



Developing a framework for sustainable entrepreneurship for small, medium and micro-enterprises in the agricultural sector in Zimbabwe

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ABSTRACT

Global warming, resulting from escalating greenhouse gas emissions, affects human populations and ecosystems and adversely affects economic development. The commercial activities undertaken by businesses are currently implicated in exacerbating global warming due to their use of unsustainable business practices. Consequently, enterprises bear a responsibility to actively engage in the adoption of sustainable practices within their operational frameworks. Incorporating ecological and societal considerations has become widely acknowledged as a necessary component of corporate social responsibility for large corporations. SMMEs have exhibited a lack of enthusiasm for integrating sustainability practices inside their business operations. Small and medium-sized enterprises (SMEs) are no longer accessible from the imperative of sustainability. Consequently, it is incumbent upon them to embrace sustainable entrepreneurship to mitigate their ecological footprint.

The aim was to explore the strategies, motivation, challenges and opportunities for sustainable entrepreneurship through the lived experience of SMMEs. The study indicated many determinants and motivational factors for adopting sustainable entrepreneurship by SMMEs. The interviewees viewed environmental and social concerns as the driving force behind the formation and exploitation of opportunities, focusing on sustainability. The results also showed that SMMEs place non-economic aims (environment and social concerns) on par with economic objectives. The analysis concludes that SMMEs in the agricultural sector balance all three dimensions of the Triple Bottom Line (TBL) in their sustainable business ventures. Sustainable entrepreneurship is advantageous to the economy, society, and environment. Adopting it reduces poverty, increases food production, protects the environment, creates jobs, improves livelihoods, and boosts the nation's economic development. Multiple recommendations were provided to four groups: legislators, SMMEs, the general populace and the business world.

The present study employed a qualitative methodology to gather data, employing purposive sampling to pick initial participants and utilising the snowball sampling technique until data saturation was attained. The study used epistemological and

ontological assumptions. This study is situated within the interpretivism and postmodernism research paradigm. Both deductive and inductive reasoning were employed in theory creation, along with a qualitative methodological approach, to generate novel and more comprehensive insights and interpretations of sustainable business. Using a methodology involving various descriptive case studies, data was gathered from sixteen SMMEs that operate sustainably. This data was acquired through semi-structured interviews. Other methods, such as observations, document analysis, and field notes, were employed to validate the findings from the interview. Subsequently, a manual thematic analysis was conducted to examine the collected data. The investigation yielded seven distinct themes.

The study theoretically fills a conceptual vacuum in the literature because there has been relatively little research on sustainable entrepreneurship among small and medium-sized firms in the agricultural sector. Understanding this aspect of sustainable entrepreneurship will be a foundation for future research in this sector. This study's findings substantially contribute to current theories and significantly improve the practice of sustainable entrepreneurship in Zimbabwe. Based on the literature, the lived experience and the sustainable practices adopted by the participating SMMEs, a framework for explaining how sustainable entrepreneurship can be adopted among SMMEs was developed. The framework highlighted several determinants, motivational factors, challenges, sustainability outcomes, and benefits and made several recommendations. It guides how to contribute to implementing sustainable practises and assists SMMEs in recognising sustainable opportunities and comprehending that they can engage in sustainability entrepreneurship. The framework for sustainable entrepreneurship from the study can be used to develop a policy that will increase the adoption of sustainable entrepreneurship among SMMEs operating in the agriculture sector.

Keywords: sustainable entrepreneurship, sustainability, entrepreneurship, SMMEs, agriculture, sustainable development

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DEDICATION

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LIST OF ACRONYMS

SMMEs: Small, Micro, and Medium-sized Enterprises

MDGs: Millennium Development Goals

SDGs: Sustainable Development Goals

TBL: Triple Bottom Line

CSR: Corporate Social Responsibility

WTO: World Trade Organisation

LRRP: Land Reform and Resettlement Programme

FTLRP: Fast Track Land Resettlement Program

AKTIS: Knowledge, Technology, and Innovation System in Agriculture

AGRITEX: Agricultural Technical and Extension Services

AGPTs: Agricultural Good Practices and Technologies

CHAPTER 1

NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

Promoting sustainable entrepreneurship among aspiring and established entrepreneurs could result in an effective solution to prevent environmental degradation, maintain the ecosystem, raise agricultural output, decrease poverty, and boost environmental, social, and economic growth (Sher *et al.*, 2020:3; Dean & McMullen, 2007:57; Youssef, *et al.*, 2018:6). Sustainable entrepreneurship is gaining growing recognition from scholars, practitioners, and policymakers as a way to solve inequality and environmental degradation (Mendes *et al.*, 2022:4; Muñoz & Cohen, 2018:314; Urbaniec *et al.*, 2022:256). It has been considered a vital subdomain of a solution to social and environmental problems (Argade *et al.*, 2021:3532; Stubbs, 2017:335). It refers to the discovery, creation, and exploitation of entrepreneurial opportunities that contribute to sustainability with triple-bottom-line objectives, i.e., economic, social, and environmental well-being (Hockerts & Wüstenhagen, 2010:485; Shepherd & Patzelt, 2011:141). Sustainable entrepreneurship enables entrepreneurs to gain profit and improve social and ecological conditions simultaneously (Belz & Binder, 2017:6).

The most significant overarching obstacle for the human race is maintaining the biosphere within a secure and equitable operational boundary. This necessitates the provision of adequate resources to fulfil the wants of individuals while simultaneously refraining from surpassing the Earth's potential to sustainably provide for such demands (Raworth, 2012:38). The term "safe" is defined as the ability to maintain planetary environmental processes, including climate regulation and nutrient cycles, within sustainable boundaries for an extended period (Rockstrom *et al.*, 2009:472). The term "just" is progressively being understood within the context of achieving the United Nations Sustainable Development Goals. These goals encompass targets that address equity-related issues and biophysical requirements (Griggs *et al.*, 2013:306). To preserve the biosphere within its operational boundaries, it is imperative to ensure

the production of necessary food and the provision of socioeconomic goods and services, all while protecting the integrity of the environment (Garnett *et al.*, 2013:34). In practical terms, this concept entails the production of a greater quantity of food within a given land or water region, while concurrently mitigating or even reversing detrimental environmental consequences. Moreover, this approach yields several advantageous outcomes for society and the environment.

There is a rising demand for significant enhancements in food production (Bernard & Lux, 2017:1281) in conjunction with severe apprehensions regarding the ecological repercussions of agriculture on biodiversity (Maxwell *et al.*, 2016:144), climate change (Whitfield *et al.*, 2018:5), ecosystem services (Dobson *et al.*, 2006:1918), and sustained food production (Smith *et al.*, 2016:1012). The question that arises is if this is attainable. Researchers and policymakers are beginning to offer preliminary responses, indicating that it is feasible to remain within the boundaries of a secure and equitable operational framework, provided that specific modifications are implemented within the agricultural system (Firbank *et al.*, 2018:2). Hummels and Argyrou (2021:3) believe that sustainable entrepreneurship serves as a strategic approach to reconcile the potential conflict between prevailing discourses and the needs of both current and future generations. The objective is to achieve a harmonious equilibrium that considers the requirements of both the current and future generations, the local and global communities, the producers and consumers, and the providers and users of ecosystem services. This task encompasses all stakeholders, including consumers, producers, corporations, and policy officials.

Despite the advancements in technology, economy, and society, these significant difficulties continue to endure and are increasingly apparent over time (George *et al.*, 2016:1889). Entrepreneurship has been identified as a potential remedy for these difficulties. Historically, entrepreneurship has been examined as a means to foster economic growth and generate monetary worth (Sarango-Lalangui *et al.*, 2018:6). The growing recognition of global social and environmental issues has prompted scholars to redefine the concept of entrepreneurship. It is no longer seen solely as a means of generating wealth but rather as a pursuit that should also integrate aspects of social and environmental well-being into its objectives (Anand *et al.*, 2021:3; Gast *et al.*, 2017:48; Schaltegger & Wagner, 2011:226). The academic discourse has witnessed

a reconceptualisation of entrepreneurship, commonly known as sustainable entrepreneurship. This emerging sub-field of entrepreneurship study has gained significant importance in recent times. According to Shepherd and Patzelt (2011:142), sustainable entrepreneurs prioritise the preservation of nature, life support systems, and community as they pursue perceived chances to develop future products, processes, and services for financial gain. The term "gain" pertains to the economic and non-economic benefits that accrue to individuals, the economy, and society.

There is a growing recognition among scholars that entrepreneurship and sustainable development are closely intertwined. Consequently, entrepreneurs are observed to exert endeavours to mitigate the adverse effects of their efforts on the natural environment and society (Markman *et al.*, 2019:373; Muñoz *et al.*, 2018:312). Numerous terminologies have been employed to examine the debate surrounding sustainability in entrepreneurship. Various terms such as "ecopreneurship" (Dixon & Clifford, 2007:328; Isaak, 2002:83), "sustainable development entrepreneurship" (Muñoz & Cohen, 2018:313), "sustainable entrepreneurs" (Choi & Grey, 2008:562; Tilley and Young, 2009:81), "environmental entrepreneurship" (Linnanen, 2005:75), and "green entrepreneurship" (Schaltegger, 2002:47) are used interchangeably to refer to the concept of sustainable entrepreneurship. Sustainable entrepreneurship is frequently associated with ecopreneurship and social entrepreneurship due to their shared emphasis on environmental preservation and social value creation. Sustainable entrepreneurship is a unique concept that integrates the development of economic, social, and ecological value while prioritising the welfare of future generations (Terán-Yépez & Marín-Carrillo, 2020:4). According to Belz and Binder (2017:8), it is widely acknowledged among scholars that an entrepreneurial endeavour is considered sustainable when it integrates comprehensive economic, social, and environmental objectives in the pursuit of commercial prospects.

Given the significance of business to society and the effects of its actions, entrepreneurship is essential in the transition to a more sustainable future (Rosario 2022:2). However, Small, micro, and medium-sized companies (SMMEs) have not fully integrated sustainability factors into their operational management. In contrast, large corporations have acknowledged the necessity of incorporating sustainability into their management and production processes (Revell *et al.*, 2010:280).

In current affairs, it is time for firms of all sizes to prioritise sustainability throughout their whole value chain. Small and medium-sized enterprises in the agriculture sector contribute significantly to the nation's gross domestic product. Still, they also negatively impact the environment because most have not incorporated environmentally and socially sustainable practices into their processes, strategies, or long-term vision (Rita *et al.*, 2018:987). Thus, a significant need exists for a sustainable shift in consumption and production patterns to sustain more responsibility on economic, environmental, and social dimensions (Haldar, 2019:100)

The study examines opportunities, motivation, strategies, and problems in creating sustainable entrepreneurship in Zimbabwe's agricultural sector by analysing case studies of successful sustainable business projects in Zimbabwe. Haldar (2019:105) and Nordin and Hassan (2019:101) added that by demonstrating the advantages of sustainable entrepreneurship, following Schumpeter's "creative destruction" theory, other SMMEs might adopt sustainable practices in "swarm-like clusters," paving the way for a transition from conventional to sustainable entrepreneurship.

This study investigates the existing situation to identify the opportunities, obstacles, and gaps in adopting sustainable entrepreneurship by SMMEs in Zimbabwe's agricultural sector. The study employs qualitative research methods, including face-to-face interviews, observation, and case studies, to provide genuine insights into the experiences of sustainable SMMEs. This methodology and a review of the relevant literature enable the study to build a framework for sustainable entrepreneurship among SMMEs in the agricultural sector. The legitimacy theory, the institutional theory, and the triple bottom line model act as framework pillars.

The study painstakingly unpacks the background, followed by a summary of the problem statement, underlining and elaborating on the need for this study. The research direction will be meticulously deconstructed, with the study's primary and secondary objectives and the research questions stated. The scope of the study section provides the field of inquiry, the sector to be investigated and the study's geographical boundary. This study provides a concise overview of the research strategy and technique employed and an in-depth discussion of the study's

significance. Finally, the fundamental concepts in this research are explained, and the study framework is delineated.

1.2 BACKGROUND OF STUDY

The impact of human consumption activities on the natural environment is well recognised to be deleterious, resulting in significant harm that is frequently irreversible (Santos *et al.*, 2023:4). The presence of potential risks and negative consequences underscores the necessity of implementing a corporate policy that places sustainability as a top priority (Melo *et al.*, 2020:6). The objective of sustainable practises to employ natural resources cyclically, to minimise environmental disruption. Ecological respect is paramount, especially in sectors that extract raw materials from the natural environment. This resource is finite and necessitates restoration efforts to guarantee its long-term sustainability (Orlitzky *et al.*, 2011:10). One prominent sector among these is the agricultural industry.

Zimbabwe is an agricultural economy; most SMMEs are in the agricultural industry. The number increased with the Fast Track Land Reform Program of 2000. The government provided resources to the SMMEs but did not instruct them on how to use them sustainably. Even SMMEs in the agricultural value chain are predominantly conventional businesses whose primary objective is profit maximisation. The strain on SMMEs to provide food security for an ever-growing population is mounting. They are causing more harm to the environment and surrounding society to accommodate demand. Unfortunately, the available resources are finite. Now that there are indications that natural resources have reached their limit, there is an urgent need for SMMEs to adopt a more sustainable business model. A paradigm change towards sustainable entrepreneurship is required. The difference is crucial for the environment and the long-term prosperity of society and the economy.

1.2.1 Small, Medium and Micro Enterprises (SMMEs)

The increasing significance of SMMEs in global economies necessitates a heightened research focus on the sector (Chundu *et al.*, 2020:1889). They play an essential role

in both developed and emerging economies. They are a substantial source of employment, income, and innovation (Rosario *et al.*, 2022:3).

Small, medium, and micro enterprises (SMMEs) must incorporate sustainability into their business operations. This highlights the ongoing debate surrounding the perception that businesses are frequently viewed as the main contributors to environmental and social challenges, leading to a dearth of sustainable societal practices (Schaltegger & Wagner, 2011:230). However, it should be noted that although this perspective tends to exaggerate the potential for SMMEs to engage exclusively in exploitative behaviours, it fails to adequately recognise and portray the role of businesses in advancing their operations within a network of organisations dedicated to fostering social and environmental entrepreneurship (Gu, 2022:6). Consequently, this assumption presents a distorted portrayal of entrepreneurship in the context of promoting sustainability (Breitbarth *et al.*, 2018:6).

According to Luswaga and Nuppenau (2021:11654), SMMEs have the potential to serve as intermediaries in facilitating the advancement of sustainable development. When examining public policy objectives that promote the establishment of new firms, it is essential to consider the potential to address environmental conservation and agricultural production flows before implementing planned initiatives. Entrepreneurship is crucial in transforming traditional methods into more environmentally and socially sustainable practices (Schaltegger *et al.*, 2022:2547). This process involves reevaluating and reconfiguring products and services to minimise environmental and societal impact. Additionally, entrepreneurship facilitates the emergence of innovative approaches that integrate social activities and ecological resources (Kanda *et al.*, 2021:2816).

It is imperative to recognise that comprehending the notion of sustainability requires adopting a holistic viewpoint encompassing multiple dimensions, such as economic, socio-cultural, political-institutional, and consumption patterns. It is vital to get an understanding of how SMMEs design and execute strategies to attain sustainability, also referred to as sustainable entrepreneurship (Jarrar, 2022:9). Sustainable entrepreneurship is characterised by the establishment of novel enterprises that prioritise consumer transition activities about the promotion of well-being, while also

acknowledging the imperative to function within the ecological boundaries of the planet (Munoz & Cohen, 2018:312).

While SMMEs have a limited individual influence, their cumulative impact is undeniably significant. Nevertheless, some researchers hold a contrasting perspective on this matter. According to Hockerts and Wustenhagen (2010:486) and Tilley and Young (2009:83), it is argued that despite the potential negative impacts of certain entrepreneurial activities on society and the environment, they also have the potential to significantly contribute to the promotion of sustainability in corporate operations. The research conducted by Tarnanidis *et al.* (2019:832) examined the role of SMMEs in mitigating environmental pollution. According to Patzelt and Shepherd (2011:637), entrepreneurial action is considered to be crucial in the identification of sustainability opportunities. Furthermore, according to Pacheco *et al.* (2010:467), SMMEs promote social and ecological sustainability significantly.

1.2.2 Sustainable entrepreneurship concept

Presently, a global context is characterised by social and environmental uncertainty, necessitating a pressing need for entrepreneurs to adopt a transformative approach to conducting business. Entrepreneurs assume profit maximisation as a strategic approach to address the intense rivalry from an unpredictable business environment (Eggers, 2020:202). The undertaking of economic activities has resulted in significant environmental damage and social inequality (Sendawula *et al.*, 2020:591). Therefore, it is imperative to adopt sustainable entrepreneurship practises that allow entrepreneurs to effectively manage the social, environmental, and financial dimensions concurrently (Kimuli *et al.*, 2021:142), intending to achieve a competitive edge.

Sustainable entrepreneurship is about entrepreneurs producing economic, social, and ecological value through business activities. In contrast, traditional entrepreneurship primarily focuses on economic profit maximisation (Belz & Binder, 2017:10; Munoz & Cohen, 2018:312; Schaltegger & Wagner, 2011:226). In addition to avoiding social and environmental harm, sustainable entrepreneurship aims to regenerate the environment and promote positive social change (Munoz & Dimov, 2015:635; Patzelt

& Shepherd, 2011:138). Consequently, sustainable entrepreneurship posits economic activity as a viable remedy for environmental deterioration and social inequity (Cohen & Winn, 2007:32; Munoz & Cohen, 2018:313; Shepherd & Patzelt, 2011:139). According to Kuckertz and Wagner (2010:526), the concept of sustainable entrepreneurship necessitates the maintenance of equilibrium across the triple bottom line, encompassing economic well-being, social fairness, and environmental robustness. According to O'Neill *et al.* (2009:37), sustainable entrepreneurship entails the establishment of businesses through the integration of entrepreneurial endeavours with social and ecological objectives, intending to achieve sustainable value. According to Crals and Vereeck (2005:178), the concept of corporate social responsibility can be defined as the ongoing dedication of an organisation to uphold ethical conduct, foster economic progress, and enhance the well-being of individuals worldwide and future generations.

Contemporary researchers perceive sustainable entrepreneurship practises as a favourable prospect for business proprietors to engage in innovation and capitalise on unexplored opportunities throughout the transition towards a sustainable society (Sarkar & Pansera, 2017:332). The incorporation of sustainable practises into firm activities has the potential to expand the market, consequently reducing intense competition among enterprises (Belz & Binder, 2017:8). In addition, to achieve a society and environment that can be sustained throughout time, the concept of sustainable entrepreneurship proposes novel approaches aimed at mitigating social inequality and environmental deterioration (Musona *et al.*, 2021:812).

Entrepreneurs' pivotal significance in managing sustainable firms lies in their ability to prevent environmental degradation while potentially neglecting social welfare. Despite the implementation of government legislation, the adoption of sustainability practices among SMMEs remains limited, primarily due to resource limitations and a lack of awareness (Abdelnaeim & El-Bassiouny, 2020:1036). The research conducted by Sendawula *et al.* (2021:65) reveals that many small, medium, and micro enterprises (SMMEs) operating in the agricultural sector continue to engage in unsustainable practices, placing a higher emphasis on maximising profits. Against this backdrop, the present work addresses this lacuna in the existing body of information.

