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THE ROLE OF GOAT FARMING IN PROMOTING SUSTAINABLE AGRIBUSINESS DEVELOPMENT IN GOKWE SOUTH DISTRICT, ZIMBABWE.

BRIGHTON MAGAIZA: PG239959G.

Supervisor: Dr. A. Chikutsa

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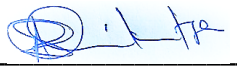
Approval form

I, the undersigned, certify that I have supervised this dissertation and recommended to the Global E4Impact Management Program and the Catholic University of Zimbabwe, for acceptance this dissertation entitled: "THE ROLE OF GOAT FARMING IN PROMOTING SUSTAINABLE AGRIBUSINESS DEVELOPMENT IN GOKWE SOUTH DISTRICT, *ZIMBABWE",* submitted by BRIGHTON MAGAIZA, in partial fulfilment of the requirements for the Global E4Impact MBA Program.

SUPERVISOR:

Name: Dr. A. CHIKUTSA.

Signature: 

Date: _____

Declaration

I, Brighton Magaiza, declare that this study is my own effort and is a true reflection of research executed by me. This research in full or part thereof has not been submitted for examination for any degree at any other university/institution.

Brighton Magaiza

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Signature

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Date

Dedication

This dissertation is lovingly dedicated to my family, whose sacrifices, prayers, and unwavering support sustained me throughout this journey. To my friend who have supported and inspired me throughout this academic journey. It is also dedicated to the small-scale goat farmers of Gokwe South District, whose resilience and determination inspired this research and whose efforts continue to contribute to sustainable agribusiness development. To you all, your resilience, hard work and passion for goat farming have made this research possible. May this work contribute to the development of sustainable agribusiness in our district and beyond?

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I owe special thanks to my late brother Onesimo Magaiza for his words of encouragement, sacrifices, and unconditional support. His belief in me gave me the strength to continue when the journey felt overwhelming. I am equally grateful to the MBA 6th Edition colleagues for their encouragement, understanding, and motivation throughout this process. To everyone who supported me in ways seen and unseen, I say thank you. Your contribution, however small it may seem, made a meaningful difference.

Abstract

This study quantitatively examined the role of goat farming in promoting sustainable agribusiness development in Gokwe South District, Zimbabwe, with specific focus on household income generation, food and nutrition security, and agribusiness sustainability. A cross-sectional survey design was adopted, and primary data were collected using structured questionnaires administered to 100 goat farmers, while supplementary data were obtained from 10 veterinary officers and 10 Ministry of Agriculture officials. Quantitative data were analyzed using descriptive statistics, including frequencies, percentages, means, and tables.

The results indicate that 78% of respondents identified goat farming as a major source of household income, with an average contribution of 35–45% to annual household earnings. In terms of food and nutrition security, 69% of households reported regular consumption of goat meat, while 74% acknowledged improved dietary diversity due to goat production. Regarding sustainability, 82% of farmers preferred goat farming over other livestock enterprises due to its low production costs and high tolerance to drought conditions. However, the study also revealed constraints affecting productivity and commercialization, including limited access to veterinary services (63%), inadequate market information (71%), and low levels of value addition (76%).

The study concludes that goat farming has a statistically significant and positive contribution to sustainable agribusiness development in Gokwe South District. It

recommends increased investment in veterinary infrastructure, market linkages, farmer training, and value addition initiatives to enhance the economic and nutritional outcomes of goat farming.

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ABBREVIATIONS

Table 1 : ABBREVIATIONS

Acronyms/Abbreviations	Full Meaning
FAO	Food and Agricultural Organizations
S.L.F	Sustainable Livelihoods Framework
TBL	Triple Bottom Line
IFAD	International Fund for Agricultural Development
DFID	Department for International Development.
AGRITEX	Agricultural Technical and Extension Services
NGO	Non-Governmental Organizations
SDG	Sustainable Development Goals
ESG	Environment, Social and Governance.
FGDs	Focus Group Discussions

CHAPTER ONE

1.0 Introduction

Goat farming plays a crucial role in promoting sustainable agribusiness, particularly in developing regions where agricultural practices are challenged by environmental and economic pressures. Hence, recurring droughts, climate variability and limited access to formal employment opportunities have increased the need for resilient and sustainable business models (FAO 2023). In Zimbabwe, goat farming is significant in the livelihoods of rural communities. It contribute much in their income, nutrition and socio-economic resilience. Goats are a major source of income obtained from meat, live goats, manure, hides and milk. This chapter provides an overview of the significance of goat farming, particularly within the context of Gokwe South District. By exploring the multifaceted benefits of goat farming, this study seeks to illuminate its potential as a catalyst for sustainable agribusiness development. The study therefore, seeks to examine the role of goat farming in promoting sustainable agribusiness in Gokwe South District by assessing its economic, social, and environmental contributions as well as existing constraints and opportunity for growth. This chapter is going to cover the following: background of the study, statement of the problem, research questions, purpose or aim

of the study, objectives and objective questions, significance of the study, assumptions, delimitations, and limitations research methodology, ethical and legal considerations. Last but not least, the chapter also contains definition of special terms and expressions and ends with a summary of the chapter.

1.2 Background of the Study

Sustainable agribusiness development has become a central priority in many developing economies as governments, rural communities, and development agencies seek production systems that enhance food security, generate income, and protect natural resources. Within this context, goat farming has emerged as a strategic livestock enterprise due to its adaptability to harsh environments, relatively low production costs, and ability to provide multiple outputs such as meat, milk, manure, and hides (FAO, 2021). Goats are particularly suited to semi-arid and marginal areas where other livestock species struggle, making them an important component of climate-resilient agricultural systems (Silanikove, 2020).

Goats are one of the very first animal species to be domesticated by humans some 10,000 years ago (Hermes et al., 2020). Goats of many breeds and usefulness to people are now raised all over the world (Lu, 2023). The number of goats in the world is estimated at 1.1 billion and they are the third most common ungulate livestock after cattle (1.6 billion) and sheep (1.3 billion) (FAOStats, 2024). Because of their higher

adaptive and resilience to tough environments, goats are much more likely to be found in certain climatically harsher regions. Goats can thrive in such challenging environments because "Relative to their ruminant counterparts, with a capacity of endocrine control, goats employ greater metabolic adaptations to water deprivation, scarcity of feed, heat stress, cold stress, high altitude, and plant ant nutritional factors" (Lu, 2023). Goats (Capra hircus) are important livestock in China, providing meat, skin, wool, and fiber products to the population. Their reproductive traits such as ovulation rate and litter size, are important for assessing their economic value.

Across Sub-Saharan Africa, including Zimbabwe, goat farming contributes significantly to rural livelihoods. It supports household income generation through sales of live animals and goat products, and it provides a reliable form of financial security, especially for smallholder farmers who rely on livestock as a form of savings and insurance (Chakadza & Ncube, 2022). The enterprise also plays a crucial role in food and nutrition security through the supply of high-quality protein and micronutrients found in goat meat and milk, which are particularly important for vulnerable households (Mwale et al., 2023). As demand for goat products continues to increase both locally and internationally, goat farming presents valuable commercial opportunities for smallholder farmers and rural agribusinesses (Kutu & Musemwa, 2021).

In 2020, the world meat goat population was estimated at 495 million animals. Meat production from goats increased by 20 % from 2010 to 2020, resulting in more than 6

million metric tonnes of goat meat produced in 2020 (Lu, 2023). Although more meat was produced over this period, the efficiency with which it was produced decreased worldwide on average by 0.5 %, while the efficiency increased by 5.3 % in the Americas (Lu, 2023).

Additionally, their climatic adaptability and disease resistance allows them to flourish in diverse conditions while their agility enables them to navigate rugged steep terrains inaccessible to cattle and sheep. Goats also have a higher reproductive rate than other ruminant livestock, with a propensity for twinning, early sexual maturity and high fertility (Lu, 2023). All these factors underlie and reinforce the value of goats to poorer farmers. Goat milk and meat production and consumption continue to rise globally, which shows the importance of goats for nutrition, health, and food security.

The rearing and production of small ruminant animals are of great global significance, as sheep and goats constitute approximately 56 % of the world's ruminant population, while producing roughly 1.5 million tons of meat and 25.6 million tons of milk. The small ruminant production sector contributes significantly to the preservation of ecological systems and landscapes, aids in biodiversity conservation, and supplies products to niche markets. With their extensive distribution, goats are a significant economic resource, offering valuable products such as meat, milk, and fiber to human societies. The role of goats in nutrition, health, and food security is underscored by the continuous increase in global production and consumption of goat milk and meat. The goat industry will continue to experience structural changes that will impact society, the

economy, and the environment.

Goats have lower growth rate than sheep under favourable conditions. However, goats possess physiological mechanisms that enable them to inhabit both humid and arid environments. Their versatility supports communities in vulnerable regions such as Sub-Saharan Africa, southern and Southeast Asia, and the Middle East, assisting these communities to overcome poverty. In addition, goats use inexpensive feed resources, have short gestation, and higher prolificacy than that of cattle, which renders goats as a desirable option for agricultural development agendas and initiatives to secure human nutrition (IFAD 2021).

Goat farming has emerged as a critical component of sustainable agribusiness, particularly in rural areas like Gokwe South District. This region, characterized by its diverse socio-economic landscape, presents unique opportunities and challenges for agricultural practices. As a significant contributor to the livelihoods of many households, goat farming is not only a source of income but also plays a vital role in food security and poverty alleviation.

Gokwe South District, located in Zimbabwe, is characterized by a predominantly rural population that relies heavily on agriculture for livelihood. The region's climatic conditions and socio-economic challenges necessitate innovative agricultural practices that not only enhance productivity but also promote sustainability (FAO stats, 2023). Goat farming has emerged as a viable option due to the animal's adaptability, low

maintenance costs, and ability to thrive in various environments. The integration of goat farming into agribusiness models can provide farmers with a reliable source of income, improve food security, and foster environmental *sustainability.*

Goats are vital livestock that play a significant role in human life, providing essential resources such as milk, meat, and skins. To meet the growing consumer demand for goat products, the development of superior goat breeds is crucial. Goat farming is a profitable agricultural venture that provides multiple economic income streams for farmers. Due to the high demand for goat meat, milk, fiber, and manure, this business offers excellent returns with relatively low investment (FAO stats, 2023). Goats are easy to manage, adaptable to different climates, and require less space compared to other livestock, making them an ideal choice for small-scale and commercial farmers alike.

The global demand for goat meat and milk is rising due to their nutritional value and health benefits. Goat meat, known as chevon, is lean and rich in protein, making it a preferred choice in many markets. Goat milk is widely used for dairy products such as cheese, yogurt, and butter, especially among people with lactose intolerance. Additionally, goat hides are valuable in the leather industry, while goat manure serves as an excellent organic fertilizer that improves soil fertility, enhancing crop production and food security. Goat farming provides employment opportunities and income for rural communities. It supports women and small-scale farmers by offering a reliable source of revenue with minimal resources.

In a nutshell, the economic benefits of goat farming make it a sustainable and profitable business. With high market demand, low production costs, rapid reproduction, and multiple revenue streams, goat farming is a valuable investment for farmers looking to generate steady income while contributing to agricultural development. Furthermore, goat farming aligns well with sustainability principles because goats require minimal inputs, utilize diverse vegetation, and have lower environmental footprints compared to larger livestock such as cattle (Lu, 2025). Their ability to graze on shrubs and browse materials helps maintain ecological balance and supports integrated farming systems. Development organizations and agricultural policies increasingly recognize small livestock enterprises as pivotal pathways for inclusive and sustainable rural development (Hermes et al., 2025). Therefore, understanding the role of goat farming in promoting sustainable agribusiness development is essential for informing policy, improving smallholder productivity, and enhancing rural resilience.

1.3 Problem Statement

Agribusiness development in Zimbabwe faces persistent challenges of food insecurity, limited rural incomes, and unsustainable farming practices. In Gokwe South District, smallholder farmers rely heavily on crop production, which is increasingly vulnerable to climate variability, land degradation, and market fluctuations. Livestock farming, particularly goat production, offers a potential pathway for resilience due to goats' adaptability to harsh environments, low input requirements, and ability to provide multiple livelihood benefits such as meat, milk, hides, and income from sales. Despite these advantages, goat farming remains underutilized and poorly integrated into formal

agribusiness strategies in the district. Farmers often face constraints including inadequate access to markets, limited veterinary and extension services, poor breeding practices, and lack of investment in value addition. Existing research on sustainable agribusiness in Zimbabwe tends to focus more on crop production and large scale livestock enterprises, leaving a knowledge gap regarding small livestock such as goats (Chanza and Nyamupingidze, 2022). As a result, the contribution of goat farming to sustainable agribusiness development has not been fully realized. Many farmers lack access to organized markets, improved breeds, veterinary services and training in sustainable livestock management (FAO, 2023). This situation raises critical questions about the role of goat farming in promoting sustainable agribusiness development in Gokwe South District. Addressing this gap is essential for designing inclusive, climate-resilient, and economically viable agribusiness models that can enhance rural livelihoods and contribute to national development goals.

1.4 Research Objectives

Main objective

To examine the role of goat farming in promoting sustainable agribusiness development in Gokwe South District.

