendations for more research based on the findings of this study. This was done to demonstrate that dependable research procedures have been used.

Transferability

Whilst convenience sampling might be viewed as the least vigorous method of sampling (Johnson et al., 2020), it was the most appropriate method to suit the purpose and context of this study. The study reflects the views and perspectives of the participants drawn from their lived experiences. Therefore, the results of the study must be understood within the context from which they were derived. Any possible biases or subjectivity was eliminated by solely relying on the participants' responses and transcripts to draw outcomes, conclusions and inferences.

Confirmability

To ensure confirmability of the study, a standard research guide was used during the interviews. Each interview was performed by the same person to ensure consistency and uniformity of the process and approach. Trustworthiness was established by the application of the thematic data analysis technique which is supported by original recordings and transcription of the interviews.

4. PRESENTATION OF FINDINGS

This chapter outlines the results of the research based on the applied research instrument, as outlined in Chapter 3. The findings are demonstrated by discussions of the themes that were identified for each research question, supported by the participants' responses. The focus of this chapter is to present the themes that have been identified from the collected data.

4.1 Context about the participants

Eleven participants participated in this study. Their views, perspectives and experience form the basis of the themes that have been identified. The participants included eight formal poultry farmers who operate their businesses as registered companies, and three informal poultry farmers who operate their poultry businesses domestically, without formal company registration. Some of the businesses have ceased to operate whilst the other participants are currently trading. The table below outlines attributes of the research participants.

Table 3: Attributes of the research participants

Description	Area	Type	Business Status
Participant 1	White River	Informal Poultry Farmer	Inoperative
Participant 2	Mkhuhlu Trust	Formal Poultry Farmer	Inoperative
Participant 3	Barberton Road	Formal Poultry Farmer	Operating
Participant 4	Barberton Road	Formal Poultry Farmer	Operating
Participant 5	Msogwaba	Formal Poultry Farmer	Inoperative

Description	Area	Type	Business Status
Participant 6	White River	Informal Poultry Farmer	Inoperative
Participant 7	Nelspruit	Formal Poultry Farmer	Operating
Participant 8	Kaapsehoop	Formal Poultry Farmer	Operating
Participant 9	Plaston	Formal Poultry Farmer	Operating
Participant 10	Mkhuhlu Trust	Informal Poultry Farmer	Inoperative
Participant 11	Emoyeni	Formal Poultry Farmer	Operating

4.1.1 Data Analysis Process

From the recorded transcripts of each interview held with the participants, the responses were reviewed in line with the research questions as informed by the research instrument. Keywords and phrases were manually identified from the responses provided to each question. The transcripts were also uploaded onto the Nvivo software application, to facilitate the data analysis process. All identified keywords and phrases were categorised into 262 codes, in line with the concepts and theories identified from the literature review and the study's theoretical framework, as outlined in Table 6. These codes were further reviewed for common and connected conceptual meanings, which led to the identification of 12 sub-themes as indicated in Table 6. From the sub-themes, Upon completion of the data analysis procedure, certain themes surfaced which were subsequently linked to the study inquiry. These themes and the findings are explained in the following sections.

Table 4: Code Reference of all themes and sub-themes

Themes / Sub-themes	Files	References
Market Dynamics	**11**	**65**
Affordability	4	5
Competition	6	10
Customer preference	11	50
Networks and Collaboration	**11**	**60**
Best practices and technology	8	19
Access to formal markets	9	15
Cooperative pricing	10	26
Skills and Training	**9**	**40**
Business Administration	4	8
Biosecurity	4	5
Technical skills	8	27
Government Policies and Support	**11**	**69**
Government polices	5	11
Access to funding	9	30
Government services and support programmes	10	28
Location and accessibility	**11**	**28**
Total		**262**

4.2 Research Question 1: Which elements of the entrepreneurship value-chain are lacking in the local communities of the Lowveld region of Mpumalanga?

A relationship between the primary research question and the developing themes is depicted in the table below.

Table 5: Relationship between Research Question 1 and emerging themes

Research Questions	Themes
What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga?	Market Dynamics
	Networks and Collaboration
	Skills and Training

During semi-structured interviews, the participants expressed their opinions and perspectives based on the challenges and difficulties that they have encountered or continue to encounter in running poultry farming businesses in the local areas of the Lowveld region. Through these perspectives, the following research themes and sub-themes were identified as common themes to the research question.

4.2.1 Theme 1: Market Dynamics

After conducting the data analysis, the following sub-themes emerged from various codes which attributed to the theme of Market Dynamics.



Figure 3: Theme 1: Market Dynamics

The following sub-themes provide context on the market dynamics that were demonstrated to be important by the participants.

4.2.1.1 Customer Preferences

Customer preferences was highlighted as the most referenced sub-theme that emerged from the codes, which contributed to the theme of identified during data analysis of market dynamics in the local communities of the Lowveld region. Several participants stressed the importance of providing quality products to customers. Customer satisfaction is seen as critical for the success of the business, and factors such as reliability in delivery of the products at the right time and quality, freshness of the products, and adherence to promised quality standards were highlighted to play significant role.

"Customers will look at price quality and also reliability."(Participant 1)

“Nowadays, people no longer prefer to buy braai-packed meat from the shops that has been frozen for too long. Now people prefer fresh meat….” (Participant 3)

“In this business, we have learned that people love fresh chickens. Because this business is an abattoir, People want to know when the chickens were slaughtered.” (Participant 4)

4.2.1.2 Competition

Competition was highlighted as the second most contributor to market dynamics, based on the number of codes that contributed to this sub-theme. All participants acknowledged the competitive nature of the poultry business and the significant impact of differentiation through quality, pricing, and strategic partnerships. Participants highlighted that poultry business is very competitive because of the low barriers of entry for new farmers, and price and quality being the key differentiating factors.

If your price is cheaper, they are prepared to leave their current service provider, but you must be reliable. (Participant 1)

There is a lot of competition, other business can end up stealing our customers. *(Participant 3)*

"In this business, there is high competition. We are not the only ones doing this business in this area. But we do get customers by making sure that we produce good quality products." (Participant 4)

"The competition is based on price. It is not easy to get new customers." (Participant 7)

4.2.1.3 Affordability

Affordability also emerged as a sub-theme to Market Dynamics. Participants indicated the importance of understanding the buying power of the target market, particularly in low-income communities where customers often buy food supplies in large numbers at month-end, or during weddings and funerals.

"Chicken meat is the cheapest available source of protein. Getting customers is quite easy, but it is just determined by affordability". (Participant 5)

"What I see as a limitation is that small-scale farmers buy chickens without customers. They will stock up without thinking about who they will sell their chickens to. They need to understand their customers. Timing is very important; you must know when your customers will be able to buy." (Participant 9)

"If someone buys the chickens, they look at the quality, size and prize of the chickens." (Participant 11)

4.2.1.4 Coding references to the theme: Market Dynamics

The following table provides an overview of the coding references to the theme on Market Dynamics:

Table 6: Code Reference of Theme 1: Market Dynamics

Sub-themes	Files	Coding References
Customer preference	11	50

Sub-themes	Files	Coding References
Competition	6	10
Affordability	4	5

4.2.2 Theme 2: Networks and collaboration

From the data analysis, the following sub-themes emerged from various codes which attributed to the theme of Networks and collaboration.