1.2.3 Sustainable entrepreneurship in agriculture

Approximately 7.41 billion people inhabit the globe, occupying 6.38 billion hectares of land, with 1.3 billion directly depending on agriculture (Gouda *et al.*, 2018:131). Every year, the world's population increases by 79 million people. However, the increase in population is causing a constant increase in food demand and a decrease in food availability (Alexandratos & Bruinsma, 2012:15). Natural resources are depleting at an alarming rate to achieve economic growth that suits the needs of an ever-growing population. Haldar (2019:100) said that climate change has altered the delicate ecosystem and ecological cycles and poses grave dangers to the vitality and sustainability of the economies. Climate change, which threatens the survival and stability of society, has also contributed to this. Ogujiuba *et al.* (2021:3) proposed that sustainable entrepreneurship activities are the new method for addressing these environmental and social concerns.

Small and medium-sized enterprises in the agricultural sector contribute to the alleviation of hunger and poverty, the creation of jobs, and the growth of the economy's gross domestic product. Still, they negatively impact the environment and society because most have not incorporated sustainability into their processes, strategies, or sustainable vision (Rita *et al.*, 2018:987). Since 1990, the Global Forest Resource Assessment indicates a net loss of 178 million hectares of forest (FAO, 2020:2). Africa is experiencing the most significant yearly rate of net forest loss at 3.9 million hectares. Principally driving deforestation, Zimbabwe is converting forest areas for agricultural use. The 2022 IPCC study also showed that agriculture was the second largest emitter of greenhouse gases, contributing 24%, with power generation being the largest emitter, providing 25% (IPCC, 2022). Scholars and policymakers assert that sustainable entrepreneurial practices can combat climate change, cut deforestation, lower greenhouse gas emissions, and protect ecosystems. Consequently, the Zimbabwean agriculture industry requires a paradigm change from old commercial practices, systems, and procedures to concerted action and sustainable strategies to address local peculiarities.

1.2.4 Overview

Historically, the evaluation of corporate success has predominantly revolved around the financial performance of companies. The primary objective of firms has traditionally been to generate economic gains and, in certain instances, facilitate employment creation. These are the same variables that have conventionally determined the impact of entrepreneurship on the economy (Davidsson & Wiklund, 2007:247). Schlange (2006:18) asserts that the assessment of business value creation has traditionally relied on economic and financial metrics, such as sales value or profits, with the primary aim of profit maximisation. To clarify, historical perspectives on entrepreneurship mainly focused on economic advancement and wealth creation, as Schumpeter (1934) articulated. However, concerns about environmental and social matters were mostly disregarded or overlooked, as evidenced by the works of Rodgers (2010:127) and Natividade *et al.* (2021:1676).

According to Nave and Franco (2019:1189) and Terán-Yépez *et al.* (2020:6), entrepreneurship has evolved from focusing on wealth generation to encompassing sustainable development in response to its global urgency. Therefore, entrepreneurship must incorporate not only economic goals but also environmental and social efforts that may adequately and proficiently address the present needs and demands of economies (Schaltegger & Wagner, 2011:225; Kostakis & Tsagarakis, 2022:14). According to Aghelie *et al.* (2016:3), there has been a growing inclination among enterprises and entrepreneurs to comprehend the actual effects of their commercial operations on the environment and society as a whole, as a result of these changes mentioned above. Entrepreneurship has evolved beyond its traditional focus on financial rewards, including non-economic benefits (Shepherd & Patzelt, 2011:141; Ter'an-Y'epez *et al.*, 2020:5).

Similarly, previous research has demonstrated a lack of focus on SMMEs that are crucial in driving inclusive growth within developing nations such as Zimbabwe. According to Iyigün (2015:1228) and Horne and Fichter (2022:3), SMMEs can act as catalysts in facilitating the transition from existing economic models to more sustainable economies. In practical terms, many SMMEs are characterised by

conventional entrepreneurship, wherein the primary objective is to produce profit by leveraging available resources. This approach often stems from a fundamental perspective of utilising assets solely for the founders' personal gain, emphasising achieving the highest financial return within a limited timeframe. This study aims to assist SMMEs in transitioning towards sustainable entrepreneurship, whereby they prioritise sustainability and view their organisations as vehicles for resource preservation. Following scholarly sources (Parrish, 2010:512; Natividade *et al.*, 2021:1676), it can be observed that organisations employ human and natural resources to sustain and enhance the efficacy of their economic activities, with the ultimate goal of ensuring their longevity.

Walker *et al.* (2008:4) argue that the absence of specific research dedicated to SMMEs poses a significant barrier to advancing sustainable entrepreneurship. It is vital for research endeavours to consider the influence of SME features on the environmental practises adopted by these entities (Mendes *et al.*, 2022:3). Hence, the purpose of this study was to investigate the sustainable entrepreneurship practises implemented within the agriculture sector, as well as to identify strategies that can facilitate the adoption of these practices by SMMEs.

1.3 PROBLEM STATEMENT

Despite the growing recognition of environmental issues (Abramovici *et al.*, 2010:469; Neely, 2009:6; Westkämper *et al.*, 2000:504), a significant number of SMEs continue to refrain from undertaking initiatives aimed at enhancing their environmental performance (Dimache *et al.*, 2009:3; Klewitz & Hansen, 2014:60; Demirel & Ozturk, 2019:4). According to Uhlaner *et al.* (2010:6), the probability of a company being sustainable is higher when it operates as a giant corporation. The challenges faced by SMEs in comparison to larger enterprises are numerous. These challenges include a higher administrative burden, which can be up to ten times more costly, financial constraints, limited resources, restricted access to relevant information, and skill deficiencies (Mitchel *et al.*, 2020:162).

Many SMMEs in Zimbabwe's agricultural industry are conventional entrepreneurs. The primary purpose of their business is to maximise profits at the expense of the

environment and society. They utilise high natural and human resources to maximise their profits. The SMMEs employ intensive farming techniques, such as increasing fertilisers, insecticides, copious irrigation, growing high-yielding species, felling trees for farm expansion and drying their produce.

SMMEs contribute to deforestation. To create new fertile and productive places, they cut down forests. The Global Forest Resource Assessment estimates a net loss of 178 million hectares of forest, primarily due to agriculture (FAO, 2020:2). SMMEs are "squeezing" too much from the fields to maximise their income, which results in soil depletion and erosion. It weakens lands by interfering significantly with natural soil processes. Deforestation also deprives animals of their natural habitats. How SMMEs conduct business causes considerable water, land, and air pollution. Heavy chemical runoffs from fields contaminate water bodies, resulting in the death of aquatic organisms.

Climate change is one of the most concerning environmental effects of unsustainable agriculture practices. Intensive crop production reduces the soil's capacity to sequester carbon, ultimately transforming it into a carbon emitter. Emissions of fossil fuels and the exploitation of land and water are other significant contributors to climate change. The 2019 IPCC assessment also revealed that agriculture was the second largest source of climate-altering greenhouse gases (IPCC, 2019:5).

The conventional business model of SMMEs impacts the social dimension of sustainable development. Extreme chemical concentrations in ingested plants cause human diseases and problems. Genetically engineered foods have a lower nutritional profile than their organic counterparts.

Unfortunately, it is now evident that Zimbabwe's natural resources have been depleted to the point of exhaustion, in addition to the intensive agriculture practised by SMMEs, productivity has declined dramatically, resulting in hunger and poverty. The climate change to which they contributed inadvertently also increased the decrease in agricultural productivity. Zimbabwe, formerly considered the breadbasket of Southern Africa, is now a net importer of its staple foods.

Many Zimbabwean SMMEs have limited awareness of sustainable development and are unfamiliar with sustainability. Because they do not know where to begin, the few who see the concept of sustainability do not integrate it into their business strategies. No structure exists to guide them toward the adoption of sustainable entrepreneurship.

Zimbabwe's agricultural framework is universally applicable to all agrarian operators despite the difference in size. SMMEs and their larger counterparts differ significantly in organisational structure, management style, level of knowledge, and owner-manager characteristics, all impacting how they conduct business. Hence, SMMEs cannot scale down the approaches to match their operations, and strategies that work for large firms may not apply to SMMEs (Tilley, 1999:16). This necessitates a study of sustainable entrepreneurship in the context of SMMEs to develop a framework that is meaningful and applicable to the sector.

This study's major problem is that agricultural SMMEs in Zimbabwe employ unsustainable business practices that negatively impact the environment, society, and economy. Therefore, building a framework for sustainable entrepreneurship among SMMEs in this sector is necessary. The framework will aid SMMEs in understanding and integrating sustainability concepts (economic prosperity, societal welfare, and environmental promotion) into their products, policies, and practices. The framework will seek to make sustainability more accessible through disseminating information, providing direction, and promoting best sustainable practices.

1.4 PURPOSE OF THE STUDY

The primary objective of this research project is to conduct a comprehensive investigation of the defining characteristics of sustainable entrepreneurship. The proposed study aims to achieve a cross-case analysis of 16 entrepreneurs engaged in commercial operations within the agricultural industry. This research aims to assess the alignment between theoretical concepts and the implementation of sustainable entrepreneurship practises in real-life scenarios. Numerous scholars have endeavoured to establish a comprehensive understanding of sustainable entrepreneurship. However, the existing body of literature falls short of providing

practical perspectives on the operational strategies employed by sustainable entrepreneurs and the extent to which these align with the established definitions.

The present study undertakes exploratory research in sustainable entrepreneurship to address this knowledge gap. The study aims to identify the motivations that drive individuals to initiate their distinctive ventures, the challenges encountered during the venture development process, and the impact of these ventures within their designated market. Furthermore, the study seeks to discern the distinguishing characteristics of these sustainable entrepreneurs. The optimal methodologies and insights from the case studies will be disseminated to other SMMEs. The objective of this study is to offer significant practical insights into SMMEs and address the existing knowledge gap in the field of sustainable entrepreneurship.

SMMEs are crucial in fostering economic, social, and environmental progress. Nevertheless, there is a tendency among scholars to overlook the role of SMMEs in the context of sustainable entrepreneurship, particularly when compared to large enterprises. Hence, the body of literature about implementing sustainable entrepreneurship in SMMEs is not readily apparent, and many SMMEs possess only a restricted comprehension and consciousness of sustainability. Therefore, as previously said, this study addresses the information gap by conducting an extensive evaluation of literature that specifically examines the adoption of sustainable entrepreneurship by SMMEs. Additionally, it investigates the feasibility of implementing sustainable practices within the agricultural sector.

The main objective of this study is to establish a conceptual framework that supports the practice of sustainable entrepreneurship within the context of SMMEs operating in Zimbabwe's agricultural sector. The framework has been constructed by drawing upon a comprehensive examination of sustainable entrepreneurship and incorporating insights from interviews conducted with successful sustainable entrepreneurs in the agriculture sector, who were selected as participants for this study. The framework will facilitate a vital platform for exchanging evidence, ideas, and optimal agricultural sustainable practices. The study intends to:

- Evaluate the existing sustainable entrepreneurship frameworks.

- Conduct an empirical review of sustainable entrepreneurs to establish best practices.
- Create a sustainable entrepreneurship framework to enhance sustainable entrepreneurship adoption by SMMEs in the agricultural sector.

1.5 RESEARCH OBJECTIVES AND QUESTIONS

The primary aim of this study is to examine the lived experience of SMMEs operating in the agricultural sector in Zimbabwe. This main objective is supported by many secondary objectives, which include literature review-based objectives, qualitative empirical study-based objectives and conclusion and recommendation-based objectives.

1.5.1 Primary objective

The primary objective of this study is to develop a framework for sustainable entrepreneurship that explains how sustainability can be incorporated into businesses for SMMEs in Zimbabwe's agricultural sector.

1.5.2 Secondary objectives

The following secondary objectives assist in achieving the primary objective.

Literature review-based objectives:

- To review the nature of sustainable entrepreneurship
- To establish the determinants that compel SMMEs to adopt sustainable entrepreneurship.
- To determine how sustainable entrepreneurship opportunities are recognised and exploited for sustainable outcomes.
- To review the nature of SMMEs and their contribution to economic development
- To determine the challenges that SMMEs face in adopting sustainable entrepreneurship.
- To describe and elaborate on the sustainable entrepreneurship framework.

Qualitative empirical study-based objectives

- To explore the motivational factors that lead to sustainable entrepreneurship from the perspective of selected SMMEs
- To examine the contribution of sustainable entrepreneurship to sustainable development.

Conclusion and recommendation-based objectives

- To summarise, strategies that encourage SMMEs in the agricultural sector to adopt sustainable entrepreneurship.
- To conclude, what motivates SMMEs towards adopting sustainable entrepreneurship, the benefits of adoption and the challenges SMMEs encounter as sustainable entrepreneurs.
- To provide practical recommendations based on the empirical findings of this study that could facilitate the successful adoption of sustainable entrepreneurship by SMMEs.
- To suggest areas for future research in the field of sustainable entrepreneurship.

1.5.3 Research questions

A study's research questions clearly articulate the specific knowledge or comprehension that the researcher aims to acquire or grasp through the implementation of the study. These research questions serve as the central aspect of the research design, providing guidance and cohesion to all the various components of the study (Maxwell, 2005:229).

The research questions have been prepared based on the purpose and objectives of the current study.

- What are the determinants of sustainable entrepreneurship?

- How are sustainable entrepreneurship opportunities recognised and exploited by SMMEs?
- What are the challenges that SMMEs face in adopting sustainable entrepreneurship?
- What is the contribution of sustainable entrepreneurship to sustainable development:
- What is the role of SMMEs in Zimbabwe's economic growth?
- What are the motivational factors that lead to the adoption of sustainable entrepreneurship by SMMEs?
- What strategies can encourage SMMEs in the agriculture sector to adopt sustainable entrepreneurship?
- What recommendations can support adopting a sustainable entrepreneurship framework by SMMEs in Zimbabwe's agriculture sector?

1.6 SCOPE OF THE STUDY

This part delineates the parameters that aid in refining the scope of the investigation, rendering it more feasible and pertinent to the research objectives. The present discourse aims to provide a comprehensive elucidation of the field of study, the specific sector under examination, and the characterisation of the geographic scope.

1.6.1 The field of the study

The field of study falls under entrepreneurship with an emphasis on sustainable entrepreneurship and its adoption by SMMEs.

1.6.2 Sector under investigation

This study examines the adoption of sustainable entrepreneurship by SMMEs in agriculture. Consequently, the study encompasses two distinct fields of investigation. The primary focus of this study pertains to SMMEs, as existing research on sustainable entrepreneurship predominantly emphasises large-scale entrepreneurship while neglecting the crucial role of SMMEs, which serve as the driving force behind several economies. This research examines the concept of

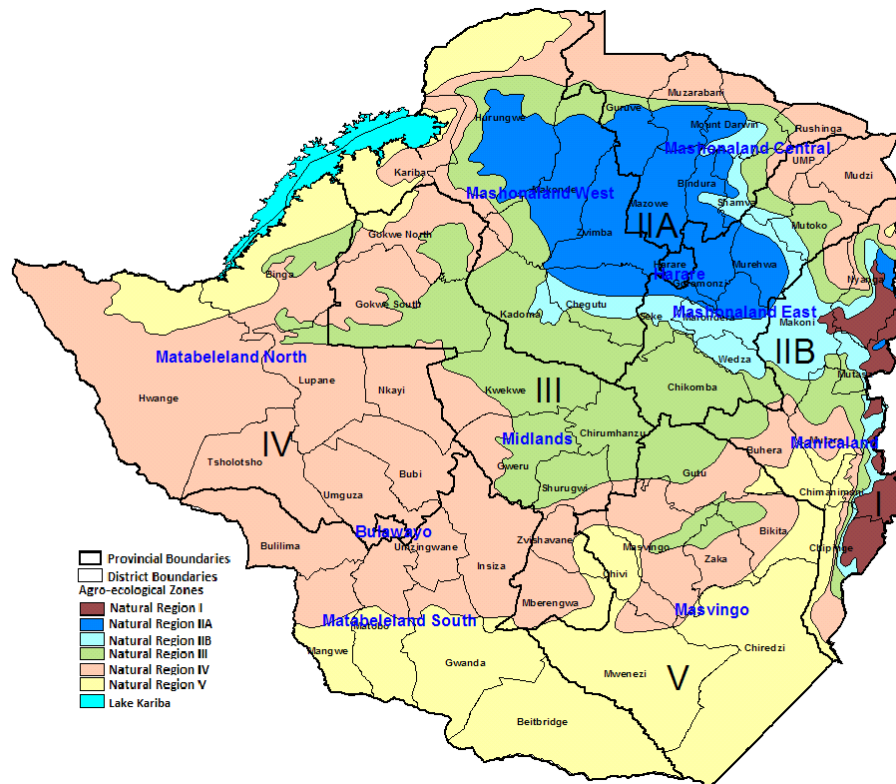
sustainable entrepreneurship within the agricultural industry. The study of Zimbabwe's agricultural sector holds significant importance due to its status as an economy primarily reliant on agriculture. The agricultural sector in Zimbabwe is an essential component of the economy, hosting most of the SMMEs. This sector has a strong interaction with the natural environment, which aligns with the objectives of sustainable entrepreneurship, as it seeks to safeguard and preserve nature.

1.6.3 Geographical demarcation

It is difficult to identify population size in entrepreneurial research. The problem is that the population of entrepreneurs is insufficiently vast, which increases if the study focuses on a specific segment of entrepreneurs (Neergaard, 2007:255). That is the situation with the researcher since the number of sustainable businesses in Zimbabwean agriculture is still limited. Delimiting it to regions would further restrict the population to insufficient sample size. As a result, the researcher considered the entire country when determining the geographical boundary.

Zimbabwe is a country in Southern Africa with a population of roughly 15,1 million people. With a population of 15.1 million, 52% are above 15 years old (ZIMSTAT,2022). This landlocked country with no harbour on its borders has a land area of about 39 million hectares, with 33.3 million hectares set aside for agro-related companies and the remaining 6 million hectares occupied by national parks and urban settlements. The country has five agroecological areas based on rainfall quantity and variability, temperature, soil quality, and vegetation. Cropping appropriateness decreases as you progress from Region 1 to Region V. Most agriculture is carried out in Regions I, II, and III, which offer climatic conditions conducive to extensive agricultural and animal production. In contrast, extensive animal production and irrigated crops are suitable in regions IV and V, as indicated below in figure 1.1 (MLARR, 2018:6).

Figure 1.1: Zimbabwe agro-ecological zones map



Source: Reliefweb: <http://reliefweb.int/map/zimbabwe/zimbabwe-agro-ecological-zones-map-2-2>

Zimbabwe's agriculturally oriented government began the Fast Track Land Reform Program (FTLRP) in 2000. The FTLRP prompted the split of big, previously white-owned commercial farms into small-holder farmers. Three types of farms emerged: large commercial farms (4 317), small to medium commercial farms (22 072), and small-holder farms (1 313 656 farmers). New policies and strategies are required to address land tenure and farm size changes (MAMID, 2013:17).

Following the land reform initiative, some of the newly resettled small-scale farmers' output dropped. Zimbabwe, once known as Africa's breadbasket, began to experience food shortages. As a result, this research aims to create a framework that smallholder farmers may utilise to increase their output, allowing the country to feed itself and eventually reclaim its former prominence.

1.7 RESEARCH METHODOLOGY

This section presents a concise overview of the research paradigm, methodological approach, and technique employed in the present study.

The investigation was carried out in two stages to accomplish the research goals. The initial stage of the study encompassed a comprehensive examination of existing literature. In contrast, the subsequent phase involved collecting and analysing empirical data.