Specific objectives

1. To assess the contribution of goat farming to household income in Gokwe South District.

2. To evaluate the role of goat farming in food and nutrition.
3. To explore strategies for improving goat farming as a sustainable agribusiness.

Research Questions

1. How does goat farming contribute to household income in Gokwe South District?
2. What role does goat farming play in improving food security and nutrition?
3. Which strategies can enhance goat farming for sustainable agribusiness?

1.5 Significance of the Study

This study is significant for several reasons. These include:

1.5.1 Contribution to knowledge:

The study contributes to existing academic literature by providing focused, up-to-date empirical evidence on how goat farming supports sustainable agribusiness in rural Zimbabwe, particularly in the context of goat farming in Gokwe South District. While broader agribusiness literature exists on sustainable practices, recent studies show goats' roles in enhancing rural resilience and economic sustainability (Nyathi et al., 2025). Many studies focus on large-scale commercial agriculture, but limited research has examined smallholder goat farming as a strategic driver of sustainable agribusiness development in districts such as Gokwe South. Therefore, this research fills an important knowledge gap and provides context-specific empirical evidence that can inform future scholarly work.

1.5.2 Practical Implications:

The findings of this study will be useful to policymakers such as the Ministry of Lands, Agriculture, Water and Rural Development and local government authorities in Gokwe South District. In addition the study provides evidence-based recommendations that may guide livestock development policies, rural financing frameworks, and extension service programming aimed at strengthening sustainable agribusiness initiatives. Evidence from recent Zimbabwean research highlights how small ruminants contribute to livelihoods and income diversification, underscoring goat farming as a viable component of agricultural policy frameworks (Setoboli et al., 2025).

1.5.3 Social Impact:

Explores how the study addresses societal issues, benefits communities, or contributes to social change. It highlights the potential of goat farming in improving livelihoods and promoting sustainable practices. For smallholder farmers, this study highlights goat farming's practical benefits, including its adaptability in semi-arid conditions and potential to support household food security and market participation (Gumindoga et al., 2024). The study highlights the economic, social, and environmental benefits of goat farming. It identifies key challenges such as access to markets, veterinary services, and credit facilities, and proposes strategies to enhance productivity and profitability. Agribusiness actors, including input suppliers, veterinary service providers, and financial institutions, may use the findings to design targeted support systems for goat farmers.

1.5.4 Future Research:

The study demonstrates the integration of quantitative and qualitative approaches in assessing agribusiness sustainability. This mixed-methods approach provides a replicable framework for future studies examining livestock-based value chains in similar rural settings. Hence, the research will encourage further investment and interest in this sector. In a nutshell, the above mentioned elements in the significance section clearly articulate why the study matters and its potential effects on the field and society.

1.6 Key Assumptions:

The study operates under several assumptions:

1. Market demand: There is a consistent demand for goat meat and milk, providing farmers with a reliable income source.

2. Affordability: Goats are relatively inexpensive to raise compared to larger livestock.

3. Land utilization: Goats can thrive in diverse environments, helping to utilize land that may not be suitable for other agricultural practices.

4. Soil health: Their grazing habits can promote soil fertility through natural fertilization and prevent overgrazing when managed properly.

5. Empowerment: It provides women and marginalized groups with economic opportunities and enhances food security.

6. Climate Resilience: Goats are hardy animals that can adapt to harsh conditions, making them suitable for areas prone to climate variability.

7. Diversity income: Goat farming allows for diversification of agricultural practices, reducing risk associated with crop failure.

8. Government initiatives: Supportive policies and programs can enhance the growth of goat farming as a sustainable agribusiness.

In summing up, by focusing on these assumptions, stakeholders can better understand the potential of goat farming in contributing to sustainable agribusiness in Gokwe South District.

1.7 Delimitations of the Study (Researcher's choice)

1. Geographical Scope and Subject Matter.

This study is confined limited to Gokwe South District and does not include other districts in Zimbabwe. Focuses exclusively on goat farming, other livestock farming practices such as cattle, poultry and piggery and their contributions to agribusiness will not be considered

2. Time Frame

Study Period: The research is focusing on a specific time frame of 5months.

3. Target Population

It focuses on small-scale and medium-scale goat farmers only, excluding large commercial farmers.

4. Thematic focus.

The research is going to focus on the economic, social and environmental roles of goat farming in sustainable agribusiness and does not assess animal health or veterinary aspects in detail.

5. Stakeholder Perspectives

Limited Stakeholder Involvement: The research is going to concentrate on the perspectives of farmers, potentially overlooking insights from other stakeholders like government officials, agricultural extension workers, or consumers.

By clearly outlining these delimitations, the study is going to provide a focused analysis of goat farming's role in sustainable agribusiness while acknowledging the boundaries within which the research operates.

1.8 Limitations of the Study (Factors beyond researcher’s control)

Several limitations may affect the outcomes of this study. This includes:

1. Resource constraints

This limit the sample size and scope of the research. If the sample size is small, it may not accurately represent the entire goat farming population in Gokwe South District.

2. Potential biases

Self-reported data from farmers may affect the accuracy of the findings. Farmers may overstate or underreport their practices and yields.

3. External Economic Factors:

Fluctuations in market prices, input costs, and external economic conditions can affect the sustainability of goat farming.

4. Environmental Variability:

Changes in climate or local environmental conditions may impact goat farming practices and should be considered.

5. Cultural and Social Factors.

The influence of local customs and social structures on farming practices may not be adequately explored.

6. Technological factors.

Technology variations in access to farming technology and information may not be adequately addressed, affecting productivity and sustainability.

7. Lack of policy analysis and institutional framework.

By acknowledging these limitations, the study can provide an understanding of the role of goat farming's in sustainable agribusiness and suggest areas for future research.

1.9 Definition of special terms

Sustainable agribusiness refers to agricultural business that balances three key bottom lines: economic viable (the business must make profit), environmental stewardship (minimize negative environmental impacts- soil erosion, biodiversity) and social responsibility (fair labour, rural development, food security and inclusion (Annosi et. al, 2022). Thus sustainable agribusiness integrate profitability with environmental care and social value.

1.10 Summary Chapter

This chapter has established the foundational elements of the research, outlining the significance and context of goat farming in Gokwe South District. However, just like in the mentioned district and in Africa at large goat farming offers a comprehensive solution to several socio-economic and environmental challenges. By providing a source of income, improving nutrition, promoting environmental sustainability, and empowering marginalized groups, goat farming holds the promise of fostering inclusive growth and resilience in African communities. With appropriate support and investment, goat farming can continue to be a cornerstone of sustainable development across the

continent. The subsequent chapters will delve deeper into the methodologies employed, findings, and discussions surrounding the role of goat farming in promoting sustainable agribusiness.

CHAPTER TWO

Literature Review

2.0 Introduction

This chapter reviews existing literature related to the role of goat farming in promoting sustainable agribusiness, with a particular focus on the context of Zimbabwe and Gokwe South District in particular. The purpose of this chapter is to examine existing theoretical and empirical studies that provide a foundation for understanding how goat production contributes to income generation, food security, and employment creation. Creswell and Creswell (2020), asserts that a literature review is essential in establishing what is already known, identifying research gaps and positioning the current study within the broader academic discourse. Hence, this chapter is going to begin by outlining the theoretical framework underpinning the study, followed by a discussion of sustainable agribusiness and its dimensions. Furthermore, the chapter will explore goat farming from a global, regional, and national perspective, emphasizing its economic, social, and environmental significance. Finally, the chapter examines challenges faced by goat farmers and concludes with a conceptual framework that links goat farming

practices to sustainable agribusiness outcomes.

2.2 Theoretical Framework

A theoretical framework provides the basis for understanding how goat farming contributes to sustainable agribusiness. This study is guided by three key theories:

2.2.1 Sustainable Livelihoods Framework (SLF)

Developed by the UK's Department for International Development (DFID, 1999), SLF emphasizes that people's livelihoods depend on access to five forms of capital namely: human, natural, financial, social, and physical. Goat farming contributes to all these capitals by improving income (financial capital), providing manure (natural capital), enhancing community cooperation (social capital), and building farmers' knowledge and skills (human capital). Thus the theory assesses how goat farming utilizes five types of "capital" (human, social, natural, physical and financial) to build resilient livelihoods for rural households, especially in developing contexts.

In a nutshell, goat farming contributes to the above mentioned capitals by providing income, nutrition, and manure while strengthening community resilience. Therefore, SLF provides a lens to analyze how goat farming supports sustainable agribusiness at the household level.

Advantages of Sustainable Livelihoods Framework (SLF)

1. Holistic Analysis:

Moves beyond mere economics to consider how goat farming enhances social networks (social capital), builds skills (human capital), and manages the environment (natural capital).

2. Focus on Resilience:

Highlights how goats act as a "living bank" or insurance against shocks (drought, crop failure) thereby reducing vulnerability and promoting stability.

3. Poverty alleviation.

Demonstrates how low entry costs goat farming can empower marginalized groups (women, youth and landless farmers.

Disadvantages of Sustainable Livelihoods Framework (SLF)

1. Conceptual complexity

The Sustainable Livelihoods Framework is broad and multi-dimensional, incorporating assets, vulnerability context, institutions, strategies, and outcomes. This complexity makes it difficult to apply comprehensively in empirical research and development practice. Researchers and practitioners may struggle to operationalize all elements within limited time and resources.

2. Challenges in measurement and quantification

Several livelihood assets, particularly social and human capital, are abstract and difficult to measure quantitatively. This limits the framework's applicability in studies that rely on statistical analysis.

3. Weak attention to power and politics

The framework does not address issues of power relations, inequality, and political influence adequately. As a result, structural constraints such as land tenure systems, gender inequality, and elite dominance may be underrepresented.

4. Limited consideration of macro-economic forces

SLF places greater emphasis on household and community level analysis, often overlooking wider macro-economic factors such as national economic policies, global markets, and trade dynamics that significantly affect livelihoods.

5. Context-specific and hard to generalize

Livelihood strategies and assets vary widely across regions and cultures. Findings based on SLF are often highly context-specific, making comparison across studies or countries difficult.

6. Assumption of rational decision-making

The framework often assumes that households make rational and informed choices to optimize livelihood outcomes. In reality, decisions may be influenced by traditions, social norms, and limited access to information.

7. Resource- and time-intensive application

Applying SLF effectively requires extensive data collection across multiple dimensions. This can be costly and time consuming, especially in resource-constrained settings such as rural development research.

8. Limited guidance for implementation

SLF is primarily an analytical tool. It offers limited practical guidance on how to design, prioritize, or implement specific development interventions.

In a nutshell, the Sustainable Livelihoods Framework is criticized for being complex, difficult to quantify, weak in addressing power relations and macro-economic factors, and challenging to apply practically across diverse contexts.

2.2.2 Triple Bottom Line Theory (TBL)

Elkington introduced the Triple Bottom Line concept, which stresses the integration of economic, social, and environmental sustainability. Goat farming supports all three pillars generating income (profit), empowering rural households (people), and promoting ecological balance (planet). The theory emphasizes that sustainable enterprises must balance economic, social, and environmental outcomes. In goat farming, economic sustainability relates to profitability and market growth; social sustainability relates to community well-being and empowerment; and environmental sustainability relates to responsible land and resource use. This theory supports the multidimensional analysis of goat farming’s contribution to sustainable agribusiness.

The Triple Bottom Line (TBL) is a sustainability framework that proposes organizations should measure success using three dimensions: Profit (economic value), People (social equity), and Planet (environmental responsibility). This framework represents a departure from traditional single-bottom-line accounting by advocating for a more comprehensive assessment of organizational performance.

Advantages of the triple bottom line theory (TBL).

1. Holistic View of Value Creation and Sustainability

Triple bottom line provides a comprehensive framework that recognizes the interdependence between economic, social, and environmental systems. This approach aligns with sustainable development principles that emphasize meeting present needs without compromising future generations. For example Organizations using TBL can demonstrate how environmental stewardship (for instance reducing emissions) contributes to long-term economic viability while supporting community health.

2. Enhanced Risk Management and Organizational Resilience

By systematically addressing social and environmental factors, organizations can identify and mitigate non-financial risks before they escalate into financial crises. This proactive approach builds resilience against regulatory changes, resource scarcities, and social conflicts. For example, research indicates that companies addressing social and environmental concerns experience fewer regulatory interventions and less reputational damage.

3. Stakeholder engagement and social license to operate

TBL expands organizational accountability beyond shareholders to include diverse stakeholders such as employees, communities, and regulators. This broader engagement builds trust and secures what has been termed a "social license to operate". For example, Corporations implementing TBL principles typically experience enhanced brand loyalty and reduced community opposition to their operations.

4. Innovation and Competitive Advantage

The constraints and goals associated with social and environmental performance can stimulate innovation in products, processes, and business models. This innovation can create distinctive competitive advantages in increasingly sustainability-conscious markets. Some scholars have documented how environmental constraints have driven significant innovations across multiple industries, creating new market opportunities.

5. Attraction of Capital and Talent

TBL-aligned performance is increasingly valued by ESG (Environmental, Social, and Governance) investors and purpose-seeking employees. Organizations demonstrating balanced performance across all three dimensions are better positioned in competitive capital and labor markets. For instance, companies with strong sustainability performance show lower cost of capital and higher employee retention rates.