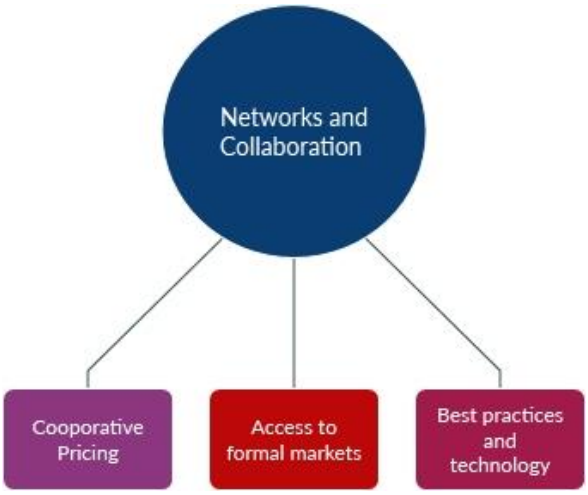


Figure 4: Theme 2: Networks and Collaboration

4.2.2.1 Cooperative pricing

Cooperative pricing was noted as a sub-theme with the highest code referencing contributing to the Networks and Collaboration theme.

Participants discussed the challenges of accessing resources like feeds at affordable prices. Collaboration was highlighted as a key means to access resources and market information more efficiently. Collaboration was mentioned as the enabler to counter economic factors such as the cost of production,

competition, and the key to establishing cost-effective strategies such as bulk buying and price-setting.

"Through stokvels, and bulk buying, small farmers can benefit from coming together." (Participant 5)

If there are relationship with other local farmers, it can assist in the price competition. (Participant 7)

"If they sell chickens and they buy from the big commercial farmers in numbers, they can be charged lesser." (Participant 9)

"They can communicate and regulate the price...If they work together, they can agree on price." (Participant 10)

4.2.2.2 Best practices and technologies

Best practices and technology were noted as the sub-theme with the second highest code referencing that contributed to the Networks and Collaboration theme.

Participants highlighted the importance of networking as a strategic platform to learn about best practices, technologies and industry advancement amongst poultry farmers, particularly other commercial farmers.

"Networks with other big commercial farmers can be good because our company can learn from them." (Participant 3)

"Relationships with other local poultry farmers is important because we can work with other". (Participant 4)

"So, we can leverage from each other's skills and expertise". (Participant 8)

4.2.2.3 Access to formal markets

Access to formal markets also emerged as a sub-theme with the 3rd highest code referencing to the theme Networks and Collaboration.

Participants discussed the challenges related to entering formal markets. Whilst informal markets are preferred initially due to fewer regulations and low entry barriers, the participants indicated their aspirations for networking to access larger markets, and how this can be achieved by collaborating with other poultry farmers, particularly other commercial farmers.

"… and then also they would link you to the market to the formal markets." (Participant 1)

"…their clientele is not the same clientele as ours because they are more into supplying big retail spaces with a national footprint, and access to this market is crucial for growing the industry." (Participant 8)

"The company can benefit as we can buy from the big firms in large quantities. We can supply bigger markets. (Participant 11)"

4.2.2.4 Coding references to the theme: Networks and Collaboration

The following table provides an overview of the coding references to the theme on Networks and Collaboration:

Table 7: Code reference of Theme 2: Networks and Collaboration

Sub-themes	Files	Coding References
Cooperative pricing	10	26
Best practices and technology	8	19
Access to formal markets	9	15

Figure 5: Coding Referencing to the theme: Networks and Collaboration

4.2.3 Theme 3: Skills and Training

Participants highlighted the significance of technical, administrative, and financial skills for running a successful poultry business. Training was regarded as crucial for both technical and administrative aspects. The following themes were developed from the data analysis, which contributed to the theme on Skills and Training:

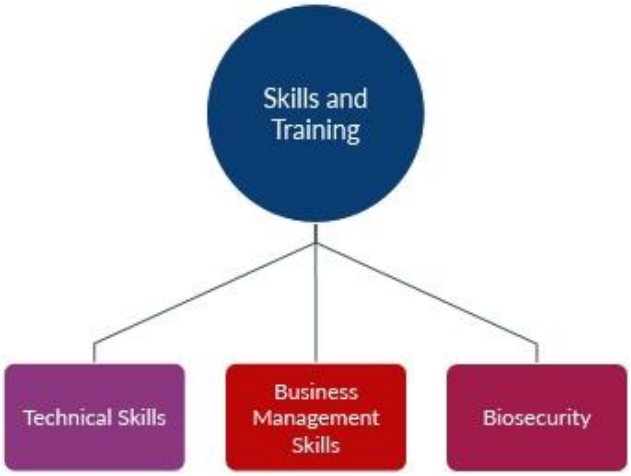


Figure 5: Theme" Skills and Training

4.2.3.1 Technical skills

Technical skills emerged as a sub-theme with the highest code referencing contributing to the Skills and Training theme.

Technical knowledge was highlighted as a vital aspect of running a poultry business by all the participants. Participants expressed the critical need for staff to have technical knowledge about taking care of chicken and poultry products, such as knowing when and how to feed the chickens, the type of feeds needed and their quality, managing temperature effects, amongst other things. The importance of continuous technical training of staff was amplified.

“When we started the business, we had a lot of fatalities. So, our chickens would die because we didn't really know what we were doing.” (Participant 1)

“When we appoint staff, when they arrive on our farm, one must undergo certain training.” (Participant 2)

“Knowledge and skills of the staff is very important because we work with very sensitive animals”. (Participant 3)

“Even if they don’t have experience, they can learn but they must be trained.” (Participant 8)

“It’s not good to hire someone with no skills. If they have no skills, you can have high mortality rate.” (Participant 11)

4.2.3.2 Business Management

Business management and administration skills was noted as the sub-theme with the second highest code referencing, contributing to the Skills and Training theme.

Participants emphasised the importance of technical support and training, not only in poultry farming techniques but also in business management skills, including the ability to develop business plans and access markets, financial management and customer care.

"Besides the technical training...you also need the business training...financial skills are also important." (Participant 1)

“In the office and administrative functions, skills are important because you need to know how to deal with customers. (Participant 4)

“You must know how to handle orders and have basic finance skills because if you make mistakes with incorrect capturing of orders, this can cost the company if customers are incorrectly billed.” (Participant 4)

*“To learn more about money management, saving money, free access to feeds**.”***

(Participant 10)

4.2.3.3 Biosecurity

Biosecurity emerged as the as a sub-theme with the third highest code referencing that contributed to the theme on Skills and Training theme.

Knowledge of regulations and disease management practices is considered crucial for the poultry business. Participants emphasised the need for continuous learning to prevent disease outbreaks.

“When we appoint staff, when they arrive on our farm, one must undergo certain training. So, we'll train them in terms of teaching them about biosecurity and what needs to be done within the farm, so we can mitigate against high mortality of stock.” (Participant 2)

Chickens are very sensitive, and they are easily susceptible to diseases and sickness. If one chicken can be exposed to sickness, all of them can easily fall sick and die. (Participant 3)

“They must understand how to operate the machines, how they must take care of the chickens, applying the correct hygiene because chickens are sensitive (Participant 4)

When you hire your staff, you must train them about the correct uniform, how to use disinfectants, hygiene, chicken feeds and water requirements amongst other things. (Participant 5)

"Knowledge is important. There are some diseases you can encounter. If you have prior knowledge, you will know how to prevent it." (Participant 9)

It is good to know about hygiene, when it’s hot you must add more water, how to use foot bath and keeping the place clean, as part of biosecurity. (Participant 10)

4.2.3.4 Code references to the theme: Skills and Training

The following table provides an overview of the coding references to the theme on Skills and Training:

Table 8: Code reference for Theme 3: Skills and Training

Sub-themes	Files	Coding References
Technical skills	8	27
Business Administration	4	8
Biosecurity	4	5

4.2.4 Conclusion on the research question: Which elements of the entrepreneurship value-chain are lacking in the local communities of the Lowveld region of Mpumalanga?