1.7.1 Phase 1: Literature review

Secondary research was conducted to accomplish the aims of this study. The initial phase encompassed a comprehensive examination of existing literature to establish a solid theoretical foundation for the investigation. The term "literature" comprises the collection of scholarly works that a researcher must examine to formulate, comprehend, explore, and assess their research inquiries (Eriksson & Kovalainen, 2016:46). Consequently, a thorough examination of existing scholarly works across multiple disciplines and domains was conducted to explore the essence of sustainable entrepreneurship. The relevant literature sources were identified through academic books, working papers, theses, peer-reviewed scholarly journals, educational websites, electronic databases, and the resources provided by the North-West University Library Services. This study employed many literature sources to achieve theoretical triangulation on the multiple facets of the phenomenon being investigated (Hoque, Covalleski & Gooneratne, 2013:1171).

The literature review of the study was addressed in two chapters. In Chapter 2, an examination was conducted on the essence of sustainable entrepreneurship in terms of social and ecological entrepreneurship. Additionally, the determinants and motivational factors influencing the adoption of sustainable business were elucidated. The distinctiveness of sustainable entrepreneurs was also emphasised, along with the specific difficulty they face. The study explained the role of sustainable entrepreneurship in fostering sustainable development. The chapter's concluding section provided a comprehensive elucidation of the theories associated with the

study, namely institutional theory, triple bottom line (TBL), and legitimacy theory, together with their respective justifications.

Chapter 3 of the literature study delved into examining the landscape of SMMEs operating within the agricultural sector in Zimbabwe. This chapter defines SMMEs and highlights their significance in fostering economic development. This study examines the tactics that can be employed to promote the adoption of sustainable entrepreneurship by SMMEs, as well as the problems encountered by these enterprises. The agricultural industry in Zimbabwe was comprehensively elucidated, focusing on sustainable entrepreneurship within the agricultural domain.

The researcher conducted a comprehensive review of over 500 sources duly cited in the bibliography portion of the study.

1.7.2 Phase two: Empirical research

The second phase encompassed the empirical investigation of the study. Empirical research pertains to the acquisition of original data. The section concisely explains the research technique for collecting and analysing empirical data. Chapter four of the study offers a more comprehensive discussion of this approach. The discourse involves the examination of research philosophy and design, research paradigms, sampling techniques, data gathering methods, data processing and analysis procedures, and the concept of trustworthiness. Chapter five of the study presents the empirical research findings and subsequent discussion.

1.7.2.1 Research paradigm

The research design of a study can be described as a series of interrelated decisions (Trafford & Lashem, 2012:93). The decision-making process involves several components, including the choice of the study paradigm, the methodological approach and technique, and the methods employed for data collection and analysis (Myers, 2013:19). The term "research paradigm" refers to the philosophical beliefs and principles that guide a researcher's approach to doing a research study, influencing their decisions and choice of methodology employed (Matta, 2021:1).

Paradigms can be distinguished by four core philosophical assumptions, namely ontology, epistemology, axiology, and methodology. The research in this study utilised epistemological and ontological presuppositions following its primary purpose. Ontological assumptions refer to the fundamental views and beliefs held by the researcher on the essential nature of reality. The researcher in this study proposes that SMMEs in developing countries possess various unique social characteristics and experiences. It is postulated that the social attributes and encounters of SMMEs in developing countries may diverge from those observed in industrialised nations. A considerable body of scholarly research on sustainable entrepreneurship in the context of SMMEs has been concentrated in the European region. Nevertheless, it is imperative to recognise that the outcomes and deductions obtained from these investigations may not inherently be directly applicable or pertinent to the African setting owing to the inherent discrepancies in the socioeconomic environments of these particular regions (Baipai *et al.*, 2023:4).

The researcher utilised epistemological assumptions as a framework for the study. Epistemological assumptions refer to the fundamental views concerning knowledge and the standards to ascertain expertise's acceptability, validity, and authenticity (Saunders *et al.*, 2016:127). The researcher used a qualitative research methodology, demonstrating their active engagement in data collection and analysis (Ritchie & Lewis, 2003:139). The researcher's active engagement facilitates the acquisition of participants' experiential knowledge and elicits their opinions.

The research paradigm and assumptions are well explained in section 4.2 of the study. The following section describes the research philosophies adopted in the study.

1.7.2.2 Research philosophies

In conjunction with research assumptions, ideologies serve as a framework for guiding the investigation. Saunder *et al.* (2019:144) assert that within the field of business and management, five significant philosophical viewpoints exist: positivism, critical realism, interpretivism, postmodernism, and pragmatism. The comprehensive examination of philosophical perspectives can be located in section 4.2.6.

The current investigation utilised an interpretive framework, also known as social constructivism. The researcher's engagement with successful sustainable businesses through semi-structured interviews facilitated the generation of knowledge, which involved a certain degree of subjectivity. The application of interpretivism has numerous benefits to the researcher in developing a framework for sustainable entrepreneurship in the agriculture industry for SMMEs. As Creswell (2013:44) stated, this methodology facilitates a complete comprehension of the social interactions among participants.

1.7.2.3 Approach to theory development

Saunders *et al.* (2016:144) argue that researchers must effectively communicate the theoretical framework they want to utilise in their research, regardless of whether it is formally integrated into the research design. Based on the scholarly works of Brinkmann and Kvale (2018:118) and Picardi and Masick (2014:6), the current corpus of academic literature puts forth three distinct approaches to theory construction: deduction, induction, and abduction. The approaches mentioned earlier are elaborated upon in section 4.3.

Given the primary objective of this study, the use of both deductive and inductive reasoning was employed as methodological approaches for theory construction. The research employs deductive reasoning to structure the collected data, relying on pre-existing knowledge about sustainable entrepreneurship within the agricultural industry. According to Hyde (2000:83), deductive reasoning is a systematic way to assess hypotheses.

However, some advocates of inductive reasoning often criticise deductive reasoning for its tendency to adopt a "rigid methodology that limits the exploration of alternative explanations" (Saunders *et al.*, 2016:147). To overcome this constraint, the researcher also utilised inductive reasoning. Yilmaz (2013:312) asserts that using inductive reasoning enables researchers to clarify the descriptive elements of the interpretations that participants attribute to their worldly experiences. The present investigation is positioned within the research philosophy of interpretivism, which is congruent with

inductive reasoning. Since sustainable entrepreneurship is relatively new among SMMEs in developing nations, Spence *et al.* (2011:12) argue that an inductive methodology is the most suitable. The inductive technique is likely to be informed by the interpretivism philosophy in this study due to its association with the humanities and its emphasis on the significance of subjective interpretations (Saunders *et al.*, 2019:155).

1.7.2.4 Methodological approach

Scholars can utilise quantitative and qualitative methodological techniques in their research endeavours. The employment of a quantitative methodology is frequently associated with research methodologies that seek to clarify phenomena by analysing numerical data (Yilmaz, 2013:311). On the other hand, a qualitative approach pertains to qualitative research, which endeavours to generate unstructured visual or textual data and examine the phenomenon being studied to build theory (Venter & Van Zyl, 2017:100).

The researcher utilised a qualitative methodology grounded in the philosophical paradigm and theoretical concepts underpinning this investigation. Qualitative research generates conceptual frameworks that facilitate a more profound comprehension of social phenomena within authentic settings, with a particular emphasis on the interpretations, lived experiences, and viewpoints of all individuals involved (Neergaard & Ulhoi, 2007:20). Ritchie and Lewis (2003:34) assert that the majority of qualitative research methodologies aim to investigate phenomena within their authentic contextual setting. The significance of this study lies in the researcher's intention to explore motivation and obstacles within a distinct context and comprehensively analyse the interviewees' responses to uncover commonalities and differences. Historically, qualitative research has been advocated and supported as the most productive approach for finding novel insights and generating ideas. According to Sekaran and Bougie (2016:7), sustainable entrepreneurship research is developing. There is a need for more frameworks and a deeper understanding of the underlying motivation and execution strategies employed by SMMEs. In the present stage of development, qualitative methodologies are the most suitable methodological approach for this particular study domain.

1.7.2.5 Research design

Researchers utilise qualitative research methodologies to examine the fundamental mechanics and justifications behind human behaviour, subjective encounters, and viewpoints. Multiple approaches are employed to conduct data search and exploration to achieve a thorough understanding (McMillan & Schumacher, 2014:31). Five unique interactive qualitative designs can be categorised into two main classifications. The initial group contains methods prioritising examining particular lived experiences, including phenomenology, case study, grounded theory, and specific critical investigations. The second group encompasses designs focusing on culture and society, particularly ethnography and detailed critical studies. The classifications mentioned above are substantiated by the scholarly works of McMillan and Schumacher (2014:32) and Merriam and Tisdell (2016:14,16).

This study aims to explore the lived experiences of sustainable entrepreneurs functioning within the agricultural sector to fully understand this phenomenon. The study has utilised a case study methodology to accomplish this goal. The case study research design, sometimes called case studies or case research, is widely acknowledged as a significant exploratory methodology in qualitative research (Venter & Van Zyl, 2017:106). Bloomberg and Volpe (2016:46) define a case study as a thorough investigation and assessment of a single social phenomenon confined to a particular social unit or system.

1.7.2.6 Population studied

According to Bryman (2012:714), a population is the complete set of individuals from which a sample will be chosen. Banerjee and Chaudhury (2010:62) define a population as a comprehensive group of individuals possessing distinct traits, such as geographic location.

Therefore, the target population for this study comprises all SMMEs within the agricultural sector in Zimbabwe engaged in sustainable business practices.

1.7.2.7 Sampling process

According to Thompson, Schwartz, Davis, and Panacek (1996:75), researchers often encounter limitations that prevent them from examining the features of the entire population. Consequently, individuals may opt to investigate a subset or sample of the population (Carlson & Winqvist, 2018:7; Diamantopoulos & Schlegelmilch, 2000:10).

1.7.2.8 Research sample

The researcher selected the participants using non-probabilistic sampling techniques, namely purposive and snowballing. Purposive sampling was relied upon first, where organisations supporting and rewarding sustainable entrepreneurs in Zimbabwe were targeted. A comprehensive online search was conducted. After an extensive analysis of several business websites, the researcher selected Green Enterprize as the best fit since it supports and rewards sustainable entrepreneurs in all sectors nationwide. The researcher contacted Green Enterprize and asked for the names of their best and two runner-up winners under the category of the agricultural industry. The researcher emailed the research request to show that the study was authentic and approved by the NWU Business School Scientific Committee. The interview guide was also attached to inform them what their winners would be asked. Green Enterprize approved the request and gave the contacts to the researcher after getting the consent of the participants. The researcher then expanded the sample from the three sustainable entrepreneurs using Snowball until data saturation was met.

1.7.2.9 Sampling technique adopted

Two primary sampling approaches can be employed: probability and non-probability. Probability sampling strategies are derived from the fundamental principles of randomness and probability theory. According to Maree (2016:192), probability sampling ensures that every element within the population has a discernible probability of being chosen, more significant than zero. In contrast to probability sampling approaches, non-probability sampling does not employ random selection processes.

In light of the present study's utilisation of a qualitative methodological framework, the decision was made to employ the methodology of non-probability sampling. The research used the non-probability method known as purposive sampling. Purposive sampling is a research method researchers employ to select instances based on predetermined criteria derived from the target population's characteristics (Venter & Van Zyl, 2017:113). In purposive sampling, researchers use their discretion to choose examples most suitable for addressing their research inquiries and accomplishing their research goals (Saunders *et al.*, 2016:301; Quinlan *et al.*, 2015:181).

Following the successful acquisition of interviews with accomplished sustainable entrepreneurs in the agricultural industry, the researcher employed a snowball sampling technique to facilitate access to other prosperous, sustainable businesses. The snowball approach is a research methodology that entails soliciting research participants for referrals and recommendations of colleagues who may meet the criteria for participation in the study, resulting in a cascading effect of more references (Robinson, 2013:37).

The researcher sought the cooperation of the sustainable entrepreneurs she had established connections with to provide access to interviews with additional sustainable entrepreneurs within their social network. The researcher employed both the non-probability purposive sampling technique and the snowball sampling technique.

1.7.2.10 Sampling size

Although there is no predetermined sample size for qualitative investigations (Venter & Van Zyl, 2017:113; Saunders *et al.*, 2016:297; Kuper *et al.*, 2008:688), researchers often rely on the notion of theoretical saturation as a measure of sample size adequacy (Guest, Bunce & Johnson, 2006:59). The concept of theoretical saturation is observed when a qualitative researcher reaches a point where no additional information is found within the data about the codes, themes, or theory being examined (Guetterman, 2015:3; Marshall, Cardon, Poddar & Fontenot, 2013:11).

The point of saturation was achieved with the inclusion of the 16th participant. Therefore, the research sample consists of 16 sustainable entrepreneurs operating in the agricultural sector in Zimbabwe, who were selected to engage in the qualitative study through semi-structured interviews.

1.7.3 Data collection

This section examines the data collection methodology employed in this study, namely using the semi-structured interview and the interview discussion guide.

1.7.3.1 The semi-structured interview

According to Creswell and Poth (2018:165), the researcher deliberately chose the appropriate type of interview. This decision was based on determining which interview format would yield the most pertinent material for addressing the research inquiries. A semi-structured interview was conducted, which provided the interviewer with the flexibility to inquire more as needed. A total of 16 research participants were engaged in semi-structured interviews.

1.7.3.2 The interview guide

A structured interview protocol was established to provide a framework for conducting the interview. The interview guide was developed to offer a comprehensive overview of the profiles of the research participants, including their business profiles, and to address the research inquiries of the study. The interview guide is accessible for viewing in Appendix B.

1.7.4 Data analysis

The methodology employed in this study is a bottom-up approach to data analysis, as described by Venter and Van Zyl (2017:120). The researcher initiates the analysis process by working with the unprocessed data collected to explore connections and associations among various themes (Venter & Van Zyl, 2017:121). Consistent with the deductive and inductive reasoning methodologies employed in theory construction for

this study, both deductive and inductive analyses were utilised during the qualitative data analysis process.

The main aim of this study is to establish a conceptual framework that elucidates the adoption of sustainable entrepreneurship by SMMEs in Zimbabwe's agricultural sector. To achieve this objective, a reflective thematic analysis was conducted. Reflexive theme analysis is characterised by an ongoing and iterative examination of data and the researcher's emotions, rendering it a flexible and dynamic analytical approach (Braun & Clarke, 2020:5). The coding process plays a crucial role in the formation of themes and sub-themes within reflective thematic analysis. Themes, together with their corresponding sub-themes, are regarded as a product of the data coding procedure, which includes thorough engagement with the data, extensive reading, deep reflection, critical questioning, the act of composing memos, temporarily withdrawing from the analysis, and afterwards resuming it (Braun & Clarke, 2020:5).

Nevertheless, the above thematic analysis techniques were executed manually without computerised assistance. The details of the procedure are in section 4.8.1.2. The manual process made the researcher fully understand the data, feel it and own it.

1.7.5 Trustworthiness and rigour of qualitative research

Saunders *et al.* (2016:204) argue that researchers must prioritise considering research quality to establish credibility and get acceptance from the academic community. The idea of trustworthiness is frequently employed in qualitative research to evaluate research rigour, in contrast to the concepts of validity and reliability. Multiple indicators of trustworthiness are available, encompassing credibility, dependability, transferability, and confirmability (Murphy & Yelder, 2010:64; Guba, 1981:80). The trustworthiness and rigour of the study were fully explained in section 4.9.

1.8 ETHICAL CONSIDERATIONS

Brinkmann and Kvale (2018:28) state that qualitative research is a moral endeavour. Therefore, it is crucial to emphasise the ethical aspects of the research being examined (Maree, 2016:44). Since the subjects of investigation in the process of

conducting interviews are individuals of the human species, it is of utmost importance to exercise great caution to prevent any potential injury to them (Fontana & Frey, 1994:372).

The researcher observed many ethical considerations during the investigation. The ethical considerations encompassed in this study comprise the fundamental entitlement to privacy, the imperative for anonymity and confidentiality, the principle of voluntary involvement, and the researcher's commitment to integrity. Furthermore, the present study elucidates obtaining consent or ethical clearance from the researcher's connected institution. Details are in section 4.10.

1.9 CHAPTER CLASSIFICATION

The structure of the current study is set out as follows:

Chapter 1: Introduction and background of the study

The current chapter establishes the foundation for the research by presenting the background of the study, articulating the problem statement, outlining the study's objectives, formulating the research questions, delineating the scope of the investigation, describing the research technique, discussing the constraints of the study, and providing a classification of the chapter. It included a comprehensive overview of the subsequent chapters.

Chapter 2: Review of the literature: Sustainable entrepreneurship

The present chapter provides a comprehensive overview of the academic literature about sustainable entrepreneurship. This paper elucidates the theoretical underpinnings of sustainable entrepreneurship by initially providing a broad definition of the concept and subsequently conducting a comparative analysis of social and environmental entrepreneurship. The subsequent section overviews sustainable entrepreneurs, including their defining features and unique problems. This paper elaborates on the drivers and motivational variables that influence the adoption of sustainable entrepreneurship. Chapter 2 comprehensively explains the paradigm employed to divide the entrepreneurial process into three distinct phases: sustainable

opportunity recognition, opportunity exploitation, and, ultimately, sustainable outcome. The chapter concludes by examining three hypotheses that form the foundation for understanding the significance and acceptance of sustainable entrepreneurship.

Chapter 3: SMMEs' landscape in the agricultural sector in Zimbabwe

This chapter provides an overview of the SMME sector in Zimbabwe. It started by defining the concept; since there was no consensus on the definition, the researcher offered different sources. The chapter analysed the importance of SMMEs to economic development and their uniqueness. The strategies to increase the adoption of sustainable entrepreneurship by SMMEs and their challenges are also discussed. The nature, importance and challenges of Zimbabwe's agricultural sector are explained in the chapter. Lastly, sustainable entrepreneurship in the context of agriculture is well elaborated.

Chapter 4: Research methodology

This chapter explained the research methodology applied to the primary data collection. An overview of the research philosophy and paradigms adopted in this study is provided. After that, the approaches to theory development used are elaborated on. Methodological approaches to research and research designs are described, and the justification for the approach adopted is given. The sampling process, the data collection methods and the data analysis techniques adopted for the current study are described. The steps undertaken to ensure the trustworthiness and quality of the research design are also elaborated on. The chapter concludes with a discussion of the ethical considerations the researcher considered.

Chapter 5: Discussion and interpretation of the findings

The chapter entirely presented what transpired during the interviews. The interview process and the demographic information of the interviewees were laid out. The eight themes raised were explicitly explained with the help of quotes from the interview participants, matrix and photographic images.

Chapter 6: Conclusions and recommendations

In this chapter, the study was summarised and completed. The framework was developed, illustrated and explained. The recommendations were spelt out, the study's contribution was presented, the researcher reflected on her PhD journey, and suggestions for further research were made to mark the end of the study.

1.10 SUMMARY

The introductory part of this research elucidated the contextual framework of the research problem statement. It provided a comprehensive delineation of the primary and secondary objectives that govern the study. The study enumerates the research inquiries it aims to address. The researchers provided an overview of the study's scope. The chapter provided an overview of the research approach employed to gather primary data for the analysis. The limits of the research were examined, and a classification for the study was provided in the chapter. The following section provides a comprehensive literature assessment on sustainable entrepreneurship.

CHAPTER 2

LITERATURE REVIEW: SUSTAINABLE ENTREPRENEURSHIP

2.1 INTRODUCTION

Chapter 1 established the necessary groundwork for undertaking this study through the provision of an introductory section, an articulation of the research problem, the formulation of research objectives, and the accompanying research questions. As stated in Chapter 1, the primary aim of this study is to develop a framework for sustainable entrepreneurship for SMMEs in Zimbabwe's agricultural sector.