Disadvantages and criticisms of the triple bottom line theory.

1. Measurement and Aggregation Challenges.

The three dimensions utilize fundamentally incommensurable units (e.g., dollars, carbon tons, employee satisfaction scores), creating what is known as the "aggregation problem". This makes meaningful integration and comparison across dimensions analytically problematic. The weakness of this is, without a common metric, organizations often produce three separate reports rather than an integrated assessment, potentially undermining the framework's holistic intent.

2. Implementation Variances and Green washing Potential

The absence of universally standardized measurement protocols enables selective reporting and "green washing" where organizations emphasize positive social/environmental metrics while obscuring negative impacts. The criticism of this is that TBL's flexibility, while initially advantageous for adoption, permits inconsistent application that hampers comparative analysis and accountability.

3. Theoretical and practical tensions between pillars

Despite its rhetoric of equal importance, economic objectives frequently dominate decision-making in practice, relegating social and environmental considerations to secondary status. The criticism is: From an ecological economics perspective, TBL

represents "weak sustainability" by assuming substitutability between natural, human, and manufactured capital, thereby ignoring critical planetary boundaries that represent non-negotiable constraints.

4. Conceptual ambiguity and definitional challenges

Core concepts such as "social equity" and "environmental responsibility" lack precise, operational definitions, leading to inconsistent interpretation and application across contexts. The weakness: This ambiguity complicates target-setting, performance evaluation, and stakeholder communication, potentially diluting the framework's effectiveness.

5. Implementation costs and resource demands

Comprehensive measurement and management across three performance dimensions require significant investments in data systems, expertise, and reporting mechanisms, creating disproportionate burdens for smaller organizations.

6. Insufficient emphasis on systemic constraints

Critics from "strong sustainability" paradigms argue that TBL inadequately addresses the primacy of ecological limits, treating environmental protection as one competing goal rather than the foundational constraint within which economic and social systems must operate. In a nutshell, the TBL framework's primary contribution lies in its ethical

and conceptual expansion of organizational success criteria, compelling consideration of non-financial stakeholders and impacts. However, its operational shortcomings particularly regarding measurement, integration, and the potential subordination of ecological limits have prompted the development of more precise

2.2.3 Systems Theory

Systems Theory views agribusiness as an interconnected system where inputs, processes, and outputs are interrelated. Cabrera and Cabrera (2023) holds that system theory enhances understanding of complexity, sustainability and organizational performance. Goat farming forms part of the livestock sub-system within the broader agricultural system, influencing the economic and environmental outcomes of agribusiness.

Advantages of systems theory

1. All aspects perspective and contextual understanding

Systems theory emphasizes all aspects, the understanding that "the whole is more than the sum of its parts". This prevents reductionist fallacies where complex phenomena are misunderstood by studying isolated elements without considering their interactions. For example, in studying agricultural sustainability, systems theory would examine how goat farming interacts with markets, ecosystems, social structures, and policies, rather

than analyzing production techniques alone. This reveals emergent properties characteristics of the whole system that cannot be predicted from individual components.

2. Focus on interrelationships and feedback loops.

The theory prioritizes relationships and processes over static entities. It identifies feedback loops (both reinforcing and balancing) that determine system behavior over time, which is crucial for understanding stability, change, and unintended consequences. For instance, in analyzing a rural economy, systems theory would map how increased goat production (reinforcing loop) might lead to overgrazing, which reduces future fodder availability (balancing loop), creating dynamic system behavior.

3. Recognition of boundaries and environment.

Systems thinking requires explicit consideration of system boundaries and interactions with the external environment. This clarifies what is included in the analysis and how the system exchanges energy, information, and materials with its context. For example, when applying systems theory to an agribusiness, the boundary might be drawn around the farm (closed system for some analyses) or expanded to include supply chains and consumers (open system), depending on the research question.

4. Applicability across scales and disciplines

Its abstract principles are scale-independent and transdisciplinary. The same concepts (input, output, feedback, hierarchy) apply to cellular systems, ecosystems, organizations, and economic systems, facilitating integrated analysis and cross-disciplinary dialogue. For instance, the concept of "leverage points" places in a system where a small shift can produce major change is equally relevant in engineering, psychotherapy, and policy design.

5. Practical problem-solving and intervention design

By modeling complex systems, researchers and practitioners can simulate the effects of interventions before implementation, potentially avoiding "fixes that fail" or that transfer problems to another part of the system. For example, in development projects, systems mapping can reveal how a subsidy for goat feed might increase production but also create market distortions or dependency, prompting more nuanced program design.

Disadvantages and limitations of systems theory

1. Complexity and abstraction leading to ambiguity

The very strength of systems theory its abstract, general nature can become a weakness. Its concepts (like "boundaries," "feedback," or "purpose") can be ambiguous and open to interpretation, making operationalization and clear communication difficult.

Without careful definition, systems thinking can devolve into vague metaphors rather than rigorous analysis, described by some critics as "woolly holism" that sounds insightful but lacks explanatory precision.

2. Practical implementation challenges.

Systems models can become extraordinarily complex when attempting to represent real-world phenomena. This creates practical barriers to data collection, modeling, and analysis, especially when dealing with soft systems involving human values and perceptions. This theory often provides a descriptive framework rather than specific predictive tools. It can explain why a system behaves as it does but may not offer quantifiable predictions about what will happen next.

3. Boundary definition problems

Determining where to draw system boundaries is both critical and inherently subjective. Different boundary choices lead to different analyses and conclusions, potentially introducing researcher bias disguised as objective systems analysis. For example, in studying goat farming's sustainability, there are boundaries which include global climate systems, local politics, consumer preferences in distant cities and each choice shapes the research fundamentally.

4. Potential to overlook individual agency and power

By focusing on structures, patterns, and relationships, some applications of systems

theory can marginalize human agency, power dynamics, and conflict. Systems may be portrayed as self-regulating entities that minimize the role of individual actors, interests, and inequalities. For instance, a systems analysis of agricultural development might focus on input/output flows while underemphasizing how gender inequalities or land tenure systems determine who benefits from the system.

5. Difficulties with validation and falsification

The complexity and context-dependence of systems models make them difficult to validate or falsify using traditional scientific methods. Multiple models might explain the same system behavior, and controlled experiments are often impossible with large, open systems. This can place systems theory outside the realm of positivist science, making its claims less susceptible to empirical testing and potentially reducing its credibility in some academic circles.

6. Risk of determinism and de-politicization

Some critics argue that systems thinking, particularly in its functionalist forms, can imply that system structures exist because they serve a necessary function, potentially justifying existing inequalities or arrangements as "natural" or "optimal" for system maintenance.

2.3 Concept of Sustainable Agribusiness

Sustainable agribusiness is an approach that seeks to balance economic, social, and environmental goals in agricultural production and trade systems. It promotes profitability while conserving natural resources and improving rural livelihoods. According to scholars, Triple Bottom Line Theory sustainability rests on three pillars people, planet, and profit which correspond to social, environmental, and economic dimensions respectively.

In the agricultural context, sustainable agribusiness involves using eco-friendly production practices, fair labor conditions, and efficient resource management. It also emphasizes resilience against shocks such as climate change and market volatility. For developing countries, it provides a framework for achieving long-term food security and poverty reduction while maintaining ecological integrity. It emphasizes a balance between productivity, ecological conservation, and rural development. According to the Food and Agriculture Organization (FAO, 2018), sustainable agribusiness enhances food security, reduces poverty, and supports inclusive economic growth.

2.4 Overview of Goat Farming

Globally, goats are an essential component of smallholder farming systems. According to Amills et al. (2020), goats are valued for their adaptability to harsh environments and their multifunctional use for meat, milk, fibre, and manure. In Africa, goats play a vital role in household food security and income generation, especially in arid and semi-arid regions where crop farming is risky.

Goat production systems vary from extensive (free grazing) to intensive (stall-fed) methods, depending on resource availability and management capacity. Their resilience and low feed requirements make them ideal for resource-poor farmers.

2.5 Goat Farming in Zimbabwe

In Zimbabwe, goat farming is practiced across all provinces, with high concentrations in the Midlands, Matabeleland, and Masvingo regions (Hermes et al., 2025). The national herd is dominated by indigenous breeds such as the Mashona and Matabele goats, which are hardy and disease-resistant. The government, through policies like the Livestock Development Strategy (2015–2020), has emphasized the development of small livestock to enhance rural livelihoods and agribusiness diversification (Ministry of Lands, Agriculture, Water, Climate and Rural Resettlement, 2019). However, challenges such as limited access to credit, poor veterinary support, and weak market linkages continue to hinder productivity and commercialization (Lu, 2023).

2.6 The Role of Goat Farming in Promoting Sustainable Agribusiness.

Goat farming contributes significantly to sustainable agribusiness through multiple channels:

2.6.1 Economic contribution:

Goats provide a consistent income stream through sales of meat, milk, and live animals. Their low production costs make them suitable for small-scale entrepreneurs (FAO, 2022). Goat farming contributes significantly to rural incomes and employment.

According to FAO (2020), small livestock enterprises like goat production play a critical role in poverty alleviation and income diversification among rural households. In Zimbabwe, goats serve as a form of “livestock banking,” providing quick cash during emergencies or seasonal income shortages (ZimVAC, 2022). Goat products such as meat, milk, and hides are in growing demand both locally and regionally, creating potential for export-oriented agribusiness. Moreover, the sale of live goats at local markets has become a steady source of income for smallholder farmers, contributing to rural economic empowerment. Goats have an ability to thrive in harsh environmental conditions makes them an ideal choice for many farmers. The sale of goats and related products, such as milk and meat, contributes to household income and food security.

2.6.2 Social contribution:

Goats empower marginalized groups especially women and youths, by offering manageable investment opportunities. They also improve nutrition and food security in rural areas. Socially, goat farming supports food security, nutrition, and gender equity. Goat milk and meat are rich in proteins and essential nutrients, addressing malnutrition challenges. In many African societies, women and youth are the main custodians of small livestock, giving goat farming a strong link to social empowerment. Goat rearing allows women to participate in agribusiness and decision-making, contributing to inclusive development. Goat farming fosters community cohesion and social capital. It encourages cooperative practices among farmers, such as sharing resources and knowledge. Goat farming initiatives often include training programs that empower women and youth, enhancing their roles in agribusiness. This social empowerment

contributes to more equitable economic development within the community. Furthermore, goat farming also creates employment and eradicate poverty. It addresses Sustainable Development Goals (SDGs) 1 and 2 no poverty and zero hunger respectively.

2.6.3 Environmental contribution:

Environmentally, goats contribute to sustainable land use through their ability to graze on shrubs and rough terrain that is unsuitable for crops. When properly managed, goats help control bush encroachment and can be integrated into mixed farming systems to recycle nutrients through manure. However, overgrazing can lead to land degradation if stocking rates exceed carrying capacity. Sustainable management practices such as rotational grazing, fodder conservation, and improved housing can mitigate environmental risks (FAO, 2020). Goat farming plays a critical role in promoting environmental sustainability. Goats are efficient grazers and can help manage invasive plant species, thus enhancing biodiversity. Their grazing habits can also contribute to soil fertility through natural manure deposition. Sustainable land management practices, including integrated goat farming systems, can lead to improved soil health and reduced erosion.

2.6.4 Nutritional Benefits

The nutritional value of goat meat and milk is well-documented. Goat meat is considered leaner and healthier compared to beef and pork, containing lower levels of saturated fat. In addition, goat meat is rich in proteins. Goat milk is also a vital source of nutrients, especially for children and the elderly. Nutrition has a number of benefits namely: Helps maintain a healthy weight, lowers risk for chronic conditions, boosts

natural immunity, improves healing and recovery from injury or illness, helps digestive system and support healthy muscles and bones. By promoting goat farming, Gokwe South District can address issues of malnutrition while providing a sustainable food source for local communities.

2.7 Challenges Facing Goat Farmers:

Despite their importance, goat farmers face numerous constraints:

Diseases and inadequate veterinary services:

Diseases and inadequate veterinary services reduce herd productivity (FAO, 2022). Reiterating the same point, poor animal health and breeding services: Inadequate veterinary support and poor disease control reduce productivity.

Limited market access:

Many farmers lack access to formal markets, resulting in low prices and exploitation by middlemen. Hence, there is a need to decentralize markets for accessibility.

Limited access to finance:

Limitation in finance restrict modernization and expansion. Farmers often lack access to credit facilities and extension services necessary for modernization (FAO, 2020). There is a need to open credit facilities to SMEs in goat farming.

Climate change:

It increases vulnerability due to droughts which will cause feed scarcity. Fire outbreaks also causes vulnerability to goats and clear the grazing areas.

Policy gaps:

Policy gaps hinder investment in small livestock enterprises (Hermes et al., 2025). Policies come with their demands. These demands may be difficult for SMEs to follow. Hence, they end up dropping what sustains them.

Weak institutional support:

Absence of organized cooperatives and inadequate policy support limit goat commercialization (Government of Zimbabwe, 2021). At times the policy may not cover some practices and in that regards farmers will not be protected.

These challenges underscore the need for interventions that integrate goat farming into the broader agribusiness value chain sustainably. Addressing these challenges requires collaborative efforts between government, private sector, and development organizations to promote training, market linkages, and value addition.