Based on the findings noted from the thematic analysis, the themes Market Dynamics, Networks and Collaboration and Skills and Training emerged as the themes that contribute to the research question on the entrepreneurial value chain that are lacking in the local communities of the Lowveld region of Mpumalanga. The following table provides an overview of the themes that contribute to this research question:

Table 9: Code reference of themes contributing to Research Question 1

Themes	Files	Coding References
Market Dynamics	11	65
Networks and Collaboration	11	60
Skills and Training	9	40

Figure 6: Code references to themes contributing to Research Question 1

4.3 Research question 2: What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga?

The data analysis procedure yielded several themes related to the research topic about the factors influencing the ease of conducting business in local communities in the Mpumalanga Lowveld region. A relationship between the developing themes and this research topic is displayed in the table below.

Table 10: Relationship between Research Question 2 and emerging themes

Research Questions	Themes
What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga	Access to funding
	Government services and support programmes
	Government policies

4.3.1 Theme 4: Government policies and support

Participants acknowledge government support, particularly through policies aimed at promoting Small and Medium Enterprises (SMEs). However, challenges such as access to funds, barriers to entry, and competition with cheap imports were noted as some of the impeding factors. The following sub-themes emerged from the reference coding which contributed to the theme, Government policies and support:

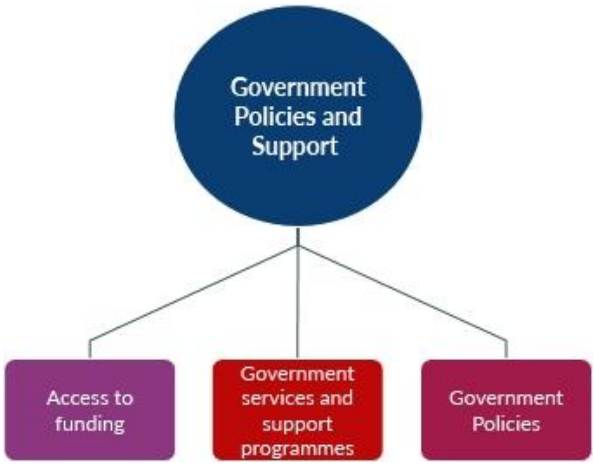


Figure 6: Theme 4: Government Policies and Support

4.3.1.1 Access to funding

Access to funding emerged as a sub-theme with the highest code referencing contributing to the theme, Government Policies and Support.

Access to capital is a significant challenge for SMEs, affecting their ability to expand and invest in necessary infrastructure. Issues such as high application requirements for funding, lack of collateral, and limited availability of grants for small and medium enterprises were highlighted. The challenges related to funding are highlighted in the context of emergency preparedness, where having access to capital becomes critical for dealing with unexpected events like diseases and floods.

"It's hard because if you go to the government agencies but they don't assist." (Participant 2)

"It is difficult to get funding. Government and financial institutions have too many requirements. They want too many documents, collateral, specific location that most informal traders or small farmers do not have." (Participant 5)

"It's not easy to access financial capital and funding. The requirements are too high." (Participant 6)

“If you concentrate on getting government funding, you're going to fall out of love for the business.” (Participant 8)

“For small scale farmers, not getting funding is a serious challenge. You might have some funds, but when emergencies happen such as diseases, floods, etc., access to capital can help. You need to have money for safety stock.” (Participant 9)

4.3.1.2 Government services and support programmes

Business management and administration skills was noted as the sub-theme with the second highest code referencing, contributing to the Government Policies and Support theme.

Participants believe that government support structures are not accessible to small and informal businesses, and government programmes are not properly implemented due to incompetence and bureaucratic hurdles affecting the effectiveness of support programmes.

Participants emphasised the need for access to essential resources, including uninterrupted electricity. They also stressed the importance of government assistance in providing resources such as equipment, feeds and vaccines.

Government initiatives that provide market access and export opportunities are recognized as beneficial for SMEs in poultry farming. The importance of support in terms of training, compliance, and export market identification was highlighted.

If the government can assist us with feeds because now the price for feeds is way expensive. Participant 2)

“But if we could get additional support that would help us to grow more chicks, such as additional chicken houses. (Participant 3)

They can also benefit from getting other markets, that can afford to buy their products cash i.e. such as formal businesses that can stock from them for purposes of BEE scorecards. (Participant 5)

"Even though they have programmes, they do not reach informal traders. They always give requirements that informal traders do not have."(Participant 6)

"Access to uninterrupted electricity. Access to a target market." (Participant 8)

4.3.1.3 Government Policies

Government Policies emerged as the as a sub-theme with the third highest code referencing that contributed to the theme, Government policies and support.

Whilst certain participants acknowledged the positive impact of government policies in supporting SMMEs, many other participant's do not perceive government policies to be helpful towards SMMEs.

Some participants expressed the view that government policies are not significantly helpful for private companies, particularly those not under government farms.

"Government is pushing big businesses to actually use SMME which will assist them in bettering their scorecard."(Participant 1)

"…we in South Africa tend to import large amount birds or chickens from outside." (Participant 2)

Government is doing its best, and those who use the help from government well, it is helpful to them. *(Participant 9)*

"Government policies are not very helpful towards private companies. Those under government farms get more help."(Participant 11)

4.3.1.4 Coding references to the theme: Government policies and support

The following table provides an overview of the coding referenceson Government policies and support:

Table 11: Code reference of Theme 4: Government Policies and Support

Sub-themes	Files	Coding References
Access to funding	9	30
Government services and support programmes	10	28
Government policies	5	11

4.3.2 Conclusion on the research question: What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga?

Based on the findings noted from the thematic analysis, the theme Government Policies and Support emerged as the theme with the connection to the research question on the factors affecting the ease of doing businesses within local communities in the Lowveld region of Mpumalanga.

The following table provides an overview of the code referencing of the theme, Government Policies and Support that contributed to this research question:

Table 12: Code reference to Research Question 2

Themes	Files	Coding References
Government Policies and Support	11	69

4.3.3 Research question 3: How does the location of the poultry farmers affect their access to supply chain and distribution channels?

Based on the data analysis process that was performed, the theme, Location and Accessibility, emerged as a connection to the research question about the how location of the poultry farmers affect their access to supply chain and distribution channels.

4.3.3.1 Theme 5: Location and Accessibility

The accessibility of the business area was emphasised as one of the key factors that contribute possibly towards marketing the business. It was highlighted as a factor that impacts on the overall supply chain and distribution value chain by enabling ease or dis-ease of accessing customers, and delivery of production supplies. Being strategically located are mentioned as factors contributing to business marketability and access to distribution channels, impacting on the supply of the poultry products, to meet the demand.