Chapter 2 elucidates the theoretical underpinnings of sustainable entrepreneurship. This is accomplished by initially providing a comprehensive definition of the concept, followed by a meticulous examination of its distinctions from other forms of entrepreneurship. Notably, the analysis emphasises the subtle divergences and resemblances of these many entrepreneurial typologies. Following this is the uniqueness of sustainable entrepreneurs stressing their peculiar challenges. A comprehensive and detailed analysis is provided regarding the determinants influencing the adoption of sustainable entrepreneurship. The chapter offers additional details on the motivational facet of sustainable entrepreneurship. The significance of sustainable entrepreneurship in sustainable development is examined, and its impact on achieving the 2030 Sustainable Development Goals (SDGs) is thoroughly explained. The chapter comprehensively explains the sustainable entrepreneurship framework, showing the recognition and exploitation of sustainable opportunities and the resulting sustainable outcomes. Finally, this chapter examines and provides the rationale for the theories that underpin sustainable entrepreneurship.

2.2 THE CONCEPT OF SUSTAINABLE ENTREPRENEURSHIP

Sustainable entrepreneurship strongly correlates with social and environmental entrepreneurship (Hockerts & Wustenhagen, 2010:487; Schaltegger & Wagner, 2011:223). To elucidate the notion of sustainable entrepreneurship, it is imperative to

delve into the shared characteristics and the differentiating factors among social, environmental, and sustainable entrepreneurship.

The primary commonality among the domains of social, environmental, and sustainable entrepreneurship is the inherent motivation of entrepreneurs to generate value for various stakeholders. This is achieved by recognising and capitalising on opportunities that emerge from societal issues overlooked or inadequately resolved by governmental, corporate, or non-profit entities (Schaltegger & Wagner, 2011:224; York *et al.*, 2016:697). In the present situation, the concept of value creation can be comprehended as a rise in the overall satisfaction or benefit experienced by the members of society due to entrepreneurial endeavours (Santos, 2012:338). Irrespective of the specific form of entrepreneurship, the generation of value at the societal level is an essential prerequisite for acquiring value at the organisational level. In contrast to conventional entrepreneurs, social, environmental, and sustainable entrepreneurs have a broader objective that extends beyond the sole pursuit of private gains through value creation. Their aim encompasses enhancing quality of life for the benefit of others (Groot & Pinkse, 2015:638; Santos, 2012:338; Schaltegger & Wagner, 2011:224). Therefore, the motivation of social, environmental, and sustainable entrepreneurs differs from the singular focus on profit that typically characterises conventional entrepreneurs (Van de Ven *et al.*, 2007:356; Dacin *et al.*, 2010:38).

Notwithstanding this shared characteristic, the social, environmental, and sustainable entrepreneurship domains exhibit distinctions across various dimensions, as elucidated in their respective definitions provided below.

2.2.1 Social entrepreneurship

Social entrepreneurs strive to generate positive social outcomes by tackling societal issues, like enhancing healthcare accessibility, sanitation, and water provision in slum regions and revitalising underprivileged communities. According to Thompson *et al.* (2011:205), prioritising social benefits takes precedence over generating economic advantages, particularly within a not-for-profit framework. Thompson *et al.* (2011:205)

believe that the rationale behind the not-for-profit environment of social entrepreneurship can be attributed to its primary disciplinary foundation in the non-profit and public sectors.

The existing body of literature about social entrepreneurship can be broadly classified into two separate streams, namely social entrepreneurship at the person level and social entrepreneurship at the collective level (Austin *et al.*, 2006:4). According to Ulhøi (2005:7), his research primarily examined a subsequent body of literature that delves into the concept of a social entrepreneur. In this context, Ulhøi defines a social entrepreneur as an individual who can effectively mobilise resources that are not fully utilised, aiming to address unmet needs. Importantly, Ulhøi emphasises that social entrepreneurs prioritise attaining social objectives over financial gains, considering profits as a secondary motivation. On the contrary, collective social entrepreneurship is a strategic approach facilitated by networks and capital with a social orientation.

2.2.2 Environmental entrepreneurship

The objective of environmental entrepreneurs is to safeguard the integrity of our natural environment and restore ecosystems that have been compromised (York & Venkataraman, 2010:452). The authors York *et al.* (2016:697) argue that this action is undertaken within a profit-driven framework that seeks to simultaneously generate both environmental and economic benefits. They further assert that this approach's theoretical foundation is in ecological economics, as highlighted by Thompson *et al.* (2011:206).

The distinguishing characteristic of environmental entrepreneurship is the abundance of environmental issues entrepreneurs can prioritise. Ecologists and economists frequently deliberate on market failures resulting from business activity. However, there has been a recent emergence of utilising business activity to address environmental concerns. It is crucial to comprehend the specific elements environmental entrepreneurship might impact, which sets it apart from social and sustainable entrepreneurship (Pfeffer, 2010:36; Isaak, 2002:2; Schaper, 2002:28).

2.2.3 Sustainable entrepreneurship

Sustainable entrepreneurship exhibits a dynamic and inherent character, making establishing a singular definition challenging. This is primarily due to the absence of criteria that can definitively distinguish enterprises from non-enterprises (Tunio *et al.*, 2021:2). According to Tleuberdinova *et al.* (2021:182), sustainable entrepreneurship refers to the creation of novel combinations.

According to Hockerts and Wüstenhagen (2010:482), sustainable entrepreneurship refers to identifying and utilising economic possibilities by creating market imbalances that catalyse the transition of a sector towards a more environmentally and socially sustainable condition. According to Dean and McMullen (2007:58), the concept pertains to the identification, assessment, and utilisation of economic prospects that arise from deficiencies in the market, particularly those that hinder the achievement of sustainability goals, including those about the environment.

According to Schlange (2009:18), the concept essentially involves the integration of opportunities and aspirations to generate value from economic, social, and ecological standpoints. The entrepreneurs in question strive to achieve equilibrium in the three domains mentioned above (Tilley & Young, 2009:82) and structure their companies accordingly. The concept under consideration centres around the conservation of natural resources, sustenance of life systems, and fostering of communal well-being in the endeavour to realise potential prospects for the creation of forthcoming commodities, procedures, and amenities to reap both financial and non-financial benefits for individuals, the economy, and society as a whole (Shepherd & Patzelt, 2011:142).

According to Katsikis and Kyrgidou (2007:2), sustainable entrepreneurship can be defined as a purposeful and goal-oriented process that seeks to attain sustainable development. This is achieved through the identification, assessment, and exploitation of opportunities, resulting in the creation of value that contributes to economic prosperity, social cohesion, and environmental protection. Social entrepreneurship can be distinguished from traditional entrepreneurship based on its social, economic, and ecological characteristics (Katsikis & Kyrgidou, 2009:3).

Another perspective highlights the repercussions of social entrepreneurship, which encompass economic, psychological, social, and ecological impacts (Cohen & Winn, 2007:34). Sustainable entrepreneurs are known for their ability to offer novel business models and advance groundbreaking technologies by leveraging the principle of "creative destruction" (Schaltegger, Hansen & Lüdeke-Freund, 2016:4; Bertello *et al.*, 2022:686). The text highlights four market defects, namely defective pricing mechanisms, information asymmetries, inefficient enterprises, and externalities resulting in unsustainable business practises, and environmental degradation (Cohen & Winn, 2007:34). The topic under discussion is a subject of debate, stemming from the principles and practises associated with sustainable development (Hall *et al.*, 2010:441).

Muñoz and Cohen (2018:306) assert that the existing body of literature about sustainable entrepreneurship demonstrates a convergence of economic, social, and environmental considerations. The wise utilisation of resources and environmental stewardship have been identified as the primary issues that contribute to the welfare of future generations (Crals & Vereeck, 2005:176; Hockerts & Wüstenhagen, 2010:489). The primary driving force behind sustainable entrepreneurship is the imperative to attain sustainability and embrace sustainable business practices to protect individuals, the environment, and financial gains (Rosário *et al.*, 2022:6). According to Ras and Vermeulen (2009:327), the objective of sustainable entrepreneurship is to reinstate equilibrium among social, environmental, and economic pursuits, whenever feasible. Given these circumstances, the concept of sustainable entrepreneurship is being considered as a viable complement to sustainable development (Lans *et al.*, 2014:41). In contrast, it has been observed by Youssef *et al.* (2018:234) that business proprietors have identified hitherto unexplored markets that exhibit strong demand for eco-friendly products and place significant emphasis on the provision of value aligned with environmental considerations.

Entrepreneurship's role in society is paramount, as its practices exert a substantial influence. Hence, it is widely seen as vital in aiding the transition towards a more sustainable future. According to Shepherd and Patzelt (2011:139), sustainable entrepreneurship encompasses a range of financial and non-financial actions that

result in the generation of employment opportunities and the production of modified goods and services that cater to the needs of global communities. The existing literature on sustainable entrepreneurship has examined environmental or ecological concerns (Boons & Lüdeke-Freund, 2013:11; Dean & McMullen, 2007:56). Moreover, entrepreneurs who embrace a sustainable strategy capitalise on market opportunities through the adoption of ethical business practises, thereby fostering the development of novel environmentally friendly products and services using eco-innovative techniques. Consequently, this enhances overall operational efficiency (Schaper, 2016:4).

Sustainable entrepreneurship has arisen in response to the increasing environmental issues and the pursuit of sustainable development. The opportunity is perceived to develop corporate strategies incorporating social and environmental factors. Schaltegger and Wagner (2011:225) argue that entrepreneurship should encompass activities that consider commercial, social, and environmental factors to meet contemporary society's requirements and desires. Shepherd and Patzelt (2011:139) underscore the imperative for entrepreneurs to integrate and adapt sustainability principles within their business strategy, mainly when their objective is to establish a thriving corporation committed to fostering progress. In recent years, there has been a shift in conventional entrepreneurial practices that primarily focus on economic gains through capital accumulation.

This shift has led to the inclusion of non-economic considerations, such as the impact of business activities on the environment and society. Scholars have noted this trend, highlighting the growing awareness among businesses and entrepreneurs regarding the broader consequences of their actions (Aghelie *et al.*, 2016:3; Belz & Binder, 2017:10; Shepherd & Patzelt, 2011:140; Urbaniec, 2018:1776). Furthermore, Avery and Bergsteiner (2011:8) demonstrated the positive impact of employing a more effective entrepreneurial strategy on long-term performance and the ability to rebound from setbacks. Therefore, sustainable entrepreneurship leads to developing a consolidated and sustainable business over time (DiVito & Bohnsack, 2017:571; Johnsen *et al.*, 2018:399).

The concept of sustainable entrepreneurship establishes a connection between sustainable development and entrepreneurial operations (Schaltegger & Wagner, 2011:226). In the early stages, scholarly investigations into sustainable entrepreneurship mostly centred around the examination of entrepreneurial endeavours and their associations with environmental challenges and resolutions (Elkington, 1998:40). In recent studies conducted by Hall *et al.* (2010:444), Nave and Franco (2019:1192), and Natividade *et al.* (2021:1677), it has been noted that the word has undergone a steady transformation, encompassing a broader scope that overlaps with the triple bottom line (TBL) concept. Sustainable entrepreneurship is comprised of three dimensions. At the ecological level, this idea encompasses preserving the environment over an extended period and mitigating adverse impacts arising from entrepreneurial activities. The social dimension considers several stakeholders, including consumers, partners, employees, communities, and other relevant parties. The economic viability of sustainable business is contingent upon the organisation's performance (Urbaniec, 2018:1776; Kostakis & Tsagarakis, 2022:4).

According to Hockerts and Wüstenhagen (2010: 482), sustainable entrepreneurship can identify and utilise economic opportunities by creating market imbalances that catalyse a sector's transition towards a more environmentally and socially sustainable state. According to Shepherd and Patzelt (2011:140), sustainable entrepreneurship may be understood as a strategic approach that emphasises preserving nature, supporting life and communities, and identifying chances to develop future for-profit products, processes, and services. Within this particular framework, the concept of profit is comprehensively understood to encompass monetary benefits and non-monetary advantages for individuals, economies, and society. The criteria provided by Majid and Koe (2012:296) are widely regarded as highly comprehensive due to their inclusion of economic, environmental, and social dimensions.

It is essential to acknowledge that Majid and Koe (2012:296) propose a distinct interpretation as they examine culture as a realm that should be sustained alongside principles of social equity, environmental stewardship, and economic sustainability. The argument posits that Nurse's (2006) thesis holds that sustainability difficulties, particularly in developing nations, should not essentially depend on Western scientific knowledge. The overreliance on Western scientific frameworks for addressing

sustainability issues might result in the marginalisation or erasure of traditional or indigenous knowledge systems. According to Abereijo (2016:5), the application of conventional knowledge has the potential to address the sustainable development difficulties developing countries face. This aligns with the study's objective of creating tailored sustainability frameworks.

2.3 UNIQUENESS OF SUSTAINABLE ENTREPRENEURS

Sustainability entrepreneurs strive to comprehensively integrate sustainability's environmental, economic, and social aspects. They possess a distinct organisational approach compared to typical entrepreneurs (Tilley & Parrish 2007:285). Sustainable entrepreneurs aim to utilise their enterprises to sustain resources by implementing a comprehensive strategy known as 'whole enterprise design,' centred around sustainable development principles (Parrish 2006:851). There is a growing interest in the role of these individuals as pioneers in a new form of capitalist development that has the potential to effectively mitigate concerns regarding global warming, climate change, and their detrimental environmental consequences (Beveridge & Guy 2005:668). Furthermore, it has been argued that many of these sustainable entrepreneurs conduct their business activities in manners that deviate from commonly held notions of entrepreneurial conduct (Hart, 2006:41).

Contrary to the portrayal of ruthless profit-seeking capitalists in popular perception, sustainable entrepreneurs exhibit a distinct mindset, which is exemplified by their contributions to environmental causes, provision of employee-friendly working conditions, engagement with broader social issues beyond mere financial gains, and consideration of the long-term consequences of their business endeavours (Harvey, 2007:41). Many businesses in the field of sustainability often take pride in showcasing their "alternative" credentials through various means such as publicity, promotional materials, and websites. They may intentionally build an image of being distinct from conventional business practices (Gibbs, 2009:64).

What's important to remember is that these socially and environmentally conscious individuals play a critical role in society because they volunteer to offer solutions to complex societal problems that are frequently overlooked, purposefully ignored, or

unsuccessfully addressed by central institutions such as governments, incumbent businesses, or civil society organizations, which are, in most cases, relatively well resourced (Zahra *et al.*, 2008:118; Nicholls, 2009:756).

The creation of a new branch of businesspeople capable and willing to inherently adjust to a highly tough global arena symbolizes the reorientation of sustainable entrepreneurs' focus towards non-economic aims (that is, social and environmental) (Hapenciuc *et al.*, 2015:942). The sustainable entrepreneur's job is to carefully volunteer to balance these pressures and redirect their combined impact toward producing shared non-economic rewards for the entire host community (Shepherd & Patzelt, 2011:138; Fellnhofer *et al.*, 2014:164). Furthermore, to achieve long-term evolution and competitiveness, sustainable entrepreneurs actively seek feasible and permanent answers to societal concerns, endeavour to undergird communal growth, and meet new chances to amplify social wealth (Richomme-Huet & De Freman, 2011:4). Sustainable entrepreneurs, according to Parrish and Foxon (2009:48), serve as genuine drivers for the transition to a sustainable economy by ensuring that the community receives better social and environmental products and services.

According to Saghaian *et al.* (2022:4), sustainable entrepreneurs perceive change as an inherent occurrence and consistently adopt a positive outlook, actively responding to and regarding entrepreneurship as a favourable prospect. The examination of patterns in the evolution of human social life reveals that sustainable entrepreneurship has played a significant role in the advancement of societies (Shahidi & Smagulova, 2008:36). According to Johnson and Schaltegger (2016:2), sustainable entrepreneurs play a crucial role in introducing innovative solutions to the market and society while ensuring that these solutions are environmentally and socially sustainable.

Sustainable entrepreneurs play a significant role in fostering economic growth through their contributions to innovation, efficiency, job creation, competitiveness, productivity, and the establishment of new enterprises. Consequently, promoting an entrepreneurial revolution and innovation becomes imperative for achieving economic growth and development. Education is a significant catalyst for progress and is intricately intertwined with nations' economic and social well-being. It serves as a reliable gauge of advancement in industrialised countries (Ayat, 2021:73).

Entrepreneurs assume a crucial position within the cycles of economic development as they serve as both the originators and drivers of such progress. The rise and progression of sustainable entrepreneurship is a significant occurrence in contemporary economies (Saghaian *et al.*, 2022:5).

As the conversation around sustainable entrepreneurship develops, it's important to remember that sustainable entrepreneurs confront unique hurdles when establishing their enterprises because of the disparity between producing and extracting personal and social value (Hoogendoorn *et al.*, 2017:1133). To begin with, they face a twofold consequence of an enormous financial and human resource burden in implementing long-term entrepreneurship. Sustainability frequently necessitates investments in infrastructure and technology, compliance, and innovation, which are costly for SMMEs. Suppose the SMME has extensively invested in the status quo. In that case, transitioning to sustainable technology will be more difficult (OECD, 2018:15). Besides the financial burden, sustainability measures can drain SMMEs' already limited human capital resources. Adopting sustainability efforts necessitates a particular level of technical and management expertise, technological understanding, sharp learning ability, and the ability to absorb new technologies while being flexible. Because they choose huge organizations that offer better career chances to their human resource pool, SMMEs frequently lack the proper human capital with the required capabilities (Creech *et al.*, 2014:42).

Jassen (2001:5) developed a set of ten ground rules for being a successful and sustainable entrepreneur to deconstruct the concept of sustainable business. To begin, the corporation that the prospective sustainable entrepreneur represents should limit environmental damage in a deliberate yet systematic manner, consciously protect human rights, and, as a matter of principle, take excellent care of its employees. What's vital to remember is that a sustainable entrepreneur should, as a matter of principle, commence the process rather than allowing extrinsic pressure to function as a stimulant. A corporation wishing to pursue sustainable entrepreneurship should intentionally identify its broad goals and required targets.

As a matter of principle, these aims and targets should be thoroughly studied and shown to be closely tied to customers' demands. They should be adhered to on a long-

term basis. According to Jassen (2001:5), the corporation's communications department should describe the sustainability thrust of its activities and the production process. Consumers and pressure groups should clearly understand the corporation's sustainable entrepreneurship investments. However, any additional costs incurred by this investment should not be passed on to the consumer through price rises for the sustainability thrust to be evident to other stakeholders. Regardless of the preceding, it should be highlighted that a company that is consciously pursuing sustainability measures should not, as a matter of principle, strive to overemphasize its efforts. In addition to the above rules, Bos (2002:125) added a restriction to the list that states that any organization intentionally pursuing sustainability entrepreneurship initiatives should, as a matter of principle, ensure that its sustainable entrepreneurship practices are shared, practised, and maintained by the entire corporation, not just by management.

Over the past several years, sustainable entrepreneurship has seen noticeable growth, characterised by the emergence of various entrepreneurial approaches aimed at addressing environmental, social, and economic challenges (Stubbs, 2017:338). According to Saghaian *et al.* (2022:8), sustainable entrepreneurs can foster change within an environment characterised by a balanced approach. This entails ensuring that the utilisation of resources, allocation of investments, and advancement of technology are all aligned and mutually beneficial for current and future generations, with the ultimate goal of meeting human needs.

Sustainable entrepreneurs are driven by the desire to constructively contribute to multifaceted and interconnected social and ecological challenges, encompassing climate change, nuclear radiation, disparities in healthcare and education, poverty, and persistent unemployment. In a broader sense, individuals are driven by the desire to actively participate in sustainable development, a concept that entails the pursuit of growth that satisfies the requirements of present generations while safeguarding the capacity of future generations to fulfil their own needs (Hoogendoorn *et al.*, 2019:1136). According to Freudenreich, Lüdeke-Freund, and Schaltegger (2019:6), sustainable entrepreneurs establish a direct correlation between their company performance and attaining favourable outcomes for the natural environment and humanity. Consequently, this linkage results in the generation of value for a diverse

set of stakeholders. Nevertheless, sustainable entrepreneurs have additional problems unique to their context, as illustrated in the subsequent section.