2.8 Empirical Studies on Goat Farming and Sustainable Agribusiness

Empirical research has demonstrated that goat farming significantly supports sustainable livelihoods. Lu (2025), in support to this, asserted that goat production enhances income diversification among smallholder farmers in Southern Africa. Similarly, some other scholars reported that goat enterprises contribute to both household nutrition and local economies. In Zimbabwe, Hermes et al. (2025) highlighted the potential of goat farming to reduce poverty and support the sustainable

development goals (SDGs 1, 2, 8, and 15). However, most studies have focused on production efficiency rather than sustainability integration, revealing a gap that this research seeks to address in the context Gokwe South District

2.9 Conceptual Framework

The conceptual framework guiding this study illustrates how goat farming activities (independent variable) influence sustainable agribusiness outcomes (dependent variable).

2.9.1 Independent Variables:

Goat production practices (breeding, feeding, management)

Market access and value addition

Access to finance and extension services

2.9.2 Dependent Variables:

Economic sustainability (income, profitability)

Social sustainability (employment, food security)

Environmental sustainability (resource conservation).

2.9.3 Intervening Variables:

Government policies, climate conditions, and infrastructure availability.

Goat Farming Practice  (income generation, herd management, value addition)

 Sustainable Agribusiness Development (economic growth, food security, environmental conservation)

2.10 Summary

This chapter has reviewed literature on the theoretical and empirical dimensions of goat farming and sustainable agribusiness. It has shown that goat farming plays a crucial role in promoting rural livelihoods, economic resilience, and environmental conservation. However, existing studies reveal gaps in understanding how goat farming contributes specifically to sustainable agribusiness at the district level. This study, therefore, seeks to fill this gap by examining the role of goat farming in promoting sustainable agribusiness in Gokwe South District.

CHAPTER THREE

3.0 Introduction

This chapter is going to talk about the research methodology adopted to investigate the role of goat farming in promoting sustainable agribusiness development in Gokwe South District. The methodology is designed to ensure that the research objectives are achieved in a systematic and credible manner. Hence, the chapter is going to cover the following: the research methodology, the research design, the research approach which is going to be a mixed approached of both qualitative and quantitative. The chapter is also going to state the population of the study, the sample and sample procedures. Data collection procedures data analysis and interpretation are also going to be of interest in this chapter. Last but not least the will be a mention of validity and reliability and ethical consideration. Respondents are going to be assured of respect, free from

harm, their contributions to be treated with confidentially and that their participation is voluntary. Finally, there is a summary of the chapter and a brief of the next chapter, what it will be all about.

3.1 Research methodology and Paradigm.

The study is grounded in a pragmatic research philosophy, which integrates both positivist and interpretivist perspectives. Pragmatism allows the researcher to apply mixed methods to gain both measurable and contextual understanding of how goat farming contributes to sustainable agribusiness (Creswell & Plano Clark, 2023). This approach ensures that both numerical and narrative data are collected to provide a comprehensive view of the issue under study.

3.2 Research Design

Research design is the overall strategy or blueprint connecting philosophical assumptions to specific research procedures, guiding choices about data collection, sampling, and analysis to address research questions effectively (Creswell and Creswell, 2018). It involves selecting an approach (qualitative, quantitative, or mixed) and then choosing specific inquiry types (like experimental or ethnographic) within that approach, aligning them with a researcher's worldview. A descriptive survey design was employed in this study. This design was chosen because it enables the researcher to collect quantitative and qualitative data that describe the characteristics, perceptions, and experiences of goat farmers regarding sustainable agribusiness practices. According to

Creswell and Creswell (2022), a descriptive design is suitable when the goal is to gather detailed information about a phenomenon as it exists in a natural setting. The design allows for triangulation of data from multiple sources, enhancing the validity of findings (Saunders et al., 2019).

3.2.1 Benefits of research design

Provided a clear, structured roadmap for qualitative, quantitative, and mixed methods studies, ensuring methodological rigor, enhancing clarity for funding/publication, and enabling comprehensive understanding of complex problems through techniques like triangulation and flexibility for interdisciplinary work. Key advantages include guiding alignment of questions with methods, fostering ethical considerations, and facilitating deeper insights by integrating diverse data, ultimately leading to stronger, more impactful research. The research design used in this work is a case study. I have chosen this because it is easy to generate data.

3.3 Research Approach

A mixed-methods approach was adopted, combining quantitative and qualitative data collection. Quantitative methods were used to gather measurable data on goat production levels, income, and employment creation, while qualitative methods captured farmers' experiences, challenges, and perceptions.

3.3.1 Why mixed methods

Mixed methods research integrates both qualitative and quantitative approaches to provide a comprehensive understanding of complex phenomena. According to Kothari (2021), using both approaches strengthens the reliability of the results and enhances the depth of interpretation. By combining the strengths of both methodologies, researchers can triangulate data, validate findings, and gain deeper insights into research questions. This approach allows for the exploration of diverse perspectives, enabling the collection of rich, contextual data alongside statistical analysis. Qualitative methods, such as interviews and focus groups, offer in-depth insights into participants' experiences and motivations, while quantitative methods, such as surveys and experiments, provide measurable data that can be generalized to larger populations. The synergistic use of these methods enhances the research process, allowing for a more nuanced interpretation of results. This abstract highlights the importance of mixed methods research in addressing multifaceted issues across various fields. It emphasizes the need for careful design and integration of both qualitative and quantitative elements to effectively answer research questions and inform practice. Ultimately, mixed methods research fosters a holistic understanding that can lead to more effective interventions and policies.

3.3.2 Population of the Study

According to John W. Creswell (2018), a population in research is the larger group of individuals, objects, or items sharing common characteristics that a researcher is

interested in studying, from which a sample is drawn, allowing for generalized conclusions about that broader group. It's the entire set of relevant subjects (like all teachers in a country or students in a grade level) that possess the features being investigated in the study.

The target population comprised all goat farmers, agribusiness extension officers, and cooperative leaders in Gokwe South District. The district has an estimated 2,000 smallholder goat farmers registered with the local Department of Agricultural Technical and Extension Services (AGRITEX, 2024). This population was selected because it directly participates in goat farming and agribusiness development activities within the district.

3.3.3 Sample and Sampling Procedures

Sampling procedure refers to the systematic process used by a researcher to select a subset (sample) of individuals, items, or units from a larger population so that the findings from the sample can be generalized to the entire population (Creswell & Creswell, 2018). In research, the sampling procedure explains how the sample is chosen, which method is used (e.g., random, stratified, purposive), and why that method is appropriate for the study. Purposive sampling was used to select key informants such as extension officers and cooperative leaders who possess specialized knowledge (Etikan & Bala, 2023). The method was used for the purpose of obtaining diversity of knowledge about goats. Sample size was determined using Yamane’s (1967) formula

for finite populations, ensuring representativeness and manageability in data collection. A sample of 120 respondents was drawn from the population using both probability and non-probability sampling techniques. The sample included 100 goat farmers, 10 agribusiness officers, and 10 cooperative leaders. A stratified random sampling method was used to ensure representation from different wards within Gokwe South District.

3.3.4 Objectives of a Sampling Procedure

The main objectives of a sampling procedure include the following:

To obtain reliable information about population without studying everyone.

Sampling aims to ensure that the selected sample accurately reflects the characteristics of the target population, allowing valid generalization of results.

To reduce cost and time:

Studying an entire population is often expensive and time-consuming. Sampling makes research more economical and manageable while still producing reliable results.

To improve accuracy and efficiency:

When properly designed, sampling can produce more accurate data than a full census because the researcher can focus resources on fewer units and collect higher-quality data (Creswell & Creswell, 2018).

To make data collection feasible:

In large or geographically dispersed populations, sampling makes research practically possible by limiting the number of respondents (Kumar, 2019).

To support appropriate statistical analysis:

Sampling allows the use of statistical techniques to estimate population parameters and test hypotheses.

3.4 Data Collection instruments

The study utilized questionnaires, semi-structured interviews, and focus group discussions (FGDs) as data collection instruments.

3.4.1 Questionnaires

Questionnaires are structured data collection instruments consisting of written questions that respondents complete on their own. They may include open-ended or closed-ended questions and are widely used to collect data from large populations efficiently. Questionnaires are cost-effective, ensure anonymity, and allow for easy quantification of responses, making them suitable for quantitative research (Creswell & Creswell, 2018; Kumar, 2019). In this study, structured questionnaire was utilized to gather information from respondents. These questionnaires were administered to goat farmers to collect quantitative data on production levels, income, and sustainability practices.

3.4.2 Interviews

Interviews involve direct verbal interaction between the researcher and the respondent to obtain in-depth information. They can be structured, semi-structured, or unstructured, depending on the level of flexibility required. Interviews allow researchers to probe further, clarify responses, and explore participants' experiences and perceptions in detail, which enhances data richness (Creswell & Creswell, 2020). In this study both structured and semi-structured were used.

Why use structured interviews

Structured interviews use pre-determined questions asked in the same order and wording for all participants. Scholars argue they are used because they:

Ensure consistency and comparability of data, since every respondent answers the same questions, responses are easy to compare across participants. This makes them particularly suitable for large samples and hypothesis testing (Bryman, 2022). Creswell & Creswell (2023), argues that this reduces interviewer bias and enhances comparability across respondents. The interviewer has little freedom to influence responses, increasing objectivity and reliability. Furthermore, structured interviews suit quantitative or mixed-methods research. Structured interviews generate data that can be coded and statistically analyzed (Creswell & Creswell, 2018). In addition, they save time and simplify analysis. Structured interviews are generally quicker to administrate and easier to manage, especially when dealing with large population or survey-based research (Creswell and Creswell 2023). They are efficient when dealing with larger samples

(Saunders et al., 2019). This is very applicable for example when assessing income contribution of goat farming across many households.

Why use semi-structured interviews

Semi-structured interviews use guiding questions but allow probing and follow-up questions. Scholars argue they are used because: They provide depth and rich insights. They allow participants to explain experiences, perceptions, and meanings in their own words. Semi-structured interviews also offer flexibility. Creswell & Poth, (2018), argued that researchers can probe emerging issues and clarify responses, making them ideal for exploratory studies. They also capture context-specific information. Furthermore, they balance structure and freedom, by maintaining focus while allowing new themes to emerge (Saunders et al., 2019). For instance, this was used to interview veterinary officers and Ministry of Agriculture officials about sustainability strategies.

One may ask, which is better structured or semi-structured interviews. Scholars agree that neither is universally better. The choice depends on the research purpose. Structured interviews are better when the study aims at measurement, comparison, and generalization. The researcher will be seeking standardized data, (Creswell & Creswell, 2018). Semi-structured interviews are better when the study seeks understanding, explanation, and meaning. Many scholars recommend combining both in applied and development research to enhance triangulation and validity (Saunders et al., 2019).

In conclusion, the study employed both structured and semi-structured interviews. Structured interviews were used to obtain standardized and comparable data from farmers, while semi-structured interviews allowed for in-depth exploration of expert views from veterinary officers and agricultural officials. According to scholars, the combination enhances data richness, credibility, and methodological rigor.

3.4.3 Focus Group Discussions

Focus group discussions involve guided conversations with a small group of participants who share similar characteristics or experiences related to the study topic. A moderator facilitates discussion to generate collective views, opinions, and insights. Focus groups are useful for exploring attitudes, social norms, and group dynamics, and they provide diverse perspectives within a short period. Focus group discussions helped to gather collective views on challenges and opportunities in goat farming. According to Bell et al. (2022), triangulation of instruments enhances the depth and reliability of research data.

3.5 Data Collection and procedures

Data Collection

Data collection refers to the systematic process of gathering information relevant to the research objectives in order to answer the research questions and test assumptions (Creswell & Plano Clark, 2018). In this study, data collection was guided by the objective

of examining the role of goat farming in promoting sustainable agribusiness development in Gokwe South District. A mixed-methods approach was adopted, combining both quantitative and qualitative techniques to ensure comprehensive and credible findings. Permission to conduct the study was obtained from farmers, local authorities and relevant agricultural offices. The researcher first conducted a pilot study to test the clarity and reliability of the research instruments. Prior to data collection, a pilot study was conducted among 10 goat farmers in a neighboring district to test the reliability of the instruments. After refinement, questionnaires were distributed with the assistance of local extension officers, while interviews and focus group discussions were conducted at mutually convenient locations. Ethical considerations such as informed consent, confidentiality, and voluntary participation were strictly observed throughout the data collection process. Data collection took approximately four weeks.

3.6 Data analysis and interpretation procedures.

Data interpretation is the process of making meaning from collected data by explaining patterns, relationships, and implications in relation to the research objectives and existing literature. Kumar (2020), holds that data interpretation is the process of making sense of numerical data that has been collected, analyzed and processed. Data interpretation requires a strong understanding of the data's context, as conclusions can vary greatly based on how data is framed or presented.

Effective data interpretation often employs visual aids, like charts and graphs, to enhance understanding and communicate insights clearly as being shown in this work.