"Our location helps us because it's just easy to access our farm." (Participant 2)

“We are well-located to suit operations of our business.” (Participant 3)

“If you are not situated in popular or easily accessible locations, your supplies are likely to be delivered late to you …” (Participant 8)

*“Transport is a serious problem for small farmers. If you don’t have their own transport, they must hire transportation as most of them stay far from town**.”** Participant 9)*

4.3.3.2 Conclusion on the research question: How does the location of the poultry farmers affect their access to supply chain and distribution channels?

The following table provides an overview of the code referencing of the theme, Government Policies and Support that contributed to this research question:

Table 13: Code reference to themes contributing to Research Question 3

Themes	Files	Coding References
Location and Accessibility	11	28

4.4 Summary of the findings

This chapter presented findings, which contributed to the themes that emerged from this study. The section also outlined the connection of the various themes to the research questions. Themes that emerged from the data analysis were outlined and explained under each research question to which a link was established. The main themes that emerged from the research study that were confirmed to be linked to the first research question on the elements of the entrepreneurship value-chain that are lacking in the local communities of the Lowveld region of Mpumalanga include 1) Market Dynamics, 2) Networks and Collaboration and c) Skills and Training. The main theme that emerged from the research study that was confirmed to have a link to the second research question on the factors that affect the ease of doing businesses within local communities in the Lowveld region of Mpumalanga is Government Policies and Support. The third research question on how location of the poultry farmers affects their access to supply chain and distribution channels is Location and Accessibility.

Three research questions with potential responses are provided based on these concepts.

The results are examined and explained in Chapter 5 within the framework of the literature review. The results and discussion follow the same sequence as in Chapter 4.

5 DISCUSSION OF RESEARCH FINDINGS

5.1 Introduction

Aryal (2021); Kumar (2020), Leendertse et al., (2021) and Stephans et al, 2022, acknowledged that the entrepreneurial environment requires the contribution of many various actors and factors for it to be conducive. In their studies on entrepreneurship, they characterised entrepreneurship ecosystems as a continuous mechanism that empowers entrepreneurs to obtain resources, information, and assistance, enhancing their competitive edge and capacity for expansion. The purpose of this study was to investigate the characteristics that contribute to the success of small- and medium-sized poultry producers in the neighbouring areas of the Lowveld region of Mpumalanga, South Africa. To evaluate these developmental obstacles faced by small and medium-sized poultry farmers, we investigated the following research questions that led us to the connection with the research themes outlined in Chapter 4: a) What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga? b) Which elements of the entrepreneurship value-chain are lacking in the local communities of the Lowveld region of Mpumalanga?, and c) How does the location of the poultry farmers affect their access to supply chain and distribution channels?

In this chapter, we discuss the core findings of this study to clarify the wider significance of our findings for local poultry farmers in the Mpumalanga Lowveld region. The following sections evaluated the research themes and considereded the implications of the findings in real-world settings by comparing the implications of the findings to reviewed literature.

5.2 Research Question 1: Which elements of the entrepreneurship value-chain are lacking in the local communities of the Lowveld region of Mpumalanga?

5.2.1 Theme 1: Market Dynamics

Recognising and addressing market demand and opportunities emerge as key motivators of entrepreneurship (Can't and Rabie, 2018). Entrepreneurs carefully analyse market trends, consumer requirements, preferences, and existing gaps in products or services to formulate successful and sustainable business initiatives (Chatterjee et al., 2023). Cultural and social influences also play a key role in influencing consumer behaviour and customer preferences (Kumar, 2020; Wurth et al., 2021).

5.2.1.1 Customer Preferences

The research findings indicated that product quality, price differentiation and meeting customer expectations are vital for the success of poultry businesses, and reliability in product delivery, adherence to quality standards, and the freshness of products was amongst the key factors that influence the demand for poultry products. This was supported by literature which indicated that food consumption and consumer expectations have evolved significantly over time with increased health consciousness, and concerns over safety and quality of products, ethical practices, environmental friendliness and animal welfare (Castro, et al., 2022; Mendes et al., 2024).

5.2.1.2 Competition

The findings indicated that poultry farming in the Mpumalanga region was very competitive, and this was evidenced by the low barriers to entry for new farmers, making price and quality key factors in distinguishing one's business in the competitive market. The findings on the competitive nature of the poultry industry confirm the propositions from the literature review which suggested that the success and growth prospects of enterprises in local communities are highly attributed to market dynamics and social conditions that influence customers' buying power and spending patterns as well as market competition (Cant & Rabie, 2018; Wurth et al. 2021). This was supported byt literature that market conditions such as market size, production cost, labour force quality determine the market's

profitability, making it imperative for each company to independently assesses if the industry is profitable enough over time before entering the market (Chen et al., 2023).

5.2.1.3 Affordability

In this study, the findings revealed that it is important to understand the buying power of the target market especially in the local low-income communities of the Lowveld region where buying patterns are influenced by affordability and significant events such as weddings, funerals and salary dates in which customers often make bulk- purchases. communities in Mpumalanga, like many other communities in South Africa are characterised by great disparities in income, social living standards, and are dominated by poverty and unemployment (Simpson et al., 2019). Unlike customers in higher LSM whose spending patterns are influenced by brand loyalty and prestige as opposed to prize (Chatterjee et al., 2023), consumer decisions of customers in low-income segments are influenced by need and affordability (Chatterjee al., 2023; Nkukwana, 2018). As a result of a shorter lifecycle and higher feed efficiency when compared to other livestock species, poultry farming continues to play an important role in providing safe, nutrient-dense, and reasonably priced animal protein to the expanding world population (Castro, et al., 2022; Mendes et al., 2024). It is important for both employment generation and food security (Mendes et al., 2024).

5.2.2 Theme 2: Networks and Collaboration

According to the findings of this study, networks played a propelling role in entrepreneurial efforts, and provided value as social capital (Wurth et al., 2021). Mentors, peers, and industry contacts are examples of supportive networks that provide important resources, counsel, and chances for collaboration, which extend to enhance a company’s reputation (Castro, et al., 2022; Mendes et al., 2024).

5.2.2.1 Cooperative pricing

Through collaboration and networks, the findings of this study highlighted that poultry farmers were able to collectively counteract economic challenges such as high production costs and competitiveness through collective price-setting, bulk buying, and trading in stock cost-effectively. The findings also indicated that hese collaborations did not exist widely among poultry farmers in the Lowveld region due to high competition. In the same vein, the presence of competitors provided an opportunity for local farmers to work together, share expertise, stock trade and to influence product pricing through cooperative pricing.

According to Grashuis & Hakelius (2023), consumer cooperatives assist to prevent supermarkets from using monopolistic pricing practices by establishing a yardstick effect. This notion supported the findings which indicateded that local poultry farmers indeed could benefit from their collective buying power to counter high poultry production costs.

5.2.2.2 Access to formal markets

The findings of the study revealed that small and medium poultry farmers in the Lowveld region of Mpumalanga experienced difficulties in getting inexpensive access to resources such as feeds, and they were unable to access formal markets due to high production input costs and lack of available market information. This was also aligned with the notions from the literature review that small-scale farmers face challenges in boosting profitability of their enterprises due to lack of access to market information to enable them access to formal and broader markets (Cant & Rabie 2018).