2.3.1 Challenges to Sustainable Entrepreneurs

The objectives of sustainable entrepreneurs are more comprehensive and intricate compared to those of conventional entrepreneurs, as they leverage opportunities stemming from overlooked social and environmental issues while concurrently pursuing both individual and collective interests (Groot & Pinkse 2015:639; Dean & McMullen 2007:53). The extra intricacies pertain to the disparity between the generation and acquisition of personal worth and communal value (Santos 2012:339). Considering this disparity, three arguments are posited to elucidate the reasons behind the augmented difficulties encountered by sustainable entrepreneurs in the initial stages of their business establishment compared to their conventional counterparts.

Sustainable entrepreneurs commonly capitalise on possibilities inside marketplaces that exhibit imperfections and failures (Cohen & Winn, 2007:34; Mair & Marti', 2006:39; Pacheco *et al.*, 2010:466). The market failures pertain to public goods, externalities, monopolistic power, improper government action, and imperfect information. While engaging in these possibilities can contribute to both collective and private wealth creation (Cohen & Winn, 2007:34), it is essential to acknowledge the presence of market failures while addressing environmental and societal concerns, further complicating the situation.

On the one hand, such market failures relate to the characteristics of natural resources and environmental issues (Folke 1999:8), such as a lack of or unclear property rights, the absence of prices for specific natural resources, and exhaustibility, where use today has consequences for future availability (Cornes & Sandler 1996:5; Dasgupta 1990:53). In contrast, for example, well-defined property rights are considered a prerequisite for value appropriation and thus for entrepreneurial activity to occur (Van Stel *et al.* 2005:315). Indeed, protecting the natural environment concerns a nonexcludable public good, resulting in low potential for value capture. On the other hand, serving unmet social needs, such as providing sanitation to slum areas and

revitalizing deprived communities, clearly limits the capacity for value capture because beneficiaries tend to lack the means to pay for the value creation (DiDomenico *et al.* 2010:683; Mair & Marti, 2006:39). In both cases, operating under circumstances of imperfect markets poses additional challenges that need to be overcome by sustainable entrepreneurs at the inception and more established stages of their business.

Second, sustainable entrepreneurs must initiate institutional change to realize changes to existing rules, public policy, norms, and legislation (Meek *et al.* 2010:496; Pacheco *et al.* 2010:467). The need to change existing institutions in sustainable entrepreneurship is illustrated by Groot and Pinkse (2015:639) for clean-energy technologies. Groot and Pinkse (2015:639) describe the development of electric vehicles under insufficient infrastructure and the introduction of renewable energy, facing competition from incorrectly priced regular energy sources subject to subsidization. Groot and Pinkse (2015:640) highlight the need for sustainable entrepreneurs to become active in the political arena to create institutional change. Some innovations will not grow into successful businesses in the agricultural sector due to inadequate infrastructure and supporting policies.

Sustainable entrepreneurs must possess a comprehensive knowledge base to navigate the challenges posed by market imperfections within an adverse institutional context (De Marchi, 2012:617; Marin *et al.*, 2015:674). To foster sustainability, entrepreneurs focusing on sustainability must allocate their resources towards procuring external knowledge, promoting cooperation, and cultivating internal knowledge. As a result, sustainable businesses face the challenge of managing diverse and intricate relationships with commercial, public, and civil society stakeholders (Marin *et al.*, 2015:674; Nicholls, 2006:12).

As mentioned above, the findings underscore the significance of robust networking abilities for entrepreneurs engaged in sustainable practices. Market imperfections, the need to adapt to institutional changes, and the requirement for a comprehensive knowledge base pose additional obstacles for sustainable entrepreneurs in their journey towards initiation, expansion, and achievement. The presence of these

supplementary problems in the pursuit of sustainable possibilities has an impact on entrepreneurs' perceptions of obstacles and uncertainties.

The primary concern for sustainable entrepreneurs is the viability of establishing prosperous enterprises through their innovative ideas (Schaltegger & Wagner, 2011:227), notwithstanding the various obstacles they may encounter (Kiefer *et al.*, 2019:157). Business success can be conceptualised and measured in several ways, depending on individual, organisational, and sociocultural values. One perspective considers financial returns as the primary indicator of success. Another view takes into account nonfinancial outcomes, such as enhanced innovative capabilities. Additionally, others argue that success should also encompass an excellent societal impact, achieved by addressing ecological and social challenges (Breuer & Lüdeke-Freund, 2017:8). However, irrespective of individual motivations and measures of success, sustainable entrepreneurs must engage in the commercialization of their problem-solving solutions and drive market transformation to generate substantial private and public benefits for diverse stakeholders (Freudenreich *et al.*, 2019:3; Schaltegger *et al.*, 2016:5).

According to Cohen and Winn (2007:32), mitigating or potentially eradicating market imperfections and negative externalities contributing to humanity's unsustainable evolution is necessary. Sure, researchers in the field of sustainability contend that the deteriorating condition of the global environment, along with the escalating levels of ecological degradation, poverty, and social injustice, necessitates the adoption of fundamentally transformative approaches to doing business that provide net positive outcomes (Ehrenfeld, 2004:6; Upward & Jones, 2016:99).

2.4 MOTIVATIONAL FACET OF SUSTAINABLE ENTREPRENEURSHIP

The observable ramifications of climate change and the degradation of the environment contribute to an amplified demand for a shift towards enhanced sustainability across several domains of human existence. The sustainable entrepreneurship (SE) field investigates how entrepreneurial endeavours might facilitate the change towards sustainability by developing novel market solutions that encompass ecological, social, and economic benefits (Gil-Doménech & Berbegal-

Mirabent, 2018:972). In recent years, the topic has gained significant prominence within the field of entrepreneurship study, as evidenced by its recognition as a crucial environmental discourse (Lüdeke-Freund, 2019:668; Anand *et al.*, 2021:6; Munoz & Cohen, 2018:312; Schaltegger *et al.*, 2016:267; Terán-Yépez *et al.*, 2020:11). The topic of interest in the field of research pertains to the factors that motivate individuals to engage in sustainable entrepreneurship (Kirkwood & Walton, 2010:267; Shepherd *et al.*, 2013:1254; Koe & Majid, 2014:259) and conduct business in a sustainable manner (Schaltegger & Wagner, 2011:224; Gibbs, 2009:65; Gagnon, 2012:13). These factors include environmental and social values, entrepreneurial passion, and market-based incentives, which have consistently garnered attention (Gast *et al.*, 2017:46). Gaining insight into the various dimensions of motivation in the context of sustainable entrepreneurship can facilitate the customization of policies aimed at fostering successful entrepreneurship.

Additionally, this understanding can aid in establishing appropriate incentives that contribute to the ongoing progress of sustainable development, which is increasingly sought after on a worldwide scale (United Nations, 2022). Previous research conducted in related disciplines has also demonstrated that motivation can serve as a precursor to performance (Sánchez-Bolívar & Martínez-Martínez, 2022:487; Shane *et al.*, 2003:259). Within this framework, the concept of entrepreneurial motivation may be comprehended as the underlying impetus or rationale that drives individuals to partake in entrepreneurial endeavours (Fayolle *et al.*, 2014:671; Schacter *et al.*, 2011:120; Toscher *et al.*, 2020:183). This study aims to investigate the impact of motivation, specifically focusing on its influence and enhancing our understanding of motivation.

2.4.1 Influence on motivation for sustainable entrepreneurship

Various factors can influence incentives for sustainability or entrepreneurship within the realm of sustainability. These factors can be categorised as either external influences or personal considerations. According to Gholamrezai *et al.* (2021:2505), several external factors were identified to motivate individuals to engage in sustainable business ventures. Through the analysis of agricultural entrepreneurs, it has been determined that various governmental strategies, including but not limited to

enhancing production capacity, aligning national and global regulations, evaluating environmental factors, fostering an entrepreneurial culture, and bolstering scientific research and international collaboration, can serve as incentives for entrepreneurs to engage in sustainable enterprises. However, it has been found that entrepreneurs are more likely to participate in social and environmental activities due to their personal convictions rather than being influenced by government policies or the need for competitive advantage inside their organisations (Famiola & Wulansari, 2020:18).

In their study, Middermann *et al.* (2020:9) examined the potential impact of heightened awareness regarding environmental risk exposure on individuals' inclination to establish firms aimed at addressing these social and environmental shortcomings. The researchers discovered that a fear of failure and the perception of social pressure significantly influence an individual's exposure to environmental risks. Simultaneously, the beneficial impacts of perceived self-efficacy and favourable prospects remain unaltered in the presence of environmental risk exposure. According to the research conducted by Butkouskaya *et al.* (2020:6), the absence of structured entrepreneurship education and the presence of informal elements such as limited support and incentives pose significant obstacles to the advancement of sustainable entrepreneurship. This aligns with the research conducted by Tunio *et al.* (2021:8), which demonstrated that engagement in an entrepreneurship course serves as a catalyst for sustainable entrepreneurship. The authors found that individuals who acquire entrepreneurial skills during their academic tenure are more inclined to capitalise on entrepreneurial prospects due to heightened motivation. In addition to conventional educational pursuits, accomplished entrepreneurial figures in entrepreneurship courses appear to significantly influence students' inclination towards entrepreneurship (Tunio *et al.*, 2021:8; Boldureanu *et al.*, 2020:12).

Personal influences encompass the principles, cultural background, and gender of sustainable entrepreneurs. Gunawan *et al.* (2021:732) also took into account the factor of gender in their study, whereby they examined the value-driven incentives behind individuals choosing to pursue a career as an ecological entrepreneur, commonly referred to as an ecopreneur. Following the research conducted by Butkouskaya *et al.* (2020:6), it was observed that the extent to which individuals embody masculine and feminine ideals holds greater significance in influencing their incentives towards

ecopreneurship, as opposed to their gender categorization. Furthermore, Gunawan *et al.* (2021:732) discovered that the drivers of ecopreneurship encompass self-enhancement, conservation, self-transcendence ideals, and the intersections of identities.

According to Tunio *et al.* (2021:8), the impact of culture and values on entrepreneurial drive was emphasised. Entrepreneurship among university graduates is a lifestyle choice influenced by cultural, societal, and familial values. The cultural background of the graduates' families serves as a significant incentive for their pursuit of entrepreneurship. Entrepreneurs from business families possess a distinct advantage when embarking on a business venture due to their families' valuable experience and support, particularly during the enterprise's nascent stages or pivotal aspects.

Fors and Lennerfors (2019:3) adopted a distinct perspective when examining the impact of values on motivation. Motivation was not seen to be a consistent element stemming from the entrepreneurs' values, talents, and expertise. Instead, entrepreneurs were perceived as profoundly involved and driven by several human and nonhuman interests, causes, and projects in diverse and evolving connections. Fors and Lennerfors (2019:3) propose the concept of the individual-care nexus, which characterises sustainable entrepreneurs as interdependent persons whose emotions, motivations, and qualities are influenced by and impact their involvement in caring practises and relationships. Therefore, the incentives exhibited by sustainable entrepreneurs are influenced by the relationships they rely on and the entrepreneurial activities they engage in. In essence, a consensus among scholars is evident regarding the influential role of gender and values, encompassing personal, cultural, and religious aspects, in motivating sustainable entrepreneurship initiatives (Famiola & Wulansari, 2020:18; Butkouskaya *et al.*, 2020:6; Tunio *et al.*, 2021:8; Fors & Lernerfors, 2019:3; Gunawan *et al.*, 2021:732).

2.4.2 Understanding motivation for sustainable entrepreneurship

The motivation of entrepreneurs within the framework of sustainable entrepreneurship can be comprehended by examining their motivation for implementing concepts or

strategies in a sustainability context and their motivation for engaging in sustainable entrepreneurial activities.

In their study, Drottberger *et al.* (2021:12) analysed the attributes, driving factors, and impediments and prospects encountered by young individuals entering the market gardening sector in Sweden. The findings underscored the multifaceted character of motivation and its interrelation with individual identity and the broader food system. This is because engaging in market gardening enabled the participants to pursue a personal passion while generating economic, ecological, and social benefits for their enterprise and the surrounding community. Moreover, this endeavour contributes to their vision of a forthcoming sustainable food system, instilling a sense of purpose that drives their ongoing economic development. Additionally, Sedlmeier *et al.* (2019:5) conducted a study examining the motivation of entrepreneurs in Germany who initiated enterprises aimed at addressing the issue of food waste. The study's findings indicate that the entrepreneurs' rationale for starting a firm aimed at mitigating food waste encompasses both sustainability-driven objectives and a profit-oriented goal.

Moreover, the entrepreneurs under investigation exhibited variations in their perspectives on the significance of environmental and social objectives, their comprehension of sustainability, and their strategies for achieving them. Therefore, social motivation manifests in various ways and plays a significant role in addressing societal issues. Drottberger *et al.* (2021:12) and Sedlmeier *et al.* (2019:5) have analysed various motivational factors influencing the new venture creation process. These factors encompass multiple motivations, including the aspiration to generate economic, ecological, and social value. In contrast, Wang *et al.* (2020:4) have focused on reasons that are not exclusively tied to the establishment of businesses. The research conducted by the authors focused on examining the underlying motivations and extent of sustainability practises, with particular emphasis on the Sustainable Development Goals (SDGs) within the maritime sector. The authors put up a theoretical framework that outlines multiple motivations, starting with legal considerations and progressing to economic, societal (including environmental), and philanthropic factors. Conversely, the model illustrates varying degrees of comprehensiveness about sustainability endeavours within the maritime sector.

2.4.3 Influence of motivation for sustainable entrepreneurship

The study conducted by Nhemachena and Murimbika (2018:117) examined the impact of the four distinct characteristics of motivation for sustainable entrepreneurship on the performance of enterprises. The dimensions encompassed in this study include extrinsic and intrinsic motivations, income security/financial independence and necessity reasons. Based on the conclusions presented in themes one and two, the study's outcomes indicate that extrinsic and intrinsic motives play significant roles in shaping entrepreneurial behaviour and performance. According to Dai *et al.* (2018:9), both elements are pertinent to effectively establishing a sustainable entrepreneurial team. Nevertheless, the researchers proposed conducting further experiments to assess the resilience of their conclusions about setting sustainable entrepreneurship teams concerning alternative forms of collaborative partnerships. Additionally, implementing interventions focused on cultivating and enhancing both intrinsic and extrinsic incentives among entrepreneurs will substantially impact the overall success of sustainable firms (Nhemachena & Murimbika, 2018:117).

The study by Reynolds and Holt (2021:2150) examined the sense-making process of individual entrepreneurs involved in hybrid organisations, specifically focusing on their experiences, motives, and ideals. The results of their study indicated that individuals are motivated to engage with sustainable enterprises due to their ambition and altruistic tendencies, which aligns with the paradoxical nature of firms striving for both social impact and value generation. A study by Sharma *et al.* (2021:4) showed that self-oriented agency and communion motives play significant roles in driving entrepreneurial pleasure and achieving success.

In a study conducted by Arru (2020:3521), an examination was carried out to gain a deeper understanding of the various elements that influence the behavioural intents of sustainable entrepreneurs. The research explored the impact of subconscious objectives, subjective motives, and personality traits on sustainable entrepreneurs. The findings of this study indicate that the intention to engage in social entrepreneurship is influenced by subconscious incentives that work in conjunction

with each other. Voinea *et al.* (2019:11) and Peralta *et al.* (2019:1124) researched the various aspects that impact the formation and implementation of sustainable business models and the level of acceptability and adoption of these practices. In their study, Voinea *et al.* (2019:11) examined the factors influencing organisational processes, management traits, and stakeholder expectations concerning corporate social responsibility. It was discovered that all the investigated businesses exhibited a profound and inherent motivation to contribute positively to society. Simultaneously, pursuing financial benefits is an ongoing incentive for their active participation in corporate social responsibility endeavours.

The objective of the study conducted by Cantele *et al.* (2020:8) was to ascertain the primary factors influencing adopting sustainable practices and to examine whether there were any notable distinctions between small and large enterprises in their implementation strategies. The findings indicated that implementing sustainability practises is positively influenced by three factors: 1) external environmental pressures, 2) anticipated benefits of sustainability implementation, and 3) the entrepreneur's characteristics in guiding strategy practises implementation, such as their motivation, values, and vision. The influence of environmental pressures appears to hold greater significance for large corporations; however, the values of entrepreneurs and the anticipated advantages are pivotal determinants for adopting sustainability practices, irrespective of the organisation's size.

The variables that influence or impede the adoption of sustainability practices include external environmental forces, anticipated benefits of sustainability implementation, and the characteristics of entrepreneurs in driving strategic approaches. These qualities pertain to the entrepreneur's motivation, values, and vision. The primary determinant of sustainability implementation across enterprises of varying sizes is the values held by entrepreneurs. The drivers of sustainable commitment may be traced to these entrepreneurs' internal and personal motives. For example, Mäkitie (2020:478) examined sustainable resource redistribution within radical clean technologies. By examining the motivations and strategies established floating wind power companies employ in their pursuit of innovation in revolutionary clean technologies, two primary drivers for engaging in floating wind power ventures emerge

the perceived shift in the energy sector and the potential to utilise existing company resources in new ways.

According to Handrito *et al.* (2021:2243), the inclination of small and medium-sized enterprises (SMEs) towards environmental sustainability is shaped by both the external economic and social context, as well as the personal motivations of the entrepreneur. When driven by discrepant explicit and implicit power incentives, an entrepreneur's environmental sustainability orientation is considered high. However, it is essential to note that high degrees of explicit and implicit power do not necessarily correlate with a high ecological sustainability orientation. The findings of Argade *et al.* (2021:3532) align with the result mentioned above, indicating that both external and intrinsic motives play a significant role in influencing entrepreneurs' ability to identify opportunities and adopt a sustainable orientation. The results of their study revealed the complex relationship between intrinsic motivational elements at the human level and the extrinsic institutional conditions that influence the process of identifying opportunities. The primary drivers for individuals to engage in sustainable business are their recognition of unsustainable practices prevalent in the local context and their moral imperative to alleviate social injustices.

According to the findings of Hanohov and Baldacchino (2018:336), it was determined that sustainable entrepreneurial activities are only driven by human motives. The researchers expanded upon the theoretical framework proposed by Shepherd and Patzelt (2011:142) to investigate the practical aspects of entrepreneurs identifying opportunities for sustainable firms. The study did not find evidence to suggest that entrepreneurs are motivated to explore sustainable possibilities based on their perceptions of dangers to the natural and communal environment. Nevertheless, the inclination towards self-employment, individual traits, and personal situations were identified as intrinsic motivations for individuals pursuing entrepreneurship. This suggests that the reasons that drive individuals to participate in conventional entrepreneurship also apply to those who participate in sustainable entrepreneurship. The findings indicate that the motivations for individuals to engage in sustainable entrepreneurship are not exclusively driven by sustainability concerns. Instead, they may also be caused by pursuing opportunities associated with traditional entrepreneurship.

The study conducted by Mas-Tur *et al.* (2021:32) builds upon the entrepreneur-centered perspective established by Hanohov and Baldacchino (2018:336). It investigates various aspects, such as entrepreneurs' perception of opportunities, their perceived capabilities, motivation, and high expectations for job creation. Additionally, the study examines how these factors contribute to promoting sustainable development. The findings indicate that the attributes of entrepreneurs play a significant role in the successful execution of sustainability initiatives. The motivation and aspiration for robust employment creation promote sustainable development inside firms. Entrepreneurs' drive and capacity to effectively motivate others appear vital in fostering sustainable development.