It is crucial to recognize potential biases in data interpretation, as personal or societal biases can influence how data is understood and used. Data interpretation also involves assessing the reliability and validity of the data sources to ensure that conclusions drawn are based on sound evidence. The ability to interpret data effectively is essential in various fields, from business decision-making to scientific research, impacting how information shapes policies and strategies. In this study, data interpretation was carried out by integrating findings from both quantitative and qualitative data sources.

Quantitative data

It was obtained from questionnaires were analyzed using descriptive statistics such as frequencies, percentages, and tables. The interpreted results focused on assessing the contribution of goat farming to household income, food security and nutrition, and agribusiness sustainability. Trends and patterns observed in the data were explained in relation to the socio-economic context of Gokwe South District.

1. Survey Findings

Survey results demonstrated that:

Many farmers practice traditional goat rearing methods with limited commercial orientation.

Farmers with access to training and loans tend to achieve higher productivity.

Disease outbreaks remain one of the major causes of goat losses.

Goat farming is increasingly becoming a climate adaptation strategy due to recurring

droughts in the district.

2. Observation Findings

Field observations revealed that:

Some goat shelters were poorly constructed, exposing goats to diseases and predators.

Water shortages negatively affected goat production during the dry season.

3. Statistical Findings

Data analysis from respondents indicated that:

There is a positive relationship between goat farming and household income generation.

Farmers with veterinary support recorded lower mortality rates.

Access to markets significantly influences profitability in goat farming.

Women involved in goat farming contributed greatly to household economic welfare.

Conclusion of Findings

The quantitative findings showed that goat farming plays an important role in sustainable agribusiness development in Gokwe South District through income generation, employment creation, poverty reduction, and climate resilience. However, the sector is still constrained by inadequate veterinary services, poor market access, lack of finance, and environmental challenges. Strengthening farmer support systems can improve productivity and sustainability in the district.

Qualitative data

This type of data were analyzed thematically by identifying patterns and emerging

themes from interview transcripts and FGD notes (Braun & Clarke, 2021). The results from both data sets were integrated during interpretation to provide a holistic understanding. Interpretation involved linking these themes to the objectives of the study and comparing them with findings from previous studies on smallholder livestock farming and sustainable agribusiness development. Themes such as income diversification, market access, veterinary support, climate resilience, and sustainability strategies emerged from the data.

The integration of quantitative and qualitative findings enabled triangulation, thereby enhancing the validity and credibility of the study. Interpreted results were discussed in relation to relevant theoretical frameworks and empirical literature, allowing the researcher to draw meaningful conclusions about the role of goat farming in promoting sustainable agribusiness development in Gokwe South District. Descriptive statistics such as frequencies, means, and percentages were used to summarize the data, while inferential statistics such as correlation analysis were used to determine relationships between variables.

3.7 Validity and Reliability.

3.7.1 Validity of the Study

Validity refers to the extent to which a research study accurately measures what it is

intended to measure and whether the findings truly reflect the reality being studied. In simple terms, a study is considered valid when: The research tools measure the intended variables, the methods align with the research objectives and the conclusions are supported by the data collected.

The validity of this study on the role of goat farming in promoting sustainable agribusiness development in Gokwe South District was ensured through several measures. Firstly, content validity was achieved by designing research instruments (questionnaires, interviews, and focus group guides) that were directly aligned with the study objectives, namely: contribution of goat farming to household income, food and nutrition security, and strategies for improving goat farming as a sustainable agribusiness. Experts from the Department of Agriculture and academic supervisors reviewed the instruments to ensure that all relevant aspects of goat farming were adequately covered. Secondly, construct validity was ensured by grounding the study in established theories such as the Sustainable Livelihoods Framework, which guided the identification and measurement of key variables including income generation, asset accumulation, and resilience of households engaged in goat farming. Thirdly, internal validity was strengthened through the use of triangulation by collecting data from multiple sources, including goat farmers, veterinary officers, and Ministry of Agriculture officials. This helped to reduce bias and allowed for cross-verification of information. External validity was enhanced by selecting a representative sample of respondents from Gokwe South District, making the findings reasonably generalizable to similar rural districts in Zimbabwe where goat farming plays a significant agribusiness role. To ensure validity, instruments were reviewed by experts in agricultural economics and

research methodology to confirm content relevance and clarity.

3.7.2 Reliability

Reliability refers to the consistency, stability, and dependability of a research instrument or procedure. A study is said to be reliable if it produces similar results when repeated under the same conditions or when the same instrument is used by different researchers at different times. In other words, reliability answers the question: “If this study were repeated, would it give the same results?” Creswell & Creswell, (2018), hold that reliability is the degree to which a research instrument yields consistent and stable results over repeated trials. Reliability refers to the consistency of measurement, indicating the extent to which an instrument produces the same results under similar conditions (Saunders, Lewis, & Thornhill, 2019). Reliable research instruments minimize random errors and ensure that the data collected are trustworthy and consistent.

3.8 Ethical Considerations

Kothari (2021) defined ethical considerations as the moral principles that ensure participants are not harmed and their dignity is respected. Ethical considerations are essential in research to protect participants, ensure credibility of findings, and uphold academic integrity. Ethical considerations include actions and decisions that ensure the following: respect for persons, avoidance of harm, beneficence, justice, confidentiality

and privacy, integrity and honest and voluntary participation. Hence, the study adhered to research ethics by obtaining informed consent from participants, ensuring confidentiality, and using data solely for academic purposes. Permission was also sought from relevant local authorities. In conclusion, the study complied with ethical guidelines for research involving human subjects.

3.8.1 Informed Consent

Is an ethical and legal process in which an individual voluntarily agrees to participate in a study, medical treatment or other activity after being provided with all relevant information in a way they can understand (Fons-Martinez, et al.2024). The key features are that there should be adequate disclosure of information (revealing purpose, procedure, and risks), comprehension by the participant, voluntary decision making and capacity to make decisions. All participants were fully informed about the purpose, nature, and scope of the study before taking part. Participation was voluntary, and respondents were given the freedom to withdraw from the study at any stage without any negative consequences. Consent was obtained before administering questionnaires, interviews, and focus group discussions.

3.8.2 Confidentiality and Anonymity

The researcher ensured that all information provided by participants was treated with strict confidentiality. Personal identifiers such as names and specific locations were not included in the research report. Data collected were used solely for academic purposes and stored securely to prevent unauthorized access.

3.8.3 Non-Maleficence (Do No Harm)

The study was designed to avoid any form of physical, psychological, social, or economic harm to participants. Sensitive questions were avoided, and participants were not coerced or pressured to provide information they were uncomfortable sharing.

3.8.4 Voluntary Participation

Participants were not forced, induced, or manipulated into participating in the study. No financial or material incentives were used that could unduly influence participation, especially among small-scale goat farmers.

3.8.5 Honesty and Integrity

The researcher maintained honesty in data collection, analysis, and reporting. Findings were presented accurately without fabrication, falsification, or misrepresentation of data. All sources used in the study were properly acknowledged to avoid plagiarism.

3.8.6 Respect for Cultural and Institutional Norms.

The study respected local cultural values and norms within Gokwe South District. Permission was sought from relevant authorities such as veterinary offices and the

Ministry of Agriculture before engaging their officers in the study.

3.9 Chapter Summary

This chapter outlined the research methodology used to investigate the role of goat farming in promoting sustainable agribusiness development in Gokwe South District. It detailed the research design, population, sampling techniques, data collection tools which outlined questionnaires, interviews and focus groups, data analysis procedures, and ethical considerations. The study employed both structured and semi-structured interviews. Structured interviews were used to obtain standardized and comparable data from farmers, while semi-structured interviews allowed for in-depth exploration of expert views from veterinary officers and agricultural officials. According to scholars, the combination enhances data richness, credibility, and methodological rigor. The next chapter presents data analysis, results, and discussion of findings.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter presents, analyses and discusses the findings of the study on the role of goat farming in promoting sustainable agribusiness development in Gokwe South District. The analysis is guided by the study three objectives, namely: to assess the contribution of goat farming to household income; to evaluate the role of goat farming in food and nutrition and to explore strategies for improving goat farming as a sustainable agribusiness. Data were obtained through questionnaires and interviews administered to goat farmers, veterinary officers, and officials from the Ministry of Agriculture. Quantitative data were analyzed using descriptive statistics, while qualitative data were analyzed thematically. The findings are discussed in relation to existing literature outlined in Chapter 3.

4.1 Response Rate

A total of 120 questionnaires and interview schedules were administered. All respondents participated, yielding a 100% response rate, as shown in Table 4.1. This showed a strong participation and interest among respondents. According to Mugenda and Mugenda (2019), a response rate above 70% is considered adequate for social science research, thus validating the

reliability of the findings.

Table 2 : ***Response Rate***

Category	Targeted Number	Responded Number	Response Rate %
Goat Farmers	100	100	100
Veterinary Officers	10	10	100
Ministry of Agriculture Officials	10	10	100
Total	120	120	100

4.2 Demographic Characteristics of Respondents

Gender Distribution:

Graph 4.1

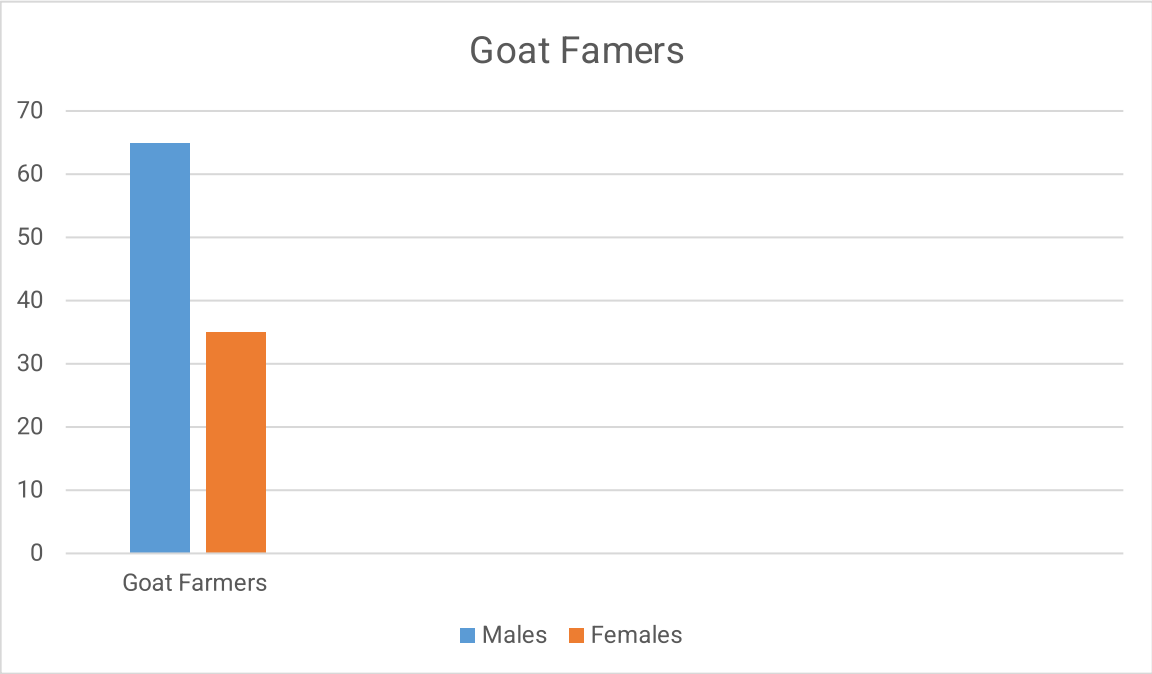

Figure 1 : Gender Distribution

The findings show that while goat farming is male-dominated, women constitute a significant proportion (35%), confirming that goat farming is a gender-inclusive agribusiness activity. FAO (2018) notes that small livestock production enhances women's economic participation in rural communities.

Age Distribution of Goat Farmers.

Table 3 : Age Distribution of Goat Farmers

Age group (Years)	Frequency	Percentage %
18 – 30	20	20
31 – 50	55	55
Above 50	25	25
Total	100	100

Most respondents fell within the economically active age group (31–50 years), indicating that goat farming contributes to employment creation and livelihood sustainability among productive households.

4.3. Educational Level:

Table 4 : ***Educational Level***

Education level	Frequency	Percentage (%)
Primary	40	40

Secondary	45	45
Tertiary	15	15
Total	100	100

The findings showed that most farmers possessed basic education, which influences farm management practices and adoption of improved goat farming technologies.