According to recent literature, collaboration amongst big businesses and start-ups help to sustain competitiveness and improve resilience (Castro, et al., 2022; Mendes et al., 2024). The findings were supported by literature from Corvello et al. (2023) who indicated that getting funding or gaining clients was one of the frequently highlighted motivations that big businesses provide to startups for

working together (Corvello et al., 2023; Buyukbalci et al., 2024; Mendes et al., 2024)

5.2.2.3 Best practices and technology

According to the findings from this study, networking was highlighted important as a tactical avenue for acquiring knowledge about industry advancements, technology, and best practices among poultry farmers, particularly with other large commercial farmers. This was supported by literature that affirmed that cooperation between startups and established businesses can boost performance for all parties and expedite innovation (Corvello et al., 2023). Big businesses may give startups the tools and resources they need, to lessen the market challenges that they encounter, such as the deficiency of material, financial, and intangible resources (; Corvello et al., 2023; Mendes et al., 2024).

Although startups and big businesses are encouraged to collaborate, there are certain barriers that prevent both parties from taking advantage of this opportunity, such as mutual trust (Corvello et al., 2023). The findings attested that small and medium poultry farmers in the Lowveld believed that big commercial farmers only pursued collaborative efforts that are mostly beneficial to them. The loss of significant potential for collaboration can result to the collapse of start-ups with great potential, from this mutual mistrust (Corvello et al., 2023).

5.2.3 Theme 3: Skills and Training

The findings from this study emphasised the role of skills and training as important for fostering entrepreneurship (Kumar, 2020). Educational programs and initiatives that provide training, mentorship, and knowledge transfer contribute to creating a pool of skilled and innovative entrepreneurs, and ultimately to the success of enterprises(Castro et al., 2022; Kumar, 2020; Mendes et al., 2024).

5.2.3.1 Technical skills

The findings have also highlighted the importance of technical expertise in operating a profitable chicken business and further emphasised the need for training on critical aspects such as temperature control, feed management, chicken care, and ongoing technical training for employees as a vital measure to reduce the mortality rate and to produce good quality chickens.

The poultry business has faced several challenges owing to advancements in the poultry industry, that are evidenced by changes in genetics, sustainability, labour availability, market and supply chain, availability of ingredients, and process automation (Castro, et al., 2022; Mendes et al., 2024). Literature supported that technical skills are a pre-requisite for poultry production, and to maintain good animal welfare, it is imperative to invest in staff who are both well-trained and fairly compensated (Castro, et al., 2022; Mendes et al., 2024).

The literature review on poultry production systems highlighted the importance of knowing the correct feed rations and water required by chickens at different growth stages (Aboah & Enahoro, 2022; Chibanda et al., 2022; Zamani et al., 2022). Additionally, providing the correct vaccination at the correct stages is equally important in the production system of poultry products. This was fully aligned to the study which highlighted the importance of technical skills and knowledge in the daily running of poultry production systems.

5.2.3.2 Business Management

The findings emphasised the value of business management skills, which was often lacking among informal and small-scale poultry farmers as most were illiterate and operated in informal markets. Financial management, customer relations and business administration were amongst the skills that were highlighted in the study that contributed towards the success of enterprises but were often lacking among small and medium scale poultry farmers.

This was supported by literature which highlighted that most lucrative outlets, such direct sales to supermarkets and exports, are closed off to small-scale farmers because they lack the expertise in business management, such as

drafting business plans, negotiating contracts, accessing market information and marketing (Cant & Rabie 2018; Holcombe, 2021; Kumar, 2020; Ndlovu & Masuku, 2021; and Zamani et al. 2022).

5.2.3.3 Biosecurity

The findings of the study revealed the importance of knowledge about disease control procedures, and ongoing training on biosecurity to prevent disease breakouts, which can be detrimental to the going concern of the business. Therefore, The findings stressed the importance of personnel understanding good hygiene habits, disease prevention, and how to operate machinery correctly to ensure good health of poultry stock and products.

Management and prevention of disease outbreaks in poultry production systems was also confirmed by the literature as vital, as it directly affects output and the farmer's profitability (Aboah & Enahoro, 2022; Castro, et al., 2022; Chibanda et al., 2022; Mendes et al., 2024; Zamani et al., 2022). Having a safe food supply, food safety remains a top concern for poultry processors (Aboah & Enahoro, 2022; Castro et al., 2022; Mendes et al., 2024). The breeding, nutrition, immunization, biosecurity advice, disease prevention and control, and home environmental management of broiler production have all seen notable breakthroughs, and these changes highlight a dynamic aspect of the chicken industry that demands constant response to emerging threats (Castro et al., 2022; Mendes et al., 2024).

The productivity, hatchability and fertility of the breeders, product quality, and characteristics pertaining to animal welfare and environmental effect are all important components of an efficient poultry production system, and the same is true for layers; robustness, disease resistance, and efficiency qualities have all become important considerations for programs that also involve behaviour (Castro, et al., 2022; Mendes et al., 2024).

5.2.4 Conclusion on the research question 1: Which elements of the entrepreneurship value-chain are lacking in the local communities of the Lowveld region of Mpumalanga?

Market dynamics, as highlighted by the findings of this study confirmed the propositions from the literature review which cited that the success and growth prospects of enterprises in local communities are highly attributed to market dynamics and social conditions that influence customers' buying power and spending patterns as well as market competition (Cant & Rabie, 2018; Wurth et al., 2021).

Product quality and price played a vital role in spending choices of the consumers, and in influencing the competition strategy of other poultry farmers, and it was noted as equally critical to take customer welfare into account on price differentiation or price strategy. (Chen et al., 2022). Low entry barriers into poultry farming are stabilised by the high demand for the affordable form of protein that is sourced from poultry products, within the low-income communities (Chen et al., 2022; Nkukwana, 2018; Nkwapi, 2022; Ogajiuba et al., 2022)

The findings revealed a that great opportunity for collective networks amongst poultry farmers that can contribute to the success and sustainability of farming enterprises in local communities, but these do not exist. These could assist to enhance a company's reputation through learning sustainable practices from other established poultry farmers (Castro, et al., 2022; Mendes et al., 2024)

The study also confirmed that the household income of small-scale farmers in Mpumalanga was derived from low-risk and low-return markets, and access to formal markets was important for their sustainability. However the findngs of this study revealed that the small and medium pountlry farmers were concernedabout large corporations' opportunistic behaviour since they make use of their technology or knowledge without having to care too much about the small farmers'growth prospects.

Poultry farmers require the technical and business management skills to operate their production systems, and to ensure that they follow correct procedures, adequate disease management practices, and effective business administration (Ndlovu & Masuku, 2021, Nkwapi (2022) and Ogajiuba et al. (2022). Additionally, business administrative skills were important to the success of farming enterprises (Cant & Rabie,2018; Ndlovu & Masuku, 2021; Nkukwana, 2018; Nkwapi, 2022; Ogajiuba et al., 2022), and the study revealed that business management skills are often lacking in small and medium poultry farming enterprises.

5.3 Research Question 2: What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga?

5.3.1 Theme 4: Government Policies and Support

According to Aryal (2021) and (Alodesselam et al. (2023), government laws and policies have a significant impact on how the entrepreneurial environment is shaped. Supportive laws serve as an enabler, creating an atmosphere that is favourable to the establishment and expansion of businesses.