Fischer *et al.* (2018:412) concurred with the findings of Hanohov and Baldacchino (2018:336) and Mas-Tur *et al.* (2021:32), asserting that a critical motivator for sustainable entrepreneurs is the aspiration for self-employment. The motivating factors among sustainable entrepreneurs were the aspiration for autonomy and self-employment, adherence to sustainable principles, the pursuit of impactful initiatives, and the promotion of enhanced societal well-being. As mentioned above, Bressan and Pedrini (2020:499) examined the impact of entrepreneurs' passion for sustainable lifestyles on sustainability-oriented innovation inside micro and small enterprises, yielding similar results. The study's results indicate that entrepreneurs' sustainable lifestyle significantly influences the functioning of their businesses. Entrepreneurs who lead a lifestyle that benefits society may have a greater propensity for developing and implementing sustainable innovations within their business operations.

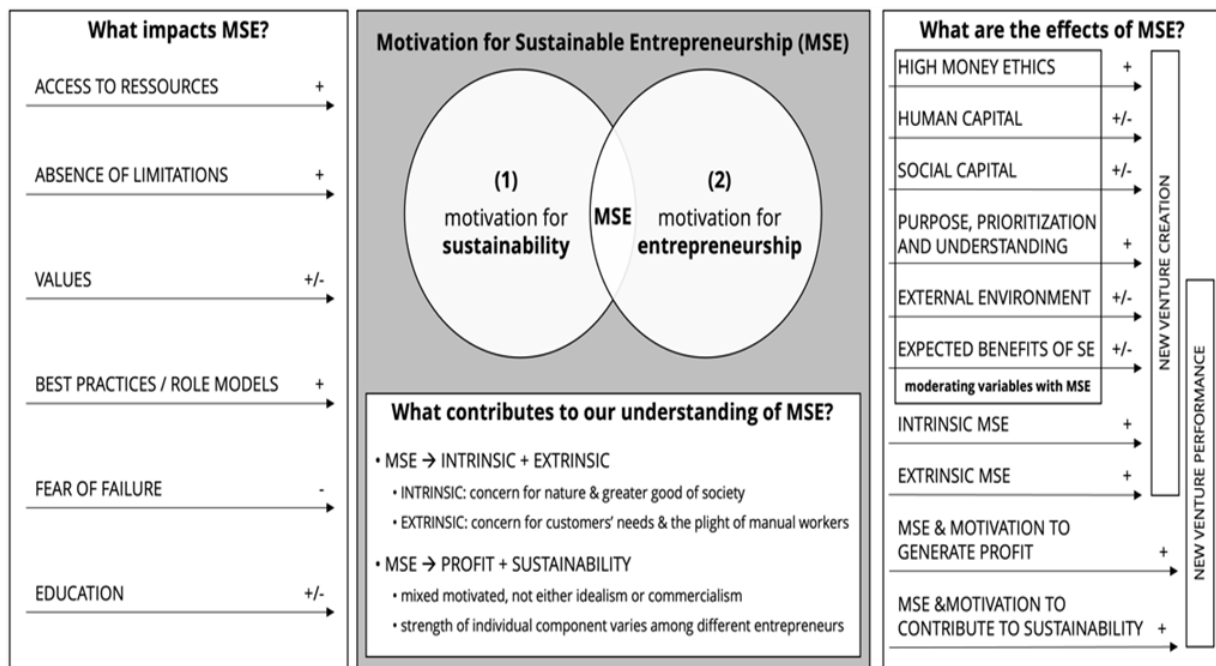
2.4.4 Effects of motivation for sustainable entrepreneurship

This study investigated the impact of varying degrees of motivation for sustainable entrepreneurship on the establishment and success of enterprises, as well as the adoption of sustainable values and practises inside these ventures. In establishing and advancing social or sustainable enterprises, solid ethical principles about financial matters moderate the drive for sustainable entrepreneurship.

Both these criteria have an excellent impact on the establishment of sustainable ventures. The effect of sustainable entrepreneurship on creating new sustainable experiences is contingent upon the availability of other essential resources. Specifically, the presence of human capital, social capital, and motivational factors is crucial for sustainable entrepreneurship to positively influence the establishment of new sustainable ventures. Motivating attitudes towards social entrepreneurship include the need for achievement, locus of control, vision, desire for independence, enthusiasm, drive self-efficacy, and goal setting. The favourable influence of motivation for sustainable entrepreneurship on the establishment of new sustainable ventures is contingent upon the entrepreneur's possession of purpose, prioritisation, and understanding. It has also been revealed that various industries may adopt distinct approaches to sustainable entrepreneurship.

According to Pudak and Bokan (2020:13), their research indicates that farmers desire a declining economy that prioritises localised production on a smaller scale. In contrast, engineers prioritise innovation and adopting new technology to facilitate economic growth, but in an environmentally sustainable manner. The various perspectives on motivation for sustainable entrepreneurship may result in varying levels of new venture development. Figure 2.1, presented below, provides a concise overview of the interconnections within the motivation construct for sustainable business.

Figure 2.1: Motivation for sustainable entrepreneurship construct



Source: Reuther *et al.* (2023:18)

The presence of intrinsic and extrinsic motivation in the context of sustainable entrepreneurship has been found to have a beneficial influence on entrepreneurial activities and performance. Consequently, implementing strategies to enhance motivation for sustainable entrepreneurship can improve the performance of sustainable entrepreneurial endeavours. Moreover, the drive towards sustainable entrepreneurship, along with its underlying incentives for profit and sustainability, has a beneficial influence on the level of involvement in sustainable entrepreneurship (Reuther *et al.*, 2023:18).

Consequently, this contributes to the overall success of sustainable entrepreneurship and facilitates the development of innovative sustainable business models. Existing evidence indicates that the external environment surrounding a business and the anticipated rewards associated with sustainable entrepreneurship significantly regulate the motivation for engaging in sustainable entrepreneurial activities. The presence of these components has a good impact on engagement in sustainable entrepreneurship and thus contributes to its success. The effect of motivation on sustainable entrepreneurship can be analysed through its intrinsic and extrinsic components (Pudak & Bokan, 2020:13).

Intrinsic and extrinsic motivation have been found to positively influence sustainable orientation. Additionally, intrinsic motivation plays a positive role in driving sustainable entrepreneurship activities. This is because the personal characteristics of entrepreneurs are considered vital factors in successfully implementing sustainability practices. The absence of motivation for sustainable entrepreneurship, coupled with a lack of problem knowledge, has been found to harm sustainable entrepreneurship activities.

2.5 DETERMINANTS OF SUSTAINABLE ENTREPRENEURSHIP

Multiple elements affect the inclination of small, medium, and micro enterprises (SMMEs) to participate in sustainable entrepreneurship. The engagement and implementation of sustainable practises by SMMEs are influenced by various drivers, including stakeholders, motivational factors, legislation, prior experience, focus on innovation and the organisation's culture. These factors are crucial in supporting and compelling SMMEs to adopt sustainable practices.

The research field has shown consistent interest in the factors that drive engagement in sustainable entrepreneurship (Kirkwood & Walton, 2010:216; Koe & Majid, 2014:258) and the factors that drive businesses to operate sustainably (Schaltegger & Wagner, 2011:227; Gibbs, 2009:66; Gagnon, 2012:66). Gaining insight into the various dimensions of determinants in the context of sustainable entrepreneurship is crucial for tailoring policies that effectively support entrepreneurial endeavours and for establishing appropriate incentives to drive progress in the realm of globally sought-after sustainable development (United Nations, 2022).

2.5.1 Stakeholders

The entities or individuals referred to in this context are responsible for evaluating and influencing the degree to which a corporation can accomplish its stated goals (Agüera, 2013:4). According to Baipai *et al.* (2023:5), this organisation exhibits a robust interconnectedness among individuals who both influence and are influenced by its operations is more equipped to effectively address a multitude of potential difficulties. Parmar *et al.* (2010:12) define the concept of stakeholders as individuals or groups

who possess the ability to influence or be influenced by the actions of a corporation. The stakeholder theory emphasises the interdependent interactions of a company entity, its customers, employees, investors, communities, and other relevant parties with a vested interest in the organisation.

The theory posits that stakeholders have both the potential and the inherent influence in management's decision-making process. The significance of stakeholder engagement in sustainable entrepreneurship research has not been adequately addressed. Limited research has been conducted, examining the farmer and the adjacent community exclusively. Insufficient emphasis has been placed on exploring the perspectives of additional stakeholders, including the government, and supporting institutions, regarding the advancement of sustainable entrepreneurship in the agriculture sector (Baipai *et al.*, 2023:4).

This study aimed to address this knowledge gap by undertaking a comprehensive analysis of the impact of various stakeholders on the development of sustainable entrepreneurship in the agriculture sector. Each stakeholder was considered a crucial component in the overall puzzle. To facilitate the establishment of sustainable entrepreneurship in the agricultural industry, all components must align harmoniously (Saftic *et al.*, 2011:8). The solution to a puzzle is rendered impossible if a single piece is absent. Therefore, the outcomes could be adverse if a subset of stakeholders is excluded from planning and developing sustainable entrepreneurship within the agricultural sector.

The collaboration between the Ministry of Agriculture and the Ministry of Small, Medium, and Micro Enterprises is crucial in identifying stakeholders who may have an impact on or be impacted by their activities, as suggested by the stakeholder theory (Sterling *et al.*, 2017:165). Using a participatory strategy is crucial for sustainable entrepreneurship as it involves all stakeholders who are either influencing or being influenced by the development in the planning and decision-making process (Khazaei *et al.*, 2015:1053). The participation of local stakeholders is a fundamental aspect of numerous initiatives focused on biodiversity conservation and the management of natural resources, including entrepreneurship (Sterling *et al.*, 2017:166). The stakeholder identification process facilitates the recognition of divergent interests

(Lester *et al.*, 2017:6). It fosters collaborative efforts towards achieving consensus (Barbieri & Streifeneder, 2019:149). Furthermore, it has been acknowledged by Karampela *et al.* (2019:11) and Dias *et al.* (2019:130) that including perspectives from all stakeholders is crucial for the advancement and growth of various goods. Additionally, fostering collaboration facilitates the emergence of innovative practices in the realm of sustainable agricultural development (Roman *et al.*, 2020:8).

It is recommended that the two ministries collaborate to establish a portal dedicated to facilitating consultations. The necessary nature of multistakeholder talks necessitates the monitoring of policies, the formulation of adaption strategies, the identification of common goals, and the building of a shared vision. Furthermore, establishing efficient communication channels among stakeholders and implementing rigorous monitoring mechanisms to verify compliance with sustainable principles are crucial factors. The stakeholders have the opportunity to reach a consensus on the adoption and advancement of sustainable entrepreneurship as a viable long-term strategy during these consultation sessions. To achieve an agreement, all stakeholders must know the advantages of sustainable evidence entrepreneurship. As stakeholders, researchers are responsible for providing the information mentioned above. After reaching a consensus on a chosen course of action, the requisite infrastructure to effectively uphold the sustainability strategy must be provided (Baipai, 2023:12). Establishing a multi-stakeholder approach is essential in all agricultural endeavours to ensure sustainability preservation. In most developing nations, a lack of extensive coordination exists across several government sectors (Biddulph *et al.*, 2018:3).

Internal and external stakeholder pressure must be considered while implementing technological innovation in any organization. Customers, employees, and competitors, among others, are crucial change drivers, especially when integrating technological innovation (Henriques & Sadorsky, 2007:120).

2.5.1.1 Customers

As previously said, customers are at the top of the hierarchy of essential stakeholders for all firms. Hence, they substantially influence SMMs' long-term behaviour.

Compliance-driven demand, market pressures, green demand, and buyer's organization dynamics all have a long-term impact (Walker, 2008:21; Yadav *et al.*, 2018:537). It's also worth emphasizing that buyers can help SMMEs implement sustainable procedures by indicating a deliberate and determined readiness to pay more for green products. Motivated by most of their consumers, many SMMEs have deemed it sensible to make adjustments that have resulted in energy savings and improved resource management initiatives (Lee & Klassen, 2008:580).

The impact of entrepreneurship on promoting conscious consumption habits is extensively debated in academic literature (Ramadani *et al.*, 2016:3). This subject is intricately connected to consumer behaviour and industrial output. Comprehending behaviours that foster a heightened consumption awareness is pivotal in developing sustainable business management strategies. This is achieved by introducing anti-predatory innovations that cater to consumers' unique preferences while also conscientiously and sustainably addressing self-sufficiency without causing depletion of natural resources. The concept of addressing the needs of the current generation without jeopardising the ability of future generations to fulfil their own requirements has been highlighted by Gu (2022:4).

One factor contributing to sustainable entrepreneurship is market-related drivers, encompassing customers' perspectives, market conditions, and rivals. Establishing a comprehensive comprehension of customer advantages and values is of utmost significance in effectively leveraging sustainable initiatives, commencing from the consumer's perspective. According to the findings of Yigit and Kanbach (2023:16), prioritising sustainable technology-driven initiatives to establish market leadership is a crucial factor in enhancing customer value. Hence, the technology by se does not serve as the primary determinant for augmenting customer advantage. It is vital to identify client needs before evaluating the appropriate technological solutions that align with their expectations. Furthermore, it is worth noting that creative activities are crucial in acquiring new customers and enhancing customer relations (Yigit & Kanbach, 2023:16).

2.5.1.2 Suppliers

By adding sustainable procurement rules to their supplier selection criteria, suppliers can exert tremendous pressure on SMMEs to adopt sustainable entrepreneurship (Yadav *et al.*, 2018:537). According to Inyang (2013:127), the activities required by significant organizations to deliver goods and services to SMMEs attract customer-friendly practices to develop sustainable, durable networks with such vast and diversified firms.

2.5.1.3 Competitors

SMMEs can be influenced by competitors and other stakeholders in their areas to practice sustainable entrepreneurship. They can adapt their production system to match their competitors' sustainable practices, which will be based on global market dynamics (Lee & Klassen, 2008:579; Yadav *et al.*, 2018:538; Testa *et al.*, 2016:382).

2.5.1.4 Intermediary organisations

Empirical evidence, as well as written works by authors such as Berrone *et al.* (2008:4) and Parker *et al.* (2009:279), suggest that transitional entities such as industry associations, environment support institutes, NGOs, and international donors can exert normative pressure on various businesses to behave in an environmentally and socially responsible manner.

2.5.1.5 Media

The utilisation of social media platforms has the potential to exert an impact on sustainable enterprise. They have the potential to significantly enhance the effectiveness of sustainable entrepreneurship endeavours. The strategic utilisation of social media platforms has the potential to expedite client knowledge and recognition of novel advancements within an organisation. Implementing marketing strategies across various social media platforms is pivotal in enhancing the perceived value of products or services derived from sustainable practices (Yigit & Kanbach, 2023:20).

2.5.1.6 Employees

Employees are internal stakeholders who impact SMMEs' sustainability approach. Employee expectations and working conditions are critical in promoting SMME sustainability (Zhang *et al.*, 2009:215; Masurel, 2007:195). According to Hosseininia and Ramezani (2016:110), employee education improves the attainment of knowledge, skills, and values critical to driving sustainable entrepreneurial actions in SMMEs. Employees with these skills are more successful, efficient, and moved to adopt sustainable behaviours. As a result, the success of sustainable entrepreneurship is determined mainly by employees' understanding of actions that may impact the environment and society's values (Sendawula *et al.*, 2018:4).

According to Bogers *et al.* (2018:225), the significance of workforce diversity concerning an organization's openness to external partners cannot be overstated. Employees can leverage their social capital to engage in activities such as searching, transferring, exchanging, and acquiring knowledge flows that are pertinent and essential (García-Villaverde *et al.*, 2018:552). This utilisation of social capital fosters innovation, thereby contributing to sustainable agricultural development and mitigating risks in supply operations (Chowdhury *et al.*, 2019:485). Furthermore, the implementation of Industry 4.0 technologies, such as Artificial Intelligence, Drones, and Blockchain, can be seen as a viable approach to enhance efficiency and address the existing obstacles in food supply chains (Dora *et al.*, 2021:12). According to Amesho *et al.* (2022:5), the implementation of Industry 4.0 technologies enables organisations to adapt to a dynamic market landscape by reconfiguring and improving their operational processes.

Additionally, these technologies provide personalised, high-quality, and cost-effective products to customers while addressing environmental considerations. According to Chan *et al.* (2016:389), organisations with high technological expertise and actively monitoring market dynamics can maintain a competitive advantage. Additionally, marketing managers can utilise this approach to provide clients with comprehensive solutions for their new product offerings (Ritter & Pedersen, 2020:183). Organisations

must update their technological infrastructure and processes to remain relevant and gain a competitive edge in a rapidly changing market (Gunday *et al.*, 2011:665).

2.5.2 Legislation

Gholamrezai *et al.* (2021:2423) conducted a study to identify many factors contributing to individuals' engagement in sustainable enterprises. Through the examination of agricultural entrepreneurs, it has been determined that various governmental approaches, including enhancing production capacity, aligning with both national and global regulations, evaluating environmental factors, fostering an entrepreneurial culture, and bolstering scientific research and international collaboration, can serve as incentives for entrepreneurs to engage in sustainable entrepreneurship. According to Yigit and Kanbach (2023:20), the incorporation of disruptive technologies, such as artificial intelligence, which results in a significant emphasis on these technologies, has the potential to address complex government demands effectively. The degree to which sustainable entrepreneurship is embraced can be influenced by the legislative and political landscape within a given country. When the conditions are favourable for sustainable activities, the influence and effectiveness of other factors can be substantially amplified or diminished.

Through the legislative process, commercial operations targeted empowerment regulation and calculated educational programs. Any country's laws, as passed through Acts of Parliament, significantly boost the sustainable behaviour tendencies of SMMEs (Yadav *et al.*, 2018:537). According to Walker (2008:20), small businesses look to the government to lead on environmental concerns. Companies are unlikely to change their minds if the government is not considered to prioritise ecological management. The state can demonstrate its desire to help by providing information on what needs to be done, offering training, and encouraging financial incentives, funding, business-friendly regulatory policies, and other carefully focused commercial measures that a state can prudently supply.

The government's involvement in numerous developing countries significantly influences the adoption of sustainable entrepreneurship. The government implements many strategies to encourage and facilitate economic growth, including providing

financial and technical aid, organising training programmes and workshops, establishing development and consultation services, and disseminating information resources (Jill *et al.*, 2007:171). Promoting sustainable entrepreneurship plays a crucial role in fostering economic growth, whereby government initiatives that facilitate advantageous financial accessibility for SMMEs can serve as catalysts for entrepreneurial activities. Government initiatives that aim to decrease obstacles to market entry, foster economic expansion and advancement, and enhance financial accessibility serve to promote entrepreneurial prospects. According to Jang *et al.* (2020:8), governments can augment opportunities by enhancing financial accessibility, mitigating obstacles to new investments, and providing ongoing assistance to entrepreneurs beyond the initial phase of business establishment through development initiatives.

The adoption of sustainable entrepreneurship is significantly influenced by factors such as inadequate infrastructure, the political climate, limited market access, and a lack of relevant skills and experiences (Chowdhury *et al.*, 2013:40). The provision of educational assistance for the development of entrepreneurship has been found to have a favourable impact on individuals' belief in their ability to successfully engage in entrepreneurial activities (Alvarez-Risco *et al.*, 2021:6). The promotion of sustainable entrepreneurship is facilitated by various factors, including the availability of financial resources, the presence of an entrepreneurial culture, favourable tax, and regulatory frameworks, coordinated training initiatives, and the involvement of specialised organisations such as business associations, clubs, and government agencies. According to Rusu and Roman (2017:4), empirical research has identified various factors influencing sustainable entrepreneurship. These factors include technology, culture and institutions, level of economic development, accessibility to financial resources, demography, government spending, political, economic, and social characteristics, and the ease of conducting business within a country.