4.4 Contribution of Goat Farming to Household Income

4.4.1 Income Sources from Goat Farming:

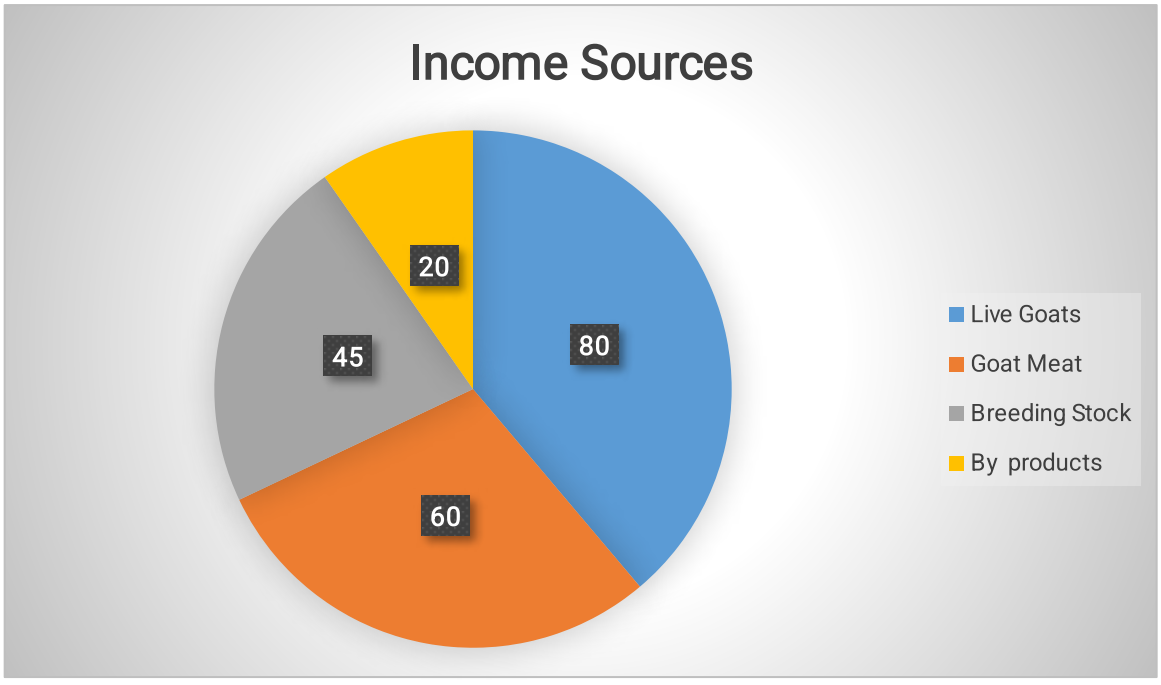

Figure 2 : Income Sources from Goat Farming

The sale of live goats was the primary income source (80%), confirming that goat farming plays a critical role in household income generation. FAO, (2020) argued that livestock farming as a key livelihood diversification strategy in rural economies. Respondents indicated that income was mainly generated through the sale of live goats, goat meat, breeding stock and goat by products. Goat farming contributed significantly to household income, particularly during periods of financial stress such as school fee payments and medical emergencies. These findings support FAO, (2020), who asserted that livestock farming plays a critical role in income diversification and resilience among rural households.

4.4.2 Contribution of Household income levels

Estimated income contribution:

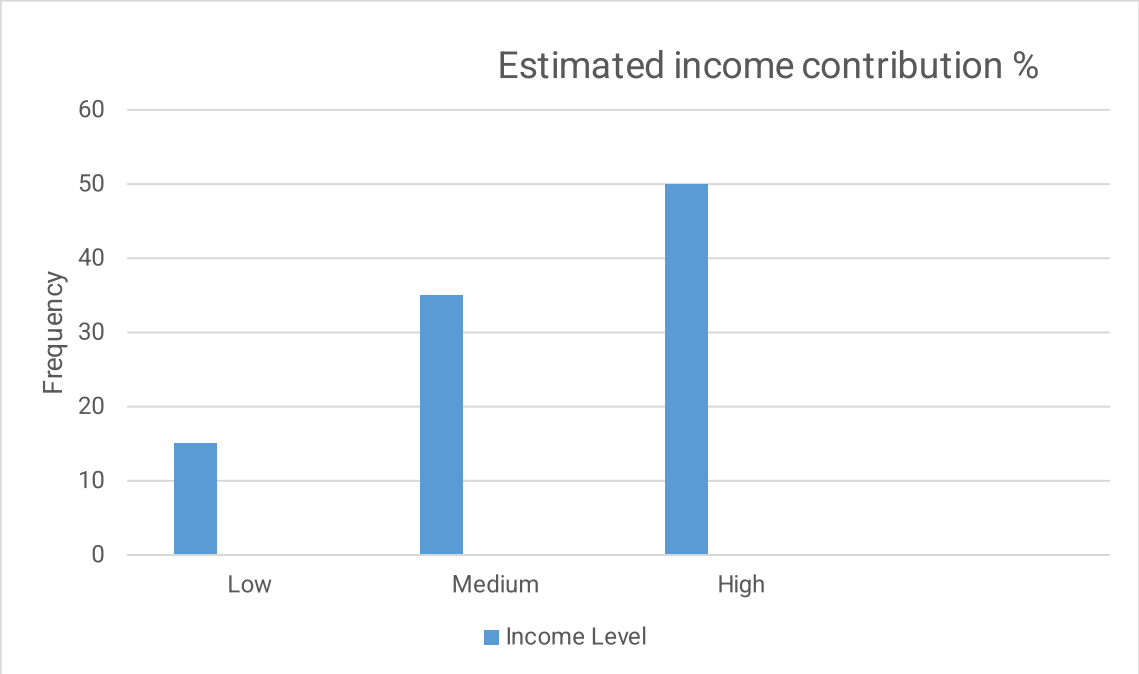

Figure 3 : Estimated income contribution

Half of the respondents reported a high contribution of goat farming to household income, particularly for school fees, healthcare, and food purchases. Creswell, (2020), noted that livestock enhances household economic resilience. This line of thought aligns with respondents report.

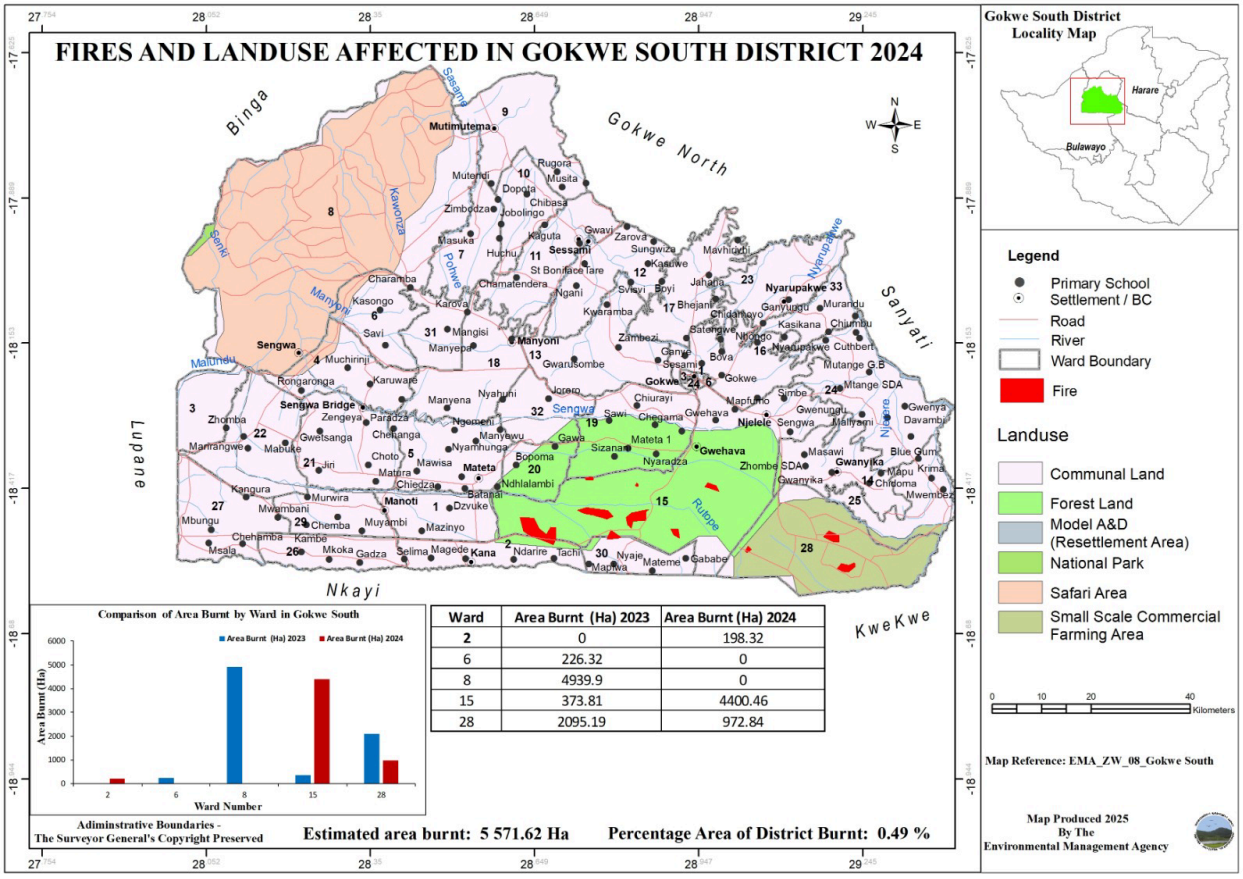

Figure 4 fires and landuse map

Veld fire reduces household income. Poor pasture poor meat quality low prices

4.4.3 Nutritional Benefits.

Goat meat is a lean protein source, low in fat and cholesterol compared to beef or pork (Webb and O'Neill, 2021). Respondents acknowledged that goat meat is lean, nutritious, and culturally acceptable. Additionally, goat milk, though less commonly consumed, was recognized for its nutritional value. These findings align with some scholars who highlights that goats contribute to improved nutrition outcomes in rural communities through meat and milk production. Veterinary officers confirmed that goat meat

provides essential proteins and micronutrients, in support to respondents' findings.

4.4.4 Income Stability and Livelihood Support

Goat farming was found to provide a relatively stable and flexible source of income compared to crop farming, especially in drought-prone areas like Gokwe South District. This confirms assertions that small livestock enhances livelihood sustainability under climate variability.

4.5 Role of Goat Farming in Food and Nutrition

4.5.1 Household Food Consumption

Table 5 : Household Food Consumption

Product	Yes (%)	No (%)
Goat Meat	85	15
Goat Milk	30	70

The majority of respondents reported consuming goat meat at household level. Goat meat was regarded as a reliable source of protein, particularly for children and vulnerable household members. According to FAO (2020), small ruminants contribute significantly to household food security by providing high-quality animal protein.

4.6 Strategies for Improving Goat Farming as a Sustainable Agribusiness

4.6.1 Access to Veterinary and Extension Services

Table 6 : Access to Veterinary and Extension Services

Access Level	Frequency	Percentage (%)
Adequate	25	25
Inadequate	75	75

The study revealed limited access to veterinary services, resulting in disease outbreaks and high mortality rates. Strengthening extension support and regular vaccination programs were identified as key strategies for improving productivity. According to World Bank (2020), effective animal health systems are essential for sustainable livestock agribusiness development.

4.6.2 Market Access and Value Addition

Respondents indicated challenges related to poor market access and low prices offered by middlemen. Ministry of Agriculture officials highlighted the absence of formal goat

markets and limited value addition. Strategies proposed included: Formation of goat farming cooperatives, establishment of formal markets (abattoirs) and value addition through meat processing and packaging. This supports Porter's value chain theory, which emphasises value addition as a pathway to increased competitiveness and profitability.

4.6.3 Access to Finance and Inputs

Limited access to credit facilities was identified as a major constraint. Respondents recommended microfinance schemes and government support programmes tailored to smallholder goat farmers. These findings are consistent with IFAD (2019), which stresses the importance of financial inclusion in promoting agribusiness sustainability.

4.6.4 Avoiding veld fires.

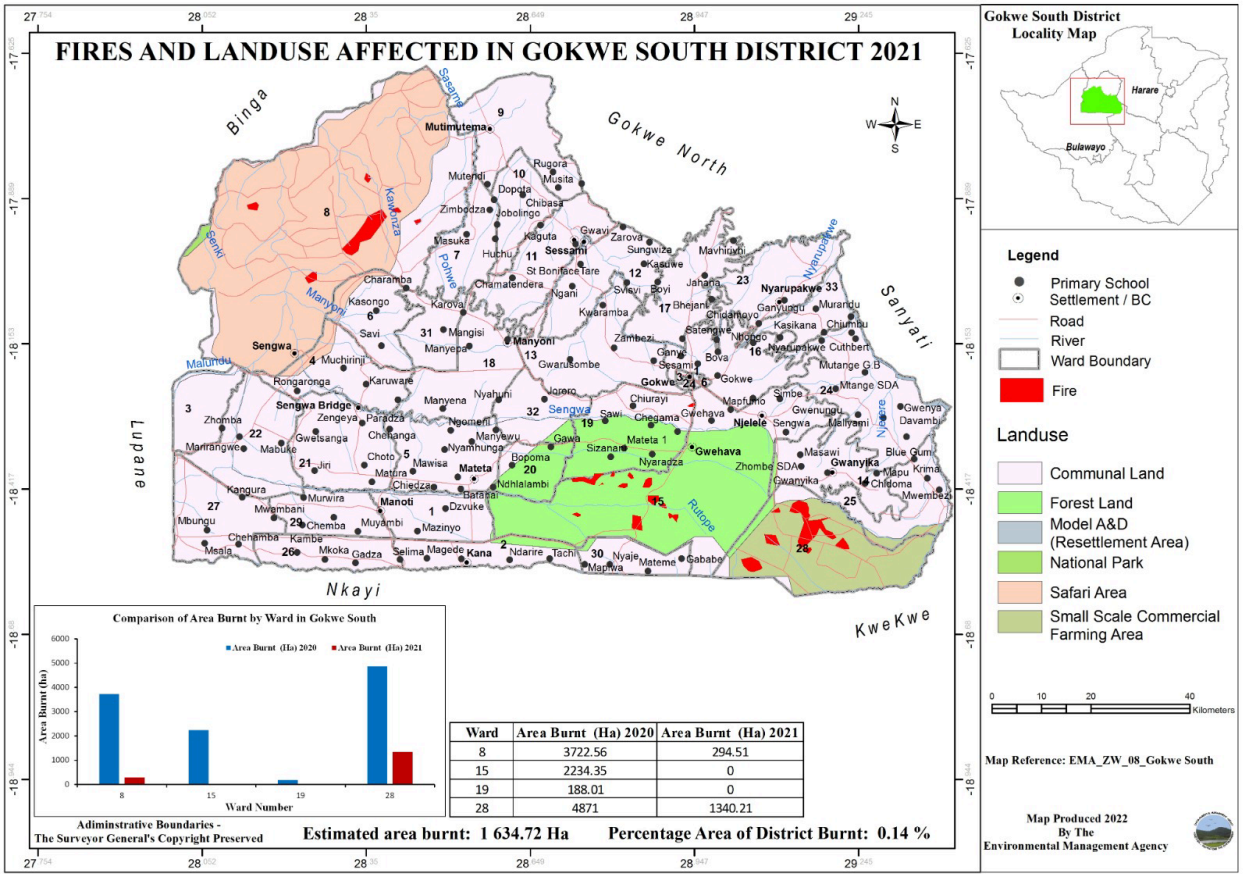

Figure 5 : *Avoiding veld fires*

Goats will lack a grazing space due to fire.