5.3.1.1 Access to funding

The findings of this study emphasized the lack of funding as a major obstacle for SMEs, and participants have stressed the obstacles of strict application requirements from funding institutions, collateral requirements that small-scale poultry farmers do not have, grant unavailability and red tapes in accessing government funding. Findings highlighted the tremendous impact of lacking financial resources during crises such as illnesses, floods, or when machinery break down. These findings weresupported by literature that highlighted the lack of funding and in-access to financial capital amongst factors that counteract growth prospects for small and medium enterprises (Cant & Rabie, 2018; Nkukwana, 2018; Nkwapi, 2022 and Ogajiuba et al., 2022).

5.3.1.2 Government services and support programmes

The findings from this study indicated the small and medium poultry farmers' dissatisfaction over government support programmes and their inaccessibility, particularly to small and informal poultry farmers. Bureaucratic obstacles and incompetence of government officials were among the reasons revealed by the findings of this study, which contribute to the difficulties encountered in the successful execution of government initiatives.

The findings of the study further emphasized the great need by small and medium- sized poultry businesses for access to electricity, machinery, feeds, and vaccinations. The findings further emphasised the need for government programs that offer prospects to formal and export markets, assistance with compliance with food production standards as well as training.

These findings were fully aligned to the literature review byChibanda et al. (2022), Omondi (2018), Ndlovu & Masuku(2021) and Nkukwana (2018) that highlighted the importance for government providing farmers with access to vaccines, feeds, clean water and energy supply, as well access to suitable production systems, market information and skills development.

5.3.1.3 Government Policies

The findings from this study revealed varying views about how government policies affect small and medium-sized businesses (SMEs). While some participants recognize the beneficial effects of government policies, other partidipantsexpressed that government policies are less beneficial, especially for private businesses that are not operating in government farms. The findings of the study placed emphasis on how policies enable importing of low-quality poultry products as one of the key factors that suppresses growth of local poultry enterprises.

The findings revealed that government policies set to enable small, micro and macro enterprises are not enabling ease of doing business in local communities of the Lowveld.

The findings of this study fully aligned to literature as noted by Nkukwana (2018) and Zamani et al. (2022) that the poultry business faces fierce competition from other nations import chicken at costs below the local cost of production, creating developmental hurdles for both commercial and small-scale local poultry producers, due to economic policies that are counter-productive towards the growth of domestic poultry enterprises. As one of the core tenets of sustainable development, startups rely on public policy for innovation and development (Alodesselam et al., 2023).

5.3.2 Conclusion on the research question 2: What affects the ease of doing business within local communities in the Lowveld region of Mpumalanga?

The study has provided differing perspectives on the impact of government policies on small and medium-sized businesses, but the most common view affirmed that government policies are not helpful towards fostering the development of small and medium enterprises. The study underscores the challenges in obtaining crucial funding for SMEs, emphasizing issues such as stringent application rules, collateral requirements, and a shortage of grants (Nkukwana, 2018; Zamani et al. (2022). Implementation problems and accessibility issues in government assistance programs due to bureaucratic obstacles and strict regulations hinder the participation of small and informal poultry enterprises (Alodesselam et al.,2023; Nkukwana, 2018; Zamani et al., 2022).

5.4 Research Question 3: How does the location of the poultry farmers affect their access to supply chain and distribution channels?

5.4.1 Theme 5: Location and Accessibility

Infrastructure is essential for fostering entrepreneurship because it allows for the effective distribution of goods and services through easy access to transportation networks (Aryal, 2021; Stephens et al., 2022).

From this study, the findings emphasised the strategic significance of having a prime location for their businesses, which indicated this as a competitive advantage when enterprises are located in visible and easily accessible areas, thus facilitating quick access for clients and prompt delivery of production supplies. The study also revealedhighlights the constraints posed by business location, which attribute to high transport costs, supplies being delivered late to business premises, and inability to deliver products to customers on time due to unavailability of reliable transport.

This was also supported by literature suggesting that small-scale farmers face considerable challenges due to geographic limitations pertaining to the proximity and ease of access to markets, hatcheries, processors, and feed suppliers (Chibanda et al., 2022; Ndlovu & Masuku, 2021; Nkukwana, 2018; Omondi, 2018).

5.5 Conclusion on the research question 3: How does the location of the poultry farmers affect their access to supply chain and distribution channels?

Infrastructure plays a critical role in fostering entrepreneurship (Aryal, 2021; Stephens et al., 2022, Ndlovu & Masuku, 2021). The findings of the study highlighted the strategic significance of business location as a crucial theme, with participants underscoring prime locations as a competitive advantage for efficient operations. However, challenges related to business location were also evident,

including high transport costs, delayed supplies, and difficulties in timely product delivery, especially for small farmers lacking own transport systems.

5.6 Chapter Conclusion

The investigation into the elements of the entrepreneurship value-chain lacking in the local communities of the Lowveld region of Mpumalanga revealed critical insights. Market dynamics, as illuminated by existing literature, emerged as a key determinant of enterprise success, with product quality, pricing strategies, and low entry barriers in poultry farming playing pivotal roles. The absence of collective networks among poultry farmers was identified as a missed opportunity for shared learning and sustainable practices. The study emphasized the significance of access to formal markets for the sustainability of small-scale farmers, despite concerns about potential opportunistic behaviour from large corporations. Furthermore, the research highlighted the crucial need for poultry farmers to possess both technical and business management skills for effective disease management, adherence to correct procedures, and successful business administration. Notably, the study underscored a deficiency in business management skills among small and medium poultry farming enterprises, emphasizing a crucial area for improvement in fostering the success and sustainability of these ventures in the local communities of Mpumalanga.

The investigation into the factors affecting the ease of doing business within local communities in the Lowveld region of Mpumalanga revealed diverse perspectives on the impact of government policies. The predominant sentiment suggests that government policies are perceived as not helpful for fostering the development of SMEs. The study emphasized the considerable challenges faced by SMEs in securing crucial funding, highlighting issues such as stringent application rules, collateral requirements, and a scarcity of grants. Additionally, implementation problems and accessibility issues in government assistance programs attributed to bureaucratic obstacles and strict regulations. These hindrances were found to

impede the participation of small and informal poultry enterprises in government-supported initiatives. The study underscored the complex landscape of government-business interactions within local communities and emphasized the need for addressing these challenges to facilitate a more conducive environment for SMEs in the Lowveld region of Mpumalanga.

The examination of how the location of poultry farmers affected their access to supply chain and distribution channels revealed the pivotal role of infrastructure in fostering entrepreneurship, consistent with existing literature. The findings of the study emphasized the strategic importance of business location, with small and medium poultry farmers highlighting prime locations as a competitive advantage for efficient operations. However, challenges associated with business location were also evident, including high transport costs, delayed supplies, and difficulties in timely product delivery, particularly for small farmers lacking their own transport systems. The dual nature of the impact of business location on operational efficiency emphasizing the need for a nuanced approach to address challenges and leverage advantages, ultimately contributing to the enhancement of supply chain and distribution channels for poultry farmers.

6 CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

Poultry farming holds significant importance in providing a crucial protein source for South African households, contributing to food security (Garrigus, 2022; Nkukwana, 2018; Statistics South Africa, 2022; Chibanda et al., 2022, Ndlovu & Masuku, 2021). Despite the high demand and relatively low entry barriers, small- and medium-sized poultry farming enterprises in the Lowveld district of Mpumalanga encounter challenges in sustaining and developing their businesses.