To make the legislation a powerful influencer, the inherent complexity of laws must be minimized, costs must be cut, and compliance must be transformed into an opportunity. Governments have also discovered a way to curb ecologically irresponsible behaviour by SMMEs who choose to break the law on purpose by

applying harsh and severe fines, leaving them with no choice but to compel them to adopt sustainable practices (Saez-Martinez *et al.*, 2016:8).

Furthermore, the government can encourage sustainable entrepreneurship by lowering subsidies for resource-intensive and high-pollution industries and promoting sustainable technologies (OECD, 2013). The cost savings from eliminating these incentives could encourage more people to start environmentally friendly businesses.

Taxation is another way for the government to encourage SMMEs to adopt eco-friendly practices and relieve their burden (OECD, 2018:24). Shifting to streamlined regulatory regimes is another option to ease the cost of environmental regulation on SMMEs. Regulatory simplification is significant for developing countries, which can boost competitiveness and transparency by decreasing bureaucratic and administrative inefficiencies and complexities (OECD, 2011). While agreeing with the OECD, Lawal *et al.* (2016:343) emphasized the importance of government support in areas such as marketing, quality assurance, research, financial management, and technology to help SMMEs transform their operations into sustainable businesses that can compete locally, regionally, and globally.

2.5.3 Social capital

Social capital has emerged as an essential resource, especially for agribusiness (García-Villaverde *et al.*, 2018:551; Ali & G'olgeci, 2020:5; Lang *et al.*, 2021:4). It is considered one of the critical strategic resources based on the resource-based view (RBV) lens (Chatterjee *et al.*, 2021:13), which helps entrepreneurs to adopt sustainable entrepreneurship. Thus, it has been encouraged to exploit and utilize (Dubey *et al.*, 2020:1593) to survive and succeed in the “new normal” context (Bhatti *et al.*, 2021:246), especially for poor communities or family businesses (Wu *et al.*, 2020:913). Social capital can help the community address challenges through solid community relationships and take advantage of new opportunities by encouraging individuals to collaborate based on reciprocity. Consequently, social capital may be a critical determinant for sustainable entrepreneurship adoption, particularly for the agriculture sector in developing countries. Social capital also influences employees' knowledge-sharing and creativity (Bhatti *et al.*, 2021:246). It can be an antecedent of

knowledge exchange, transformation, and acquisition to transform sustainable agriculture and help supply chain resilience (Nikookar & Yanadori, 2022:68).

Agricultural entrepreneurs can utilize their social capital to search for necessary knowledge resources and appropriate solutions to implement sustainable entrepreneurship practices. Specifically, agricultural entrepreneurs need to strengthen and use their social capital resources by expanding their social networks, establishing network ties, and forming connections and interactions through personal relations, such as improving relationships and increasing interactions with friends, neighbours, and acquaintances. They can also strengthen their social capital through connecting, often keeping in touch with and taking an active part in gatherings of relevant professional organizations - e.g., labour associations, environmental associations, technology associations, and trading promotion associations besides joining community activities (Cesar & Jhony, 2020:6; Lang *et al.*, 2023:4).

2.5.4 Motivational factors

Motivational variables are a significant determinant of sustainable entrepreneurship success. Motivation is critical to sustainable entrepreneurship success (Shepherd *et al.*, 2011:140). Sustainable entrepreneurs require great inspiration because they frequently engage in even riskier activities than conventional entrepreneurs (Rodgers, 2010:127). Furthermore, sustainable entrepreneurs are driven by a strong desire to play a catalyst role in transitions. In contrast, typical entrepreneurs are driven by a desire to start a business (Schlange, 2006:18). As a result, one of the fundamental differentiators between sustainable entrepreneurs and other entrepreneurs is their motivation.

Motivation is a multifaceted phenomenon that encompasses an individual's intensity, focus, and tenacity in pursuing a specific objective (Robbins, Odendaal, & Roodt, 2011:13). The concept of intensity pertains to the level of effort exerted by an individual. Nevertheless, it is improbable that high intensity alone will result in favourable job performance outcomes unless the exerted effort is directed towards a specific goal or objective. According to Robbins *et al.* (2011:13), the dimension of persistency pertains to an individual's ability to sustain their level of effort across time.

Individuals with a strong sense of motivation exhibit perseverance by remaining committed to a task until they successfully accomplish their desired objective.

The idea of motivation has been dissected into intrinsic and extrinsic motivation in most studies, and this study will use this binary definition of the term motivation.

2.5.4.1 Extrinsic motivational factors

Extrinsic motivation refers to the desire to accomplish a task as a result of external stimuli such as a reward or recognition (Tur-Porcar *et al.*, 2018:4). Sustainable entrepreneurs, according to Fischer *et al.* (2018:420), try to benefit others while running lucrative firms.

Motivation can arise from either a perceived personal threat or from feelings of empathy towards others. Entrepreneurs are inclined to prioritise the investigation of the underlying problem when they see potential harm to their bodily or psychological well-being (Sarma *et al.*, 2022:5). The situationism theory provides a theoretical framework for understanding how situational aspects in the external environment, such as nature and community, impact an individual's propensity to engage in helping behaviour, particularly in the context of prosocial and pro-environmental activities (Lefevor *et al.*, 2017:229). The existing body of literature in the field of entrepreneurship focuses on the impact of entrepreneurial ecosystems and various situational settings on the process of new venturing (Sarma & Marszalek, 2019:8; Spigel & Harrison, 2018:156; Welter, 2011:168). However, limited research is available on how external factors, such as the ecological environment, impact an individual's motivation to participate in sustainable activities.

In addition to pursuing personal benefits, entrepreneurs are driven to address the challenges within the ecological environment. This drive is not solely motivated by self-interest but also by a desire to act selflessly towards fellow human beings and other living organisms, regardless of immediate personal risks (Muñoz & Dimov, 2017:635). Altruism refers to the intrinsic drive of an individual to promote the well-being of others, irrespective of any conscious consideration of personal self-interest (Patzelt & Shepherd, 2011:638; Simpson & Willer, 2008:43). The scholarly literature has

provided explanations for the reason behind engaging in generous actions, attributing it to the empathic and sympathetic conduct exhibited by individuals. Altruistic persons typically show higher levels of generosity, helpfulness, and kindness than their counterparts.

Altruistic motivation emerges when individuals manifest feelings of empathy and sympathy towards others. Following the findings of Patzelt and Shepherd (2011:636), the literature on sustainable entrepreneurship highlights the significance of altruistic reasons and the aspiration to assist others as critical factors that drive the recognition of opportunities (Doherty *et al.*, 2006:402). According to Khan and Quaddus (2015:351), an entrepreneur with altruistic tendencies may identify a business opportunity that leads to decreased emissions or waste reduction. Likewise, entrepreneurs have the potential to use technological advancements to effectively address the treatment of produced water, rendering it appropriate for the purpose of irrigating crops and fulfilling other needs, not only in their own state but also in different regions within the country or even overseas, where water scarcity is a pressing issue (Sarma *et al.*, 2022:6).

2.5.4.2 Intrinsic motivational factors

Intrinsic motivation, conversely, refers to the psychological processes that drive behaviour or the internal desire to attain one's objectives (Shane & Venkataraman, 2000:220). Both sorts of incentives determine the adoption of sustainable business. However, because sustainable entrepreneurs may take a long time to profit in their complicated social and environmental problem-solving enterprises, intrinsic motivation may be more important than extrinsic motivation (Kirkwood & Walton, 2010:216; Seelos & Mair, 2005:242).

According to Zimmerman and Chu (2013:76), intrinsic motivation is when individuals engage in actions without apparent external incentives. The term "intrinsic motivation" pertains to the underlying rationale behind engaging in specific measures for inherent gratification or enjoyment (Hennessey, 2010:347). The source of this phenomenon can be attributed to the favourable response of the individual towards the task at hand, which may include elements such as interest, engagement, curiosity, contentment, or

a sense of positive challenge. These factors can be seen as a form of intrinsic reward for the individual's efforts (Grant & Berry, 2011:75). According to the Self Determination Theory, intrinsic motivation plays a pivotal role in the proactive and growth-oriented characteristics of individuals, serving as the foundation for both learning and development (Deci & Ryan, 2011:423).

According to Grant and Berry (2011:76), business leaders who possess intrinsic motivation are inclined to prioritise the pursuit of fun, interest, satisfaction of curiosity, self-expression, or personal challenge within their commercial endeavours. According to Hennessey (2010:348), intrinsic motivation is an inherent inclination towards motivation that plays a crucial role in individuals' cognitive, social, and physical development. Bande *et al.* (2016:221) posit that SMME owners who possess intrinsic motivation are inclined to willingly participate in their business endeavours and actively strive to enhance their skill sets. According to Grant and Berry (2011:75), SMME owners are more likely to exhibit intrinsic motivation when they attribute the growth of their businesses to factors within their control, such as autonomy. Additionally, they are inclined towards self-efficacy, believing they can effectively pursue their desired goals. Furthermore, their interest lies not solely in attaining wealth but also in expanding and developing their businesses.

According to Csikszentmihalyi and Wong (2014:442), creativity plays a crucial role in the development and expansion of enterprises. The primary focus of this study is to investigate the circumstances in which intrinsic motivation facilitates the enhancement of creativity. According to Coon and Mitter (2010:12), intrinsic motivation has a significant role in stimulating creativity. Following Hennessey's (2010:347) findings, intrinsic motivation refers to the internal drive characterised by a genuine interest and pleasure derived from the tasks being undertaken. According to Coon and Mitter (2010:12), three interconnected psychological mechanisms can be identified as how intrinsic motivation might enhance creativity.

According to Becchetti *et al.* (2013:382), the proponents of emotional theory suggest that business owners who possess intrinsic motivation are likely to encounter pleasant affect. The process described enhances creativity by increasing the breadth of cognitive material accessible, widening the focus of attention to incorporate more

ideas, and fostering mental adaptability in recognising patterns and connections among concepts (Grant & Berry, 2011:76).

Deci and Ryan (2011:423) propose that when business owners are intrinsically motivated, their curiosity and interest in learning enhances their cognitive flexibility, willingness to take risks, and openness to complexity, expanding their access to ideas and potential solutions.

The emotion and self-determination theorists suggest that intrinsic motivation promotes creativity by encouraging persistence. By fostering a positive effect, inherent drive enhances psychological engagement. It builds energy for sustaining effort, increasing the amount of time that SME owners are willing and able to work on their tasks (Coon & Mitterer, 2010:13). This relates to the emotional theories of motivation. On the other hand, by fostering confidence and interest, intrinsic motivation encourages SME owners to persist with challenging tasks and concentrate more effectively on them (Hennessey, 2010:348).

Scholars have argued that various psychological and sociodemographic factors are worthy of consideration as determinants or predictors of sustainability orientation (Corral-Verdugo *et al.*, 2009:307). Previous studies have highlighted the significance of personal characteristics as the strong predictors of sustainability orientation at the individual level. These factors include personal values (Seidel *et al.*, 2018:339), self-identity (Meek & Sullivan, 2018:7), sustainability conceptions (Seidel *et al.*, 2018:340), social orientation, and altruism (Corral-Verdugo *et al.*, 2009:307).

However, some studies have reported an insignificant association between the sociodemographic factors like age, gender, education, and sustainability orientation of owners/entrepreneurs (Eijdenberg, 2019:132; Meek & Sullivan, 2018:7). (Meek & Sullivan, 2018:7) further reported that business experience negatively influences sustainability orientation, implying that the more business experiences the owner/entrepreneur has, the less he will be interested in sustainability initiatives. This means non-entrepreneurs are more sustainability-oriented, whereas entrepreneurs with high cognitive scripts are less concerned about sustainability issues. More interestingly, Steiner, Geissler, Schreder, and Zenk (2018:1009) found an

incongruence between the implicit and explicit attitudes toward sustainable development principles. They further argued that most firms only pretend to be sustainability-oriented for social desirability and reputation management.

In the context of the study, entrepreneurship in the agricultural sector has shown the importance of entrepreneurial orientation as a motivational driver (Grande *et al.*, 2011:93; Verhees *et al.*, 2011:168). It is seen as a combination of three elements: innovativeness, risk-taking and pro-activeness (Wiklund & Shepherd, 2005:76). Innovativeness is the willingness to engage in and support new ideas, novelties, experimentation, and creative processes; it is a fundamental willingness to depart from existing technologies or practices (Verhees *et al.*, 2012:171). However, an innovation in a small enterprise in the developing countries context is essentially an adoption of a product, process or method that has already been adopted elsewhere but is new to the firm and not necessarily unique to the world, region, country, or industry (Szirmai *et al.*, 2011:165). Risk-taking is the willingness to commit resources to plans with a reasonable chance of costly failures (Verhees *et al.*, 2012:172). SMMEs differ in the degree to which they accept risk. Some SMMEs are willing to take more risk than others. Attitudes to risk are often related to the financial ability of the entrepreneur to receive a small gain or loss. Dadzie and Acquah (2012:33) argued that most agricultural decisions are taken in an environment of risk and uncertainty. Agricultural entrepreneurs will have to make decisions now, affecting their production later. But they are often unsure of changes in various factors, including weather, government policies and technology, making it difficult to predict the future with certainty.

Pro-activeness is defined as the willingness to act in anticipation of future problems, customer needs or changes in the market environment (Verhees *et al.*, 2012:172). Pro-activeness is an opportunity-seeking, forward-looking perspective characterized by the introduction of new products or services ahead of the competition and acting in anticipation of future demand. Mupfasoni *et al.* (2018:68) found that SMMEs driven to make sustainable success are more willing to experiment and make investments. These sustainable entrepreneurs can later transfer their knowledge to other SMMEs and become leaders of new social activities.

The resilience of small, medium, and micro enterprises (SMMEs) is a significant factor contributing to their commercial activities' ongoing sustainability. Strength refers to the capacity of entrepreneurs and small business owners to effectively navigate the entrepreneurial process and consistently rebound from setbacks or swiftly recover from challenging circumstances, such as the COVID-19 pandemic (Manfield & Newey, 2018:1159; Nisula & Olander, 2020:6). The resilience capacity refers to the collection of cognitive and behavioural characteristics demonstrated by entrepreneurs, which facilitate the adaptation and continuity of their businesses. According to Gittell *et al.* (2006:303), resilience capability can be defined as the ability to maintain positive adjustment in the face of demanding conditions, to recover from adverse occurrences, and to sustain desirable functions and outcomes despite experiencing pressure.

Academic scholars argue that possessing resilience is crucial for the survival of small firms in the face of calamities. SMMEs experience a greater vulnerability to recessions and economic shocks than bigger national chains due to their constrained access to credit and alternative financing mechanisms in such crises. SMMEs typically fail to anticipate and prepare for unforeseen circumstances. Consequently, many of these enterprises face substantial challenges, leaving only entrepreneurs with resilience capable of adapting and maintaining long-term viability (Sarma *et al.*, 2022:6).

2.5.5 The organisational setting

The organisational context is a substantial factor in the adoption of SMME sustainability. Organizational context comprises three variables: business sector, size, and ownership.

- **The firm sector:** the tangibility of the firm's product and operations impacts whether sustainable entrepreneurship is adopted or not. According to Uhlaner *et al.* (2010:7), tangible product companies adopt sustainable practices at a higher rate than companies in other industries. Manufacturing tangible goods has such a significant potential for pollution that a slew of environmental rules governs it.

- **Firm size:** larger enterprises are more likely to engage in sustainable practices than small businesses. Larger companies have more significant financial and human resources to devote to adopting sustainable practices and a more substantial reputation to maintain (Uhlener *et al.*, 2010:8; Yadav *et al.*, 2018:540)
- **Firm ownership:** firms in which members of the same family hold the majority ownership or control have been proven to have more environmentally friendly policies than those owned by people not connected by lineage or bloodline. Due to the long-standing relationships they have built with the community in which they operate, family businesses feel obligated to avoid activities that hurt the environment in which they operate, and some firms will span generations. Family businesses use environmentally responsible methods to protect their brand, image, and reputation (Uhlener *et al.*, 2010:10).

According to Shaw and Carter (2007:420), sustainable businesses prioritise the optimisation of networks to establish local credibility and reputation rather than focusing primarily on financial considerations. Understanding the constituents of cultures and communities, particularly the communal environment, can facilitate the identification of possibilities that foster social advancement. Entrepreneurial action can provide significant social benefits when it considers the cultural values and social groups of the communities in which it aims to promote sustainable development. According to Patzelt and Shepherd (2011:637), an increased awareness among individuals of their own and society's limitations in sustaining the natural and communal environment might lead to a heightened sensitivity towards opportunities for sustainable development, hence benefiting the environment. The lives of numerous persons are at risk due to the pollution-induced degradation of the natural environment. Consequently, individuals residing in heavily polluted regions exhibit a significant interest in initiatives aimed at mitigating pollution levels (Patzelt & Shepherd, 2011:637).

2.5.6 Gains in productivity and competitiveness

The digitalisation process is characterised by its disruptive nature and its ability to introduce significant and discontinuous changes (Paiola & Gebauer, 2020:251). However, it also plays a crucial role in developing new value, generating revenue, and enhancing market competitiveness (Kamalaldin *et al.*, 2020:311). Recognizing climate change, pandemics, environmental degradation, and increasing socioeconomic disparities have led to a sudden understanding that the current business models are no longer suitable for their intended objectives.

According to Sjödin *et al.* (2021:576), using artificial intelligence to generate consumer value necessitates the adoption of novel practices, skills, operational processes, and business models. The comprehension of the dynamic business landscape and subsequent adaptation for sustainability in the market, followed by the pursuit of innovation to attain a competitive edge, has become progressively crucial for enterprises. Sustainable enterprises must prioritise achieving their non-financial objectives rather than solely pursuing profit maximisation (Rabaya & Saleh, 2022:2042). The interrelated components of the environment, society, and economy have acted as a driving force for enterprises to adopt a more proactive approach towards promoting the planet's well-being and its inhabitants while simultaneously seeking financial success and expansion. According to Sewpersadh (2023:3), entrepreneurs can achieve comprehensive objectives by utilising sustainable technology by refining, adapting, amending, and reformulating a company model. This approach offers them with a strategic roadmap.

According to Flyverbom *et al.* (2019:14), implementing digital transformations presents SMMEs with the opportunity to redefine and improve their operations. This may be achieved by acknowledging the significance of automation in establishing market distinction and achieving service excellence. The global COVID-19 pandemic significantly impacted essential company operations, leading to an expedited adoption of digital technologies and the restructuring of stagnant business models. The global pandemic has significantly impacted societal operations and customer service provision, mainly when governments have implemented regulated lockdown measures to safeguard human life. Following institutional theory, internal and external

influences contribute to the heightened inclination or necessity to initiate organisational transformation. Two significant pressures that have had a profound impact are disruptive digital technologies and the ongoing epidemic. According to Sewpersadh (2023:4), the conventional labour force has undergone a significant transformation, wherein individuals now engage in collaborative work with technological tools.

According to a global poll performed by Deloitte in 2020, the primary concern expressed by respondents during the pandemic pertained to the sustainability of their business models. Certain businesses spearheaded the invention of business models, while other companies experienced a decline. According to the proposition by Lewin and Volberda (1999:523), the contingency theory posits that it is necessary to implement an appropriate strategy to achieve a strategic fit with an organization's market. Hence, incorporating business model innovation is crucial in supporting a business resilience plan, especially given the swift evolution of work due to technological advancements. The pressures to foster innovation in the digital era have increased the disparity between those who actively engage in innovative practices and those who lag in business.