4.7 Discussion of Findings

This chapter discusses the study findings in relation to existing literature and theoretical perspectives. The discussion aligns the empirical results with scholarly work and highlights areas of convergence. Overall, the findings demonstrate that goat farming plays a significant role in household income generation, food and nutrition security, and rural agribusiness development in Gokwe South District. However,

constraints such as inadequate veterinary services, poor market structures, and limited financial support hinder its full potential. Addressing these challenges would enhance goat farming as a viable and sustainable agribusiness.

The findings revealed that goat farming significantly contributes to:

4.7.1 Household income.

Most respondents indicated that income from goat sales supports school fees payments, food purchases, and emergency expenditures. This finding aligns with the Sustainable Livelihoods Framework, which emphasizes livestock as a critical asset for strengthening rural livelihoods (Scoones, 2022). Similarly, studies by Hassen et al. (2021) and Dube and Moyo (2023) found that small livestock enterprises improve income stability among rural households in sub-Saharan Africa.

The results further confirm that goat farming acts as a “living bank,” enabling households to convert livestock into cash during financial shocks. This supports findings by FAO (2023), which highlight goats as important financial buffers in rural economies. This shows that goat farming enhances income diversification and reduces vulnerability to poverty.

4.7.2 Employment Creation and Agribusiness Development

The study found that goat farming creates both direct and indirect employment opportunities across the value chain, including herding, trading, transportation, and feed

supply.

This finding supports value chain theory, which emphasizes the interconnectedness of production, processing, and marketing activities. Recent literature confirms that livestock value chains stimulate rural enterprise development (Ayele et al., 2022).

In Zimbabwean contexts, livestock commercialization has been shown to promote micro-enterprise growth and rural industrialization (Chitongo & Muzenda, 2024). The present findings therefore reinforce the role of goat farming as a catalyst for local agribusiness expansion. The implication is that strengthening goat value chains could enhance rural economic transformation.

4.7.3 Food Security and Nutritional Improvement

Respondents reported improved access to meat and enhanced dietary diversity. Goat farming contributes to protein intake and improves household nutrition. This finding corroborates FAO (2023), which states that small ruminants significantly contribute to food and nutrition security in developing countries. Additionally, research by Leroy et al. (2022) confirms that livestock ownership is positively associated with improved dietary diversity among rural households. The study findings therefore support global Sustainable Development Goals, particularly SDG 1 (No Poverty) and SDG 2 (Zero Hunger) (United Nations, 2023). The implication being that goat farming supports both economic and nutritional wellbeing.

4.7.4 Challenges Affecting Goat Farming Productivity

The study identified major constraints including disease outbreaks, limited access to veterinary services, inadequate markets, and lack of financing. These findings are consistent with scholars. Mapiye et al. (2021), identified animal health constraints and poor extension services as major barriers to smallholder livestock productivity in Southern Africa. Furthermore, access to credit remains a persistent challenge limiting livestock commercialization (World Bank, 2022). The findings also align with systems theory, which suggests that weaknesses in one subsystem for example veterinary services affect the entire production system (Allen & Prosperi, 2020). This implies that institutional support and policy interventions are critical for sustainability.

4.7.5 Gender Participation in Goat Farming

The study found high participation of women in goat production and marketing activities. Women were largely responsible for goat management and income utilization at household level. This aligns with findings by Njuki and Sanginga (2021), who argue that small livestock enterprises empower women economically. FAO (2023) also notes that goat farming enhances women's financial inclusion and decision-making power in rural communities.

However, despite active participation, women still face challenges accessing credit and larger markets, confirming gender-based structural barriers highlighted in recent rural development literature (UN Women, 2022). This implies that policies should promote gender-inclusive livestock financing and training.

4.7.6 Theoretical Integration of Findings

The findings strongly support the Sustainable Livelihoods Framework, which posits that access to productive assets (such as livestock) enhances livelihood outcomes (Scoones, 2022). Goat farming strengthens: Financial capital (income generation), Human capital (skills development), Social capital (market networks), Physical capital (asset accumulation). Additionally, the results validate Value Chain Theory, demonstrating that goat farming impacts multiple nodes within the agribusiness ecosystem (Kaplinsky & Morris, 2021).

Overall, the findings are consistent with contemporary literature demonstrating that goat farming plays a significant role in promoting sustainable agribusiness development. However, productivity remains constrained by institutional and infrastructural challenges. Therefore, strengthening veterinary services, improving market access, and enhancing financial inclusion could significantly increase the sector's contribution to rural economic transformation in Zimbabwe.

4.7.8 Chapter Summary

This chapter presented and discussed the study findings of the study on the role of goat farming in promoting sustainable agribusiness development in Gokwe South District in line with the research objectives, aligned with the methodology outlined in Chapter

Three. The findings demonstrated that goat farming contributes significantly to household income, with many households relying on the sale of live goats, goat meat and goat products as a dependable source of cash income. Goat farming was shown to play a crucial role in cushioning households against economic shocks, particularly in a climate-vulnerable and resource-constrained rural setting such as Gokwe South District.

With regard to food and nutrition, the study established that goat farming enhances household food security through regular access to goat meat, which provides essential proteins and nutrients. Although goat milk consumption was limited, respondents acknowledged its nutritional value, suggesting untapped potential for improved dietary diversity through expanded goat production systems. In relation to sustainable agribusiness development, the findings revealed that goat farming in Gokwe South District remains largely under-commercialized. Major constraints identified included inadequate veterinary and extension services, limited access to structured markets, minimal value addition, and restricted access to finance. Despite these challenges, the study confirmed that goat farming has strong potential to develop into a sustainable agribusiness if supported through targeted interventions.

In conclusion, the chapter demonstrates that goat farming is not merely a subsistence activity but a viable agribusiness venture capable of contributing meaningfully to household income, food and nutrition security, and sustainable rural development in Gokwe South District. The empirical evidence presented provides a strong foundation for the conclusions and recommendations discussed in the next chapter which is

Chapter Five.

CHAPTER FIVE

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This Chapter discusses the major findings of the study in relation to existing literature and theoretical frameworks, namely the Sustainable Livelihoods Framework, Systems Theory, and Triple Bottom Line theory. The discussion focuses on income generation, food security, asset accumulation, market access, and institutional challenges affecting goat farming in Gokwe South District. Furthermore, the chapter presents a summary of the study, draws conclusions based on the research findings, and offers recommendations aimed at enhancing goat farming as a sustainable agribusiness in Gokwe South District encompassed with the three main objectives of the study. These recommendations are made to all stakeholders namely the Government, NGOs, goat farmers, Veterinary officers and the community. The Chapter will end by highlighting the study's contributions, limitations, and areas for future research.

5.1 Summary of the Study

The study investigated the role of goat farming in promoting sustainable agribusiness development in Gokwe South District. The specific objectives were to assess the contribution of goat farming to household income, evaluate its role in food and nutrition, and explore strategies for improving goat farming as a sustainable agribusiness. A mixed-methods approach was adopted, combining quantitative data from questionnaires administered to 100 goat farmers and qualitative data from interviews with 10 veterinary officers and 10 Ministry of Agriculture officials. Data were analyzed using descriptive statistics and thematic analysis, consistent with the methodology outlined in Chapter Three.

5.2 Summary of findings

The study examined the contribution of goat farming to sustainable agribusiness development in Gokwe South District, with specific focus on household income, food and nutrition security, and strategies for improving goat farming sustainability. The findings reveal that goat farming plays a significant socio-economic and livelihood role among rural households in the district. Goat Farming and Rural Income in Zimbabwe.

Firstly, the study established that goat farming contributes meaningfully to household income. The study found that goat farming significantly contributes to household income in Gokwe South District. This finding is consistent with Zimbabwean studies that identify small ruminants as critical livelihood assets in semi-arid regions such as Midlands Province (Ndlovu & Muchenje, 2020; Chikwanha et al., 2022). Research conducted in Matabeleland and Midlands provinces shows that goats serve as “liquid

assets” because they can be quickly sold to meet urgent household needs, including school fees and health expenses (Ndlovu & Muchenje, 2020). These findings support the livelihood arguments advanced by Scoones (2021), who emphasizes livestock as a resilience mechanism in dryland Zimbabwe.

Furthermore, national livestock development reports from Food and Agriculture Organization (2023) confirm that small ruminants contribute significantly to rural cash flow, particularly where crop agriculture is climate-sensitive. Most farmers rely on goat sales to meet basic needs such as school fees, medical expenses, and food purchases, especially during periods of crop failure. Goats were found to be preferred livestock due to their low start-up costs, adaptability to semi-arid conditions, and ability to provide quick cash compared to cattle.

Secondly, findings showed that goat farming enhances food and nutrition security. The study revealed that goats improve food security through meat consumption and income generation. This aligns with findings from southern Zimbabwe, where goats are considered drought-tolerant livestock suitable for arid agro-ecological regions IV and V (Chikwanha et al., 2022). Zimbabwe’s climate variability makes cattle production risky in some districts; however, goats adapt better to low rainfall and poor grazing conditions. According to the World Bank (2022), climate-resilient livestock systems are key to strengthening food security in Sub-Saharan Africa. Thus, goat farming in Gokwe South enhances dietary diversity and acts as a buffer during crop failure years, reinforcing the Sustainable Livelihoods Framework. Goat meat was identified as an important source

of animal protein, particularly for vulnerable households. Although goats were not slaughtered frequently, they served as a nutritional buffer during special occasions and times of food scarcity. This confirms the role of goats in strengthening household resilience and dietary diversity.

Thirdly, the study revealed that goat farming contributes to sustainable agribusiness development, though largely at a subsistence and semi-commercial level. Most farmers practiced traditional production methods, with limited value addition, formal market access, and business planning. This limited the full commercialization potential of goat farming in the district. Recent empirical studies further confirm that small ruminants are critical financial assets for rural households because they are easily convertible into cash during times of need (Dube & Mapiye, 2021; FAO, 2023).

From a theoretical perspective, these findings support the Sustainable Livelihoods Framework, which views livestock as part of household financial and physical capital that enhances resilience and adaptive capacity. However, despite the income benefits, the study found that commercialization levels remain low due to poor market structures, limiting farmers' ability to maximize profits.

The study further found that farmers face several constraints affecting sustainability, including inadequate veterinary services, disease outbreaks, fire outbreaks, poor access to credit, lack of training, limited extension support, and weak market linkages. These

challenges reduce productivity, profitability, and growth of the goat farming sector.

Finally, the findings indicate that there is strong potential for improving goat farming as a sustainable agribusiness. Strategies identified include improved veterinary and extension services, farmer training in modern husbandry practices, access to affordable finance, promotion of value addition (such as meat processing and skin utilization), and development of organized markets and cooperatives.

5.3 Conclusion.

5.3.1 Contribution of Goat Farming to Household Income

The study concludes that goat farming makes a significant contribution to household income in Gokwe South District. Income generated from the sale of live goats, goat meat and goat products provides households with financial stability and supports essential demands such as education, healthcare, and food purchases. Goat farming therefore serves as a reliable livelihood diversification strategy, particularly in a climate-vulnerable rural context.

5.3.2 Role of Goat Farming in Food and Nutrition

The study further concludes that goat farming plays an important role in improving household food and nutrition security. Regular consumption of goat meat contributes to

protein intake and dietary quality. Although goat milk utilisation remains limited, its recognised nutritional benefits indicate potential for enhancing household nutrition through improved production and consumption practices.