To explore the factors that hinder the growth and sustainability of these enterprises, the study sought to achieve the following research objectives: 1) To determine the elements of the entrepreneurship value-chain that are lacking in the local communities of the Lowveld region of Mpumalanga.
2) To investigate factors that disable the ease of doing businesses within local communities in the Lowveld region of Mpumalanga, and
3) To determine how the location of the poultry farmers affect their access to supply chain and distribution channels.

This chapter presents the conclusions drawn from the outcomes of the study in relation to the initial research questions and objectives. Recommendations and ideas for further research are included in this chapter.

6.2 Conclusion

6.2.1 Conclusion on elements of the entrepreneurship value-chain that are lacking in the local communities of the Lowveld region of Mpumalanga.

The investigation into the elements of the entrepreneurship value-chain lacking in the local communities of the Lowveld region of Mpumalanga revealed the absence of collective networks among poultry farmers. The theme on Market Dynamics indicated the lack of collaboration, knowledge sharing, mentorship amongst commercial farmers and small and medium enterprises, which contributes to the lack of growth of small scale, due to the inability to access broader markets, inability to influence economically influence product pricing to counter high production costs.

The lack of business management skills among small and medium poultry farming enterprises was underscored as one of the contributing factors that inhibit their ability to counter challenges imposed by the market dynamics in poultry farming. This is attributed to the level of literacy amongst small and medium poultry farmers, as well as limited participation in government support programmes.

Therefore, the absence of collaboration amongst local poultry farmers, the lack of effective networks with large commercial farmers, lack of business management skills were determined as the elements of entrepreneurship value-chain that are lacking in local communities of the Lowveld region.

6.2.2 Conclusion on factors that disable the ease of doing businesses within local communities in the Lowveld region of Mpumalanga.

The outcomes of the study underscored government policies on SME development as not being effective in promoting the growth of small and medium enterprises.

The study highlighted the significant difficulties encountered by SMEs in obtaining funding, owing to constraints posed by unreasonable funding application requirements, the need for collateral, and limited funding from government and financial institutions.

The study revealed challenges in implementing and accessing government assistance programs, attributing these issues to bureaucratic hurdles and strict regulations. These barriers were identified as obstacles hindering the involvement of small, medium and informal poultry enterprises in business support initiatives.

Therefore, government policy restrictions and limitations, lack of capital to fund poultry enterprises, and the unavailability and inaccessibility of government support programmes present a dis-ease of doing business for small and medium poultry farmers in the region.

6.2.3 Conclusion on how location of the poultry farmers affects their access to supply chain and distribution channels.

The study has highlighted challenges related to business location especially for small-scale farmers without dedicated transportation systems, such as high transport expenses, delayed delivery of supplies affecting production output, and challenges in punctual product delivery to customers. Whilst business location plays a critical role as a strategic benefit in which business located in prime locations foster operational efficiency, it is a hindrance and hindrance towards accessing supply chain and distribution channels for small and medium poultry farmers in the Lowveld, particularly for informal traders who are based in rural and desolate communities.

The study attributes the factors that hinder the growth and sustainability of small and medium poultry enterprises in the Lowveld region of Mpumalanga to the lack of collaboration amongst local poultry farmers, the lack of effective networks of

small and medium enterprises with large commercial farmers, lack of business management skills, government policy restrictions and limitations, lack of capital to fund small and medium poultry enterprises, and unavailability and inaccessibility of government support programmes, and hindrance placed by business location towards accessing supply chain and distribution channels for small and medium poultry farmers based in rural and desolate communities.

Table 14: Consistency Table

RQ #	Research Question	Proposition	Conclusion	Difference between propositions and research findings
1.	What are the factors that hinder the growth and sustainability of small and medium poultry enterprises in the Lowveld region of Mpumalanga?			
1.1	Which elements of the entrepreneurship value-chain are lacking in the local communities of the Lowveld region of Mpumalanga?	Small and medium-scale farmers are challenged by droughts that negatively affect agricultural output and locally produced feeds, limited access to established value chains or economies of scale for necessary business support, energy load-shedding and lack of	The absence of collaboration amongst local poultry farmers, the lack of effective networks with large commercial farmers, lack of business management skills were determined as the elements of entrepreneurship value-chain that are lacking local communities of the Lowveld region.	The impact of drought and loadshedding in agricultural output of poultry farmers was not part of the study conclusions.

RQ #	Research Question	Proposition	Conclusion	Difference between propositions and research findings
		access to clean water, the distance and accessibility of markets, hatcheries, processors, and feed providers for small-scale farmers, and inadequate local industry protection.	Government policy restrictions and limitations, lack of capital to fund poultry enterprises, and the unavailability and inaccessibility of government support programmes present a dis-ease of doing business for small and medium poultry farmers in the region. Business location places a hindrance towards accessing supply chain and distribution channels for small and medium poultry farmers based in rural	
		The sustainability of enterprises is significantly influenced by the unique combination of social and economic factors specific to each business and township. Promising avenues for sustaining		**None**

RQ #	Research Question	Proposition	Conclusion	Difference between propositions and research findings
		enterprises within townships include diverse customer bases, prospects for social and infrastructural development, and untapped markets	and desolate communities of the Lowveld region.	
1.2	What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga?	Small-scale poultry farmers must be empowered by having access to comprehensive market information, affordable transportation options, and a well-		**None**

RQ #	Research Question	Proposition	Conclusion	Difference between propositions and research findings
		designed production system.		
1.3	How does the location of the poultry farmers affect their access to supply chain and distribution channels?	Geographical constraints associated with the distance and accessibility of markets, hatcheries, processors, and feed providers present significant obstacles for small-scale farmers		**None**

6.3 Recommendations

The following measures are recommended to the policy makers, and government institutions to facilitate the development of small and medium poultry enterprises:

- Policy makers and government institutions should ensure that policies are equitable and inclusive. They should encourage openness in the application of policies to make them equitable and fair for SMEs. Therefore, they need to review economic policies regularly, to ensure that they are adaptive to shifting market conditions and they enable ease of trade and accelerate enterprise development locally.
- The government should ensure that necessities such as uninterrupted electricity and clean water are available in local, rural and urban communities.
- As an economic stimulus, the government should also provide seasonal grants to sponsor small- and medium poultry farmers with supplies, food, and vaccinations. This can be achieved by forming collaborations with industry stakeholders and local business support structures to facilitate access to these resources.
- Government funding agencies and financial institutions must work together to simplify and to expedite SME finance application processes, by reducing the amount of documentation needed while maintaining due diligence. This can lower entrance barriers and increase financial accessibility for a wider variety of businesses, including small and medium-scale poultry farmers.
- The government should create support programs that are especially suited to the requirements of informal traders.
- To make government assistance systems more easily accessible to small-medium poultry farmers, including informal traders, the government needs to set up special offices in local communities to enable small and medium-sized enterprises (SMEs) to find the right assistance and resources.

Outreach initiatives will also be beneficial to create awareness and to guarantee that these support services are available and easily accessible.

- The government should remove administrative roadblocks, enhance agency coordination, and ensure training and competency evaluation of funding program administrators to reduce hurdles faced by local poultry farmers.
- To address constraints due to location and inaccessibility, subsidised transportation methods for small farmers in rural areas should be considered.