5.3.3 Goat Farming as a Sustainable Agribusiness

The study concludes that goat farming has strong potential to develop into a sustainable agribusiness, but this potential is currently constrained by inadequate veterinary services, limited market access, low levels of value addition, and restricted access to finance. Addressing these challenges would significantly enhance productivity, profitability, and sustainability within the goat farming sector.

5.4 Recommendations

Based on the study findings and conclusions, the following recommendations are proposed:

1. Strengthening Market Structures

The government, private sector and local authorities and agricultural organizations should create reliable markets for goats and goat products. Establishing auction floors, slaughter facilities, and links with supermarkets and meat processors can help farmers earn stable incomes and reduce exploitation by middlemen.

2. Promoting Value Addition

Farmers should be trained in value addition activities such as goat milk processing, leather production, manure packaging, and meat processing. Value addition increases profits and creates employment opportunities for youth and women in the district. Investment in small-scale abattoirs and meat processing facilities should be encouraged to enhance value chain participation and increase farmer incomes.

3. Improving Veterinary and Extension Services

The Ministry of Lands, Agriculture, Fisheries, Water and Rural Development should increase extension officer coverage and disease control programs to reduce mortality rates. Government agricultural officers and veterinary departments should provide regular training on goat management, disease control, vaccination, and nutrition. Healthy goats reduce farmer losses and improve productivity, making goat farming more sustainable and profitable.

4. Facilitating Access to Finance

Banks, microfinance institutions, and government programs should provide affordable loans specifically for smallholder goat farmers. Access to capital helps farmers buy improved breeds, construct shelters, purchase feed, and expand production.

5. Encouraging Farmer Cooperatives

Farmers should be encouraged to form producer cooperatives to enhance collective marketing, bulk selling, and improved negotiation power. Goat farmers should form cooperatives or producer groups. Cooperatives help farmers buy feed and medicines at lower costs, share knowledge, and bargain for better prices in the market. Collective

marketing also improves access to larger buyers and export opportunities.

6. Better goat breed

Government and NGOs to assist farmers with better goat breed like the boer goat. Boer goats are good for these reasons: grow faster than other goat breeds, strong build, easy breeding and profitable. Hence, farmers should be encouraged to use improved and disease-resistant goat breeds such as Boer and Matebele goats. Improved breeds apart from growing faster, they produce more meat, and fetch better market prices. This increases household income and strengthens agribusiness development in rural communities.

5.5 Contribution of the Study

The study contributes to agribusiness and rural development literature by providing empirical evidence on the role of goat farming in income generation, food security, and sustainable livelihoods in a semi-arid rural district. It also offers practical insights for policymakers, practitioners, and development partners seeking to promote small livestock agribusiness.

5.6 Limitations of the Study

Despite its contributions, the study had some limitations. The research was confined to

Gokwe South District, which may limit generalization of the findings to other regions. Additionally, the study relied partly on self-reported data, which may be subject to response bias.

5.7 Areas for Further Research

Future studies could:

1. Value Addition and Agro-Processing

Future studies could examine the impact of value addition activities such as goat meat processing, milk processing, leather production, and packaging on income generation and market competitiveness among smallholder farmers.

2. Climate Change and Resilience Strategies

Further research may investigate how climate variability affects goat productivity and the effectiveness of adaptive strategies such as improved breeds, drought-resistant fodder, and water-harvesting techniques.

3. Access to Finance and Credit Facilities

To carry studies focusing on the role of microfinance institutions, savings groups, and government funding schemes in expanding goat farming as a viable agribusiness.

4. Gender and Youth Participation in Goat Farming

Future research could explore gender dynamics and youth involvement in goat farming, assessing how inclusivity influences productivity, innovation, and sustainability.

5. Market Linkages and Supply Chain Development

Research could be conducted on the structure of goat value chains, pricing mechanisms, and the role of cooperatives in improving market access for smallholder farmers.

6. Policy Impact Evaluation

Further research may evaluate the effectiveness of existing agricultural and livestock policies in supporting sustainable goat farming and agribusiness development.

5.8 Chapter Conclusion

This chapter summarized the study, presented key conclusions, and proposed recommendations for strengthening goat farming as a sustainable agribusiness in Gokwe South District. Overall, the study demonstrates that goat farming is a viable agribusiness pathway capable of contributing meaningfully to household income, food security and nutrition, and sustainable rural development if adequately supported.

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APPENDICES

APPENDIX A: QUESTIONNAIRE

FOR THE STUDY ON THE ROLE OF GOAT FARMING IN PROMOTING SUSTAINABLE AGRIBUSINESS DEVELOPMENT IN GOKWE SOUTH DISTRICT, ZIMBABWE.

Study Title: The role of goat farming in promoting sustainable agribusiness development in Gokwe South district, Zimbabwe.

Researcher: Brighton Magaiza

Student Number: PG239959G

Introduction

My name is Brighton Magaiza, currently a student at The Catholic University of Zimbabwe. I am conducting a research study on the role of goat farming in promoting sustainable agribusiness development in Gokwe south district, Zimbabwe.

The purpose of this study is to understand the income, livelihood activities, socio-economic factors, and market constraints of goat farmers in Gokwe South. Your participation is voluntary. All information provided will be treated with strict confidentiality and used solely for academic purposes. No names will be recorded, and your identity will not be disclosed. Please answer all questions honestly.

GOAT FARMERS' QUESTIONNAIRE

Instruction: Tick (✓) the appropriate answer. Information provided will be treated confidentially and used strictly for academic purposes.

Section A: Demographic Information

Gender:

☐ Male

☐ Female

Age group:

☐ Below 25

☐ 26–35

☐ 36–45

☐ Above 45

Education level:

☐ None

☐ Primary

☐ Secondary

☐ Tertiary

Years in goat farming:

☐ 1–5

☐ 6–10

☐ Above 10

Section B: Contribution to Household Income

Number of goats owned:

☐ Below 10

☐ 10–20

☐ Above 20

Goat farming is a source of household income.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Income from goat farming has improved my household livelihood.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Main income activities from goats (tick all):

☐ Sale of live goats

☐ Meat

☐ Milk

☐ Breeding

Section C: Food and Nutrition

My household consumes goat products regularly.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Goat products contribute to improved household nutrition.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Section D: Sustainability and Challenges

Major challenges faced (tick all):

☐ Diseases

☐ Feed shortage

☐ Markets

☐ Finance

☐ Theft

Training and extension services improve goat farming sustainability.

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Suggest ways to improve sustainable goat farming:

……

……

VETERINARY SERVICES QUESTIONNAIRE

What common diseases affect goats in this district?

……

……

….

How do goat diseases affect farmers' income and productivity?

……

……

…

How accessible are veterinary services to goat farmers?

☐ Very accessible

☐ Accessible

☐ Not accessible

What challenges limit effective veterinary support?

……

……

…

What interventions can enhance sustainable goat farming?

……

……

Additional comments:

……

……

MINISTRY OF AGRICULTURE QUESTIONNAIRE

Are there government programmes supporting goat farming?

☐ Yes

☐ No

How does goat farming contribute to household income in rural areas?

……

……

…

What are environmental challenges (e.g., deforestation, soil degradation, fire outbreak) that affect goat farming-based livelihoods?

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……

……

What role does goat farming play in food and nutrition security?

……

……

…

What policies promote goat farming as a sustainable agribusiness?

……

……

What challenges hinder the growth of goat farming?

……

…….....

What strategies can strengthen goat farming sustainability?

……

……

…

Additional comments:

……

……

COMMUNITY LEADERS' QUESTIONNAIRE

Is goat farming common in your community?

☐ Yes

☐ No

Does goat farming contribute to food security in the community?

☐ Yes

☐ No

Are there cultural practices that influence goat farming?

……
……

What community-based strategies can improve sustainable goat farming?

……
……

Additional comments:

……
……
…

Section E: Policy, Programs, and Recommendations

1. In your opinion, what policies or programs could enhance the economic benefits of goat farming for households?

2. What interventions would improve market access, training, or institutional support for goat farming-based livelihoods?

3. Are there community-level strategies that can strengthen both income generation and sustainable goat farming management?

4. What advice would you give policymakers or NGOs working to improve goat farming in Gokwe South District?

Thank you for your participation and time. Your input is highly appreciated.

APPENDIX B: SEMI-STRUCTURED INTERVIEW FOR KEY INFORMANTS

FOR THE STUDY ON THE ROLE OF GOAT FARMING IN PROMOTING SUSTAINABLE AGRIBUSINESS DEVELOPMENT IN GOKWE SOUTH DISTRICT, ZIMBABWE.

Study Title: The role of goat farming in promoting sustainable agribusiness development in Gokwe South district, Zimbabwe.

Researcher: Brighton Magaiza

Student Number: PG239959G

Introduction

My name is Brighton Magaiza, a student at The Catholic University of Zimbabwe. I am conducting a research study titled: The role of goat farming in promoting sustainable agribusiness development in Gokwe South district, Zimbabwe. The purpose of this study is to explore how goat farming sustains households in income and food security.

Your participation is voluntary, and all responses will be kept strictly confidential. No names will be recorded, and your identity will not be disclosed. The information you provide will help generate recommendations to improve forestry-based livelihoods and support sustainable rural development.

Section 1: Demographic and Professional Information

1. **Age:** _____

2. **Gender:**

   ☐ Male

   ☐ Female

   ☐ Prefer not to say

3. Position/Job Title: _____

4. Organization or Department (if applicable): _____

5. **Years of experience in this field of animals' services in community support:**

   ☐ Less than 1 year

   ☐ 1–3 years

   ☐ 4–6 years

   ☐ 7–10 years

   ☐ More than 10 years

1. Background

Can you briefly describe your role and experience related to goat farming in Gokwe South District?

2. Status of Goat Farming

How would you describe the current state and importance of goat farming in the district?

What major changes or trends have you observed in goat production in recent years?

3. Contribution to Agribusiness Development

In what ways does goat farming contribute to household income and local agribusiness activities?

How strong are the market linkages for goats and goat products in and beyond Gokwe South?

4. Sustainability of Goat Farming

How does goat farming contribute to economic and food security sustainability in the district?

From your perspective, how environmentally sustainable is goat farming in this area?

5. Institutional Support

What forms of institutional or policy support exist for goat farmers, and how effective are they?

How would you assess the role of extension and veterinary services in promoting sustainable goat farming?

6. Challenges and Constraints

What are the main challenges limiting goat farming and agribusiness development in the district?

How do factors such as climate variability, disease, and access to finance affect the sector?

7. Opportunities and Future Prospects

What opportunities exist for improving goat value chains and value addition?

How can goat farming be strengthened as a sustainable agribusiness in the future?

8. Closing

Do you have any additional comments or recommendations on goat farming in Gokwe South District?

THANK YOU FOR YOUR PARTICIPATION AND TIME. YOUR INPUT IS HIGHLY APPRECIATED.

APPENDIX C: CONSENT FORM FOR PARTICIPATION IN A RESEARCH STUDY

Title of the Study: The role of goat farming in promoting sustainable agribusiness development in Gokwe South district, Zimbabwe.

Researcher:
Brighton Magaiza
Student Number: PG239959G
The Catholic University of Zimbabwe
Contact: _____

Purpose of the Study

You are invited to participate in a research study that seeks to know the role of goat farming in promoting sustainable agribusiness development in Gokwe South District.

The study aims to understand the contribution of goat farming in promoting livelihoods of people, household income, identify socio-economic and demographic factors influencing goat farming.

Voluntary Participation

Participation in this study is entirely voluntary. You may choose not to participate, skip any question, or withdraw from the study at any time without any penalty or negative consequence.

Study Procedures:

If you agree to participate, you will be asked to:

1. Complete a questionnaire and/or participate in an interview lasting approximately

15–35 minutes.

2. Provide information about goat farming activities, sources of income, and socio-economic characteristics carried by families in your area.

3. Share your views on challenges, government support, market access, and strategies to improve goat farming.

There are no right or wrong answers. Please answer honestly based on your experiences.

Risks and Discomforts

There are no anticipated physical risks. Discussing household income or livelihood strategies may cause mild discomfort. You may choose not to answer any question you feel uncomfortable with.

Benefits of the Study

While there are no direct financial benefits to participants, your contribution may:

Help understand how goat farming sustains livelihoods of people in Gokwe South District.

Inform policy, programs, and community interventions to enhance sustainable goat farming income.

Provide insights for NGOs, local authorities, and development practitioners working in goat farming.

Confidentiality

All information you provide will remain confidential:

Your name or personal identifiers will not appear in any report or publication.

Responses will be used solely for academic purposes.

Data will be accessed only by the researcher and supervisor.

Consent

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I will receive the copy of the consent. I voluntarily agree to take part in this study.

Participant's signature _____ Date _____

Researcher’s signature _____ Date _____

Thank you for your participation. Your contribution is highly appreciated.

RELEASE FORM

THE CATHOLIC UNIVERSITY OF ZIMBABWE

Name of Student: Brighton Magaiza

Student Number: PG239959G

Dissertation Title: THE ROLE OF GOAT FARMING IN PROMOTING SUSTAINABLE AGRIBUSINESS DEVELOPMENT IN GOKWE SOUTH DISTRICT, ZIMBABWE.

Programme Title: Master of Business Administration in Impact Entrepreneurship (E4IMPACT MBA)

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Signed: _____

Permanent Address: _____

Date: February 2026