The following measures are recommended to practitioners in order to foster the development of small and medium poultry enterprises:

- Practitioners, intermediary service providers and institutions aimed to support enterprise development establish locally based programmes such as corporate venture capital programs, innovation hubs, incubators, and accelerators, to provide necessary business support to small and mediums enterprises (including poultry farmers) within the communities in which they operate.
- Formation of formal network structures that will facilitate and coordinate communication, collaboration and connection amongst poultry farmers in local as well as urban communities of Mpumalanga, is recommended. These structures can be independently managed to manage subjectivity and competition dynamics amongst the farmers. Market information and opportunities can be facilitated and made available to the farmers. Initiatives such as agricultural business hubs e.g. *Mkhuhlu Agri-business hub* within local communities can be partnered with, to implement initiatives of these cooperative structures.
- Intermediaries and business support structures to play a significant role in implementing skills development initiatives and programmes accessible to small and medium poultry farmers across various local communities.

To counter the negative impact of market dynamics, lack of collaboration and networks and the hindrance placed by business location in rural and desolate communities, the following measures are recommendations to the small and medium poultry farmers:

- The acknowledgment of the competitive nature of the poultry business and the significance of differentiation through quality, pricing, and strategic partnerships indicates that poultry farmers should adopt measures provide competitive advantage such as improving production practices to improve the quality of their products.
- Poultry farmers need to understand customers' buying patterns and to align their production strategies to the markets' preferences. Therefore, poultry farmers should not oversupply their products, they should adjust their output volumes to meet available demand, to avoid issues of chicken mortality and overstocking that results to losses.
- SMEs should also consider alternative sources of funding that can provide them with flexibility and resilience in securing financial support. Through cooperative set-ups such as stokvels within their local communities, and other investment opportunities, to alleviate the constraints posed by limited government funding.

6.4 Suggestions for further research

Future research on this topic is suggested in the following.

- **Impact of Government Policies on SMEs**

  Although the study sheds light on the perceptions of government policies affecting small and medium enterprises (SMEs), there is an opportunity for further research to delve into specific policy dimensions and their diverse effects on various business types.

- **Funding challenges for SMEs**

The analysis of funding challenges for SMEs is intricate, and future research could delve into exploring distinct alternative funding mechanisms, examining the role of financial institutions, and proposing potential strategies to mitigate funding barriers.

- **Implementation Issues in Government Assistance Programs:**

The study pinpoints issues related to the implementation and accessibility of government assistance programs. Subsequent research could focus on a comprehensive analysis of these challenges, investigating specific bureaucratic hurdles and regulatory aspects that impede the involvement of small and informal poultry enterprises.

- **Geographic Factors in Entrepreneurship**

The context of this study focused on poultry farmers located within the Lowveld region of Mpumalanga. Further studies in different geographical context are recommended for further explorative research.

Further investigations could explore other facets of geographic factors, including regional variations, urban-rural differences, and the impact of specific infrastructure elements in diverse entrepreneurial scenarios.

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APPENDICES:

A. Interview guide

Research Questions	Elements	Questions
Which elements of the entrepreneurship value-chain are lacking in the local communities of the Lowveld region of Mpumalanga?	Entrepreneurship culture	1. What are the social norms, beliefs, or practices in society that impact on the success of the business?
	Leadership Networks	2. How would your business benefit from networks with other local poultry farmers? 3. How can relationships and networks with other successful commercial poultry farmers benefit your business?
	New Knowledge Talent	4. How does the knowledge and skills of your staff impact the way you operate your business?
	Demand	5. How easy is it for you to attract new customers?

Research Questions	Elements	Questions
What affects the ease of doing businesses within local communities in the Lowveld region of Mpumalanga?	Formal institutions	6. How does current government policies on Small and Medium Enterprises enable ease of conducting your business?
	Finance	7. How does access to financial capital or lack thereof affect your business?
	Intermediate services	8. What are the key business support services that you need for your business? And why?
How does the location of the poultry farmers affect their access to supply chain and distribution channels?	Output	9. How is your business affected by the accessibility of supplies, transportation, and customers for your business? And why? 10. Are you able to produce the expected volumes to meet your target sales margins for your business? And why? And why?

B. Research Plan

Item	Description	Timeline
1. Ethics Training	Training on ethical considerations relevant to the research project	16 May 2023
2. Panel Approval	Submission to research panel	9 June 2023
	Presentation to research panel	14 June 2023
3. Panel feedback	Receive panel feedback	7 – 14 July 2023
	Update proposal with panel feedback	14 – 31 July 2023
4. Proposal resubmission	Resubmit updated proposal	04 August 2023
5. Data Collection	• Sampling • Conducting interviews with participants	31 July – 30 August 2023
6. Data Analysis	Analysing and interpreting data sets	1 Sept – 30 Nov 2023
7. Research Proposal	Update research proposal with data analysis and interpretation of results	1 Sept 2023 – 27 Feb 2024
8. Final Submission	Submit final proposal	28 February 2024

C. Ethics Clearance Certificate

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg

Wits Business School

Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/BA1758279/209
This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below).

Project title	Challenges affecting the development of small and medium enterprise poultry farmers in the Lowveld district of Mpumalanga, South Africa
Investigator / Researcher	Ms. Nontethelelo Mashego
Nature of Project	MBA (Research Article)
Decision of the Committee	Approved, provided stakeholders and participants are guaranteed confidentialty.
Issue Date of Certificate	9/11/2023
Expiry date	Date of submission of the project / research report
Chairperson	Dr Pius Oba +27 11 717 3976 +27 82 733 6587 pius.oba@wits.ac.za

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

Signature

12 September 2023
Date:

D. Participation Information Sheet



2 St Davids Place, Parktown,
Johannesburg
2193

Participant Information Sheet

Dear Sir / Madam

My name is Nontethelelo Nokulunga Mashego. I am a Masters student in Business Administration at the University of the Witwatersrand, Johannesburg. My supervisor is Dr / Prof. Nomusa Mazonde. I am conducting a research study about challenges faced by small and medium scale poultry farmers in the local townships of Mpumalanga, within Ehlanzeni District. The study title is *"Challenges faced by small and medium poultry farmers in the Lowveld District of Mpumalanga, South Africa"*.

I am inviting you to take part in an interview by providing responses to the questions that will be posed to you. If you decide to take part, your participation in this research study will last about thirty minutes (30 mins). The interview will take place at your business premises or at an area of your choice, at a time that will be suitable to you. .

With your permission, I would like to audio record the interview. This data will be stored in my personal laptop for three years.. Only the researcher will have access to the data.

During the research activity, I will need to ask for some personal information about you, including your name and surname or the name of your business, and the name of the place of your business operation.

The interview will be confidential and anonymous. When I share the results of the research study, I will not include your name or anything else that could identify you. With your permission, other researchers may use the data collected from this research study, but your name and any personal information will not be used or passed on.

If you decide to take part in the research study, it should be because you want to volunteer. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life / some of the questions asked may make you feel sad or upset. If this happens, I will stop the interview and continue another time.

This research study will be written up as a research report. The report will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Researcher:
Nontethelelo Nokulunga Mashego, 1758279@students.wits.ac.za, Mobile: 083 74 9296 / 083 644 3197

Supervisor:
Nomusa Mazonde, email : nomusa.mazonde@wits.ac.za, Tel :. +27 11 717 4862