The efficacy of traditional corporate procedures that heavily rely on human involvement is diminishing, thereby revealing the vulnerability of the human capital leverage paradigm. This approach will face additional challenges as technology continues to advance. Hence, businesses that do not incorporate disruptive technology into their business models may face failure as they lag in innovation. In the context of extraordinary disruption in global economies, it is possible for a business model that was previously considered disruptive to lose its dynamism and become stagnant. This can occur when a company becomes complacent or overly reliant on obsolete techniques from the past. The potential for innovation apathy or myopia compels organisations to adopt an agile business strategy that consistently adapts to the disruptive digital era (Santos *et al.*, 2020:411).

SMMEs can be persuaded to engage in sustainable measures that benefit their bottom lines, such as cost-cutting, recycling, differentiation, and growth. Competitive advantage and reputation are essential to SMMEs' sustainability viability (Battisti & Perry, 2011:173; Fort *et al.*, 2016:1440). According to Wahga, Blundel, and Schaefer

(2017:3), the necessity for SMME owners to gain a competitive edge may encourage the adoption of sustainable entrepreneurship. According to Sendawula, Turyakira, and Bananuka (2018:4), some SMMEs in developing countries believe that investing in environmental activities such as producing green products, planting trees, and raising community awareness about sustainability initiatives will attract customers, allowing them to gain a competitive advantage in the market through lower operating costs, increased revenue, and a positive public image.

Gast *et al.* (2017:45) found that SMMEs could outcompete giant corporations by implementing environmentally conscious actions and behaviours. However, it is worth noting that many SMMEs struggle to effectively identify and leverage their sources of competitive advantage. Consequently, these SMMEs often rely on external support from government entities and other stakeholders within their respective industries (Comen, 2017:401). According to Palmi and Lezzi (2020:14), industry participants also contribute to identifying novel strategies for enhancing the competitive advantage of SMMEs in the agricultural sector, considering the competitive landscape in which they function. Investigating commercial enterprises' infrastructural and marketing prerequisites is paramount, as these factors significantly contribute to their competitive edge (Khairabadi *et al.*, 2020:6).

The promotion of sustainable entrepreneurship can be enhanced by fostering eco-efficiency, which involves the implementation of strategies aimed at minimising the utilisation of natural resources and optimising process efficiency (Geng *et al.*, 2012:220; Moktadir *et al.*, 2020:3617). Eco-efficiency underscores the significance of minimising resource usage in production, yielding advantages for the company, the environment, and society. A noteworthy investigation by Seah *et al.* (2022:4) revealed that SMEs prioritise environmental concerns or economic considerations while striving for eco-efficiency.

Small and medium-sized enterprises (SMEs) focusing on environmental concerns are driven by their perspective of the global environment and customer demand for environmentally friendly products and services. On the other hand, SMEs emphasising economic considerations are motivated by the need to achieve cost savings and offer competitive pricing to differentiate themselves from rival businesses. According to

Santolin *et al.* (2023:8), both firms utilise digital resources to gain a competitive edge. They employ generic digital resources to initiate specialisation and configurable digital resources to further enhance it. Furthermore, companies cultivate their digitalization capabilities by fostering an organisational culture conducive to digitalization and providing training opportunities for their employees.

Eco-efficiency fosters a cooperative mindset, wherein competitors collaborate to achieve a common objective. Additionally, corporations possessing complementary expertise often form partnerships to enhance problem-solving efficiency, resulting in more optimal utilisation of available natural resources (Borms *et al.*, 2023:6; Zimmerling & Chen, 2021:9). The limited accessibility of natural resources, resulting from production capacity limitations, additionally contributed to an increased emphasis on the efficient utilisation of available resources (Eggers, 2020:203; Ibn-Mohammed *et al.*, 2021:4; Paul & Chowdhury, 2021:115). SMMEs tend to procure raw materials from producers who are geographically close by (Akbari & Hopkins, 2022:13; Zerbino *et al.*, 2021:10).

The phenomenon of industrial symbiosis is enhanced by geographical proximity, wherein the waste generated by one firm is transformed into a valuable resource for other companies. This symbiotic relationship is helped by a geographical factor that minimises the expenses of transporting leftover materials and garbage (Fraccascia *et al.*, 2021:1689). The phenomenon mentioned above necessitates the development of novel products and services that effectively address the challenges associated with resource allocation, waste management, and preserving health and safety. Consequently, this creates favourable conditions for entrepreneurial ventures to explore untapped market opportunities (Neumeyer *et al.*, 2020:4). Similarly, the proliferation of technological advancements and the implementation of governmental regulations have prompted a wave of new entrepreneurs who are incorporating sustainability principles and striving for competitiveness in their commercial ventures (Henry *et al.*, 2022:3).

2.5.7 Culture in the workplace

It's crucial to note that organizational culture encompasses promoters', proprietors', and administrators' standards and values, ethical and moral duty, management support, and knowledge management (Yadav *et al.*, 2018:539). It is worth noting that the administrator's principles or ethical orientation and level of morality play a vital role in determining his commitment to implementing social responsibility in a company (Hsu & Cheng, 2011:189).

In other words, SMME owners' and managers' commitment to pro-environmental attitudes is detrimental to their performance (Koe *et al.*, 2015:576). Environmental sustainability is seen by SMMEs as their moral and ethical obligation to their stakeholders and the natural environment in which they work, live, and grow in their drive for sustainable entrepreneurship (Wagner *et al.*, 2017:4). Sustainable entrepreneurs, according to Spence *et al.* (2011:336), lead their companies with great care and caution, based on their principles, which include sustainability. As a result, these individuals strategically engage organizations in long-term sustainable practices in the pursuit of diligence, thoroughness, competitiveness, and efficiency in the three domains of sustainability.

The organisational domain and culture possess the capacity to enhance employee learning and development by utilising open communication channels and acquiring knowledge from clients, suppliers, and even competitors. Therefore, a company has the potential to achieve a competitive advantage by leveraging innovation. The discovery process enables an organisation to enhance its depth and diversity of knowledge. The level of an organization's competitiveness, inventiveness, and product presentation achievement is positively correlated with its learning ability (Amesho *et al.*, 2022:5).

According to Wilson (2007:185), an alternative perspective on learning involves learning from and with one another. In the context mentioned above, the shareholders acquire knowledge currently possessed by those from whom they are receiving instruction. Ultimately, this entails the utilisation of preexisting data. Learning is a collaborative and dynamic process involving generating new knowledge. Collaborative

endeavours and integrated systems facilitate the continuous flow of information while also promoting trust and equitable relationships, which are crucial for the rapid advancement and development of information-intensive technologies (Cenamor, Parida & Wincent 2019:198; Cennamo 2019:267; Rycroft 2006:84).

2.5.8 A focus on innovation

One of the factors in adopting sustainable entrepreneurship is an organization's innovation orientation, which characterizes its innovation. According to Masurel (2007:192), innovation has become vital to sustainable enterprise in all civilised global communities. In other words, because it has so much to do with adopting new industrial methods, innovation has become such a central notion that it cannot be discussed without addressing it. In agreement with Masurel, Uhlaner *et al.* (2010:11) pointed out that less innovative organizations tended to be less concerned about the community and more focused on cost-effectiveness.

The drivers associated with innovation play a critical role in facilitating the effective execution of sustainable entrepreneurship endeavours within small, medium, and micro enterprises (SMMEs). An organisation must establish a conducive climate that fosters high levels of enthusiasm and readiness to engage in innovative endeavours (Yigit & Kanbach, 2023:20). Additionally, it was noted that the visibility of valuable ideas within the organisation, as well as the facilitation of their appraisal and implementation in an entrepreneurial manner, hold equal significance. This necessitates the construction of a harmonious equilibrium between fostering the freedom to explore these concepts and aligning inventive ideas with viable commercial propositions based on their potential. Prematurely associating an argument with a business case may inadvertently overlook its latent potential during the initial stages. Similarly, prematurely establishing a high expectation for the possibility of an idea may lead to an overvaluation of a potentially mediocre idea. Furthermore, an additional factor contributing to organisational innovation is the degree of ambidextrous penetration (Yigit & Kanbach, 2023:12).

Nidumolu *et al.* (2009:64) strongly support this viewpoint, claiming that "in the future, sustainable-oriented enterprises will be more successful in terms of their products,

technologies and processes, business models and structures." Sustainable entrepreneurship has been offered as a game-changing notion for innovation, a source of methodical process teardown, and the start of the next industrial revolution (Braungart & McDonough, 1998:82; Hart & Milstein, 1999:23; Senge & Carstedt, 2001:24).

2.5.9 Expertise in the field of entrepreneurship

The role of prior knowledge is a fundamental aspect of research concerning the determinants of the initial stages of sustainable entrepreneurship. According to Shane (2000:451), entrepreneurs can recognise and assess opportunities connected to their knowledge. Shepherd and DeTienne (2005:94) define prior knowledge as encompassing an individual's understanding of a specific subject, enabling them to recognise and capitalise on potential possibilities. According to Westhead *et al.* (2009:663), individuals with prior experience in business ownership demonstrate a more remarkable ability to identify and recognise a higher quantity of potential business prospects than those new to entrepreneurship. According to Cooper and Park (2008:31), the recognition and exploitation of breakthrough new product innovations are significantly influenced by an entrepreneur's expertise and work experience.

The existing body of knowledge about sustainable entrepreneurship encompasses understanding how entrepreneurs discern and seize opportunities aligned with sustainability principles, drawing upon their social, environmental, and economic expertise. According to Patzelt and Shepherd (2011:633), entrepreneurs are more inclined to recognise sustainable prospects when they possess a comprehensive understanding of environmental elements such as the earth, biodiversity, and ecosystems, as well as social factors like culture, health, and life expectancy. As illustrated by Rodgers (2010:127), in his examination of three SMEs in the United Kingdom, it was seen that confident entrepreneurs established sustainable enterprises after augmenting their understanding by participating in environmentally focused education programmes.

The existing body of scholarly literature about sustainable entrepreneurship posits that the prior experience of entrepreneurs typically assumes a significant role in forecasting the results of SMMEs while also exerting a favourable influence on entrepreneurial performance (Failla, 2017:6; Jiao *et al.*, 2021:7). According to Agarwal *et al.* (2016:1065), the human capital viewpoint posits that founders derive their competency from two primary sources: formal education and job experience. According to Famiola and Wulansari (2020:22), the authors found that the sustainability of SMMEs in Indonesia is significantly influenced by the assimilation of knowledge and understanding derived from the educational background of their owners. According to Reuther *et al.* (2023:4), the environmental interests of SMME owners are notably influenced by their educational experiences. Nevertheless, an increasing number of scholars argue that prior experience holds greater significance than academic qualifications, as it equips entrepreneurs with unique human capital that facilitates the establishment of new enterprises (Failla, 2017:7; Sahinidis *et al.*, 2021:20).

Sustainability awareness is a crucial determinant of long-term entrepreneurship. According to Patzelt and Shepherd (2011:632), environmental awareness and social knowledge influence the identification of sustainable options. Entrepreneurial knowledge can aid in forming a new company, its growth and competitive advantage, creating new technologies and manufacturing, and achieving long-term performance while dealing with an uncertain environment (Wiklund & Shepherd, 2003:1308).

The acquisition of competencies, abilities, and skills in individuals is influenced by their prior experiences (Hmieleski *et al.*, 2015:291; Wright *et al.*, 2007:794). Davidsson and Honig (2003:304) state that competencies can motivate and influence entrepreneurial actions. Entrepreneurs can possess two distinct forms of expertise: functional experience and founding experience. According to Baum and Locke (2004:587), both operational experience in the industry and entrepreneurial or startup experience have a beneficial impact on entrepreneurial outcomes, such as opportunity recognition and new venture growth (Sarma & Marszalek, 2019:6). According to Shane (2008:13), empirical evidence indicates that approximately 45% of entrepreneurs initiate ventures within industries where they have prior employment experience. According to Folta *et al.* (2010:256), individuals with previous entrepreneurial experience can evaluate their aptitude, competencies, and compatibility within the entrepreneurial environment. To

offer new inventive solutions to the market, complex social and environmental problems are frequently solved by researching and creating new technologies (Dai *et al.*, 2018:4).

Entrepreneurs with a lot of knowledge resources pay greater attention to learning, maintain a close eye on market developments, and respond quickly; on the other hand, entrepreneurs with a lot of knowledge resources have a more challenging difficulty recognizing and exploiting possibilities (West & Noel, 2009:2). Moreover, previous entrepreneurial involvement enhances one's ability to identify and assess potential opportunities, as well as acquire resources and establish effective organisational structures inside a company. Furthermore, sustainable entrepreneurs must effectively use resources and develop collaborative relationships with external entities (Sarma & Sun, 2017:589) to realise an opportunity within the marketplace. The current strategic approach prioritises the prevention of pollution and the reduction of risks. In contrast, the future strategy aims to foster innovation and reposition the organisation to effectively market environmentally friendly and sustainable technologies (Hanohov & Baldacchino, 2018:336).

Understanding the ecological context is a significant factor contributing to adopting sustainable entrepreneurship. The environmental environment encompasses the physical and natural components of the planet, encompassing the earth, biodiversity, and ecosystems (Parris & Kates, 2003:561). According to Muehlebach (2001:418), it is possible for something to possess inherent value beyond its function as a mere life support system. The coexistence of businesses with the natural environment is characterised by an interdependent relationship. Regrettably, a significant number of economic activities result in the contamination of the atmosphere, bodies of water, and soil while also contributing to the depletion of valuable natural resources, including fossil fuels and freshwater reserves.

In a similar vein, the disposal of hazardous industrial waste has resulted in the contamination of groundwater, wherein the presence of arsenic has been identified in water sources intended for human use. Experienced entrepreneurs can effectively monetize technology to treat produced water, a byproduct of the oil extraction process, to render it suitable for crop irrigation. By conducting a pilot study on a one-acre plot

dedicated to sorghum cultivation, these entrepreneurs can ascertain the viability and efficacy of the treated produced water. Subsequently, upon ensuring the safety of utilising produced water, it can be made available to farmers at an affordable price. Implementing this action would effectively protect the water table levels and alleviate the adverse effects of drought circumstances (Meng *et al.*, 2016:1318).

In conclusion, the neglect and lack of preservation of the ecosystem pose a significant risk to the well-being of both human beings and the biodiversity of plant and animal species (Shepherd & Patzelt, 2011:140). The natural environment's preservation can be achieved by mitigating the hostile interaction between business and ecology. Entrepreneurs possessing previous awareness of this potential risk can discern multiple chances to minimise said risk by providing an appropriate product or service.

2.6 ROLE OF SUSTAINABLE ENTREPRENEURSHIP TO SUSTAINABLE DEVELOPMENT

In contemporary times, individuals have become increasingly cognizant of the imperative need to enact fundamental transformations in societal production, energy consumption, and natural resource utilisation, owing to the pressing environmental concerns of global warming and ecological degradation (Hall *et al.*, 2010:442). The efficacy of traditional entrepreneurship in driving economic transformation is subject to scrutiny. Scholars posit a connection between the profit-driven nature of entrepreneurship and the destruction of the environment (Cohen & Winn, 2007:33; Dean & McMullen, 2007:33). Nevertheless, scholars lack consensus about this perspective.

According to Hockerts and Wustenhagen (2010:485), Parish (2010:514), and Tilley and Young (2009:83), it is argued that despite the potential negative impacts of certain entrepreneurial activities on society and the environment, they are also seen as crucial in driving sustainable business practises. According to Patzelt and Shepherd (2011:636), entrepreneurial action is considered to be essential in the identification of sustainability opportunities. Furthermore, according to Pacheco *et al.* (2010:466), entrepreneurs are a significant driving force in promoting social and ecological sustainability. Numerous studies have demonstrated a strong correlation between

sustainability and the entrepreneurial mindset. In light of this context, the concept of sustainable entrepreneurship was introduced. Sustainable entrepreneurship can be defined as the amalgamation of sustainability principles and entrepreneurial practices. In particular, the concept integrates the objective of sustainability with conventional entrepreneurial techniques (Tilley & Young, 2009:83).

The potential for achieving sustainability and fixing the current situation can be found in the interaction between entrepreneurship and sustainable development (Youssef *et al.*, 2018:237). The societal and environmental impacts of unsustainable business practices are often exacerbated by the exploitation of natural resources and inadequate environmental protection measures (Gast *et al.*, 2017:46). Sustainable development, facilitated by many organisations, prioritises economic expansion as a means to achieve social progress while minimising harm to the environment (Diaz-Sarachaga *et al.*, 2018:665). The internationally recognised framework that has garnered consensus among states is the 2030 Agenda, encompassing a set of 17 Sustainable Development Goals (SDGs). The primary objective of these goals, as outlined by the United Nations (2019), is to promote progress in social, economic, environmental, and governance domains.

Understanding the potential impact of new businesses on the progress towards sustainable development, in alignment with the Sustainable Development Goals (SDGs), is of utmost importance (Apostolopoulos *et al.*, 2018:4). The extant literature suggests an upward trend in the number of entrepreneurs and new ventures that are prioritising environmental and social concerns (Horne *et al.*, 2020:6; Di Vaio *et al.*, 2022:3). In addition, it is crucial to have sustainable business owners who can replace obsolete systems, procedures, and practises with those that prioritise high-quality social and environmental goods and services (Vallaster *et al.*, 2018:541).

Entrepreneurship, in conjunction with innovation, has been seen as a crucial element in addressing the challenges connected with sustainable development. According to the United Nations (2019), the anticipation is that by promoting economic growth, enhancing social cohesion, fostering sustainable agriculture and innovation, reducing inequality, implementing climate change mitigation technologies, and adopting environmentally sustainable practices. Consumption patterns will enable contributing

to all aspects of sustainable development. The Sustainable Development Goals (SDGs) underscore the pressing necessity to alter the trajectory of unsustainable growth now being pursued by humanity.

The United Nations (2019) highlights the significance of the SDGs in urging humanity to adopt innovative and revolutionary actions essential for guiding the global community towards a sustainable and resilient path. The role of companies, especially entrepreneurs, is of utmost importance in facilitating this transition (Bocken & Short, 2016:43; Loorbach & Wijsman, 2013:24; Sullivan *et al.*, 2018:239; Weissbrod & Bocken, 2017:2665). Entrepreneurs have the potential to initiate and expedite the necessary structural modifications through their ventures. Suppose the implementation of these changes is not carried out due to factors such as organisational inertia. In that case, there is a potential danger that they may undermine or disrupt existing unsustainable business strategies (Hockerts & Wüstenhagen, 2010:491; Lüdeke-Freund *et al.*, 2016:12).

The wise utilisation of resources and environmental stewardship are the primary issues contributing to future generations' well-being (Crals & Vereeck, 2005:173; Hockerts & Wüstenhagen, 2010:491). The driving force for sustainable entrepreneurship, with a focus on achieving sustainability and implementing sustainable business practises, is imperative to protect individuals, the environment, and financial gains (Rosário *et al.*, 2022:3). According to Ras and Vermeulen (2009:327), the primary objective of sustainable entrepreneurship is to reestablish equilibrium among social, environmental, and economic pursuits, whenever feasible. Given this context, the concept of sustainable entrepreneurship is being considered as a possible complement to sustainable development (Lans *et al.*, 2014:39). In contrast, it has been observed that business proprietors have identified previously unexplored markets that exhibit a strong demand for eco-friendly products, and where the provision of value aligned with environmental considerations is highly esteemed (Youssef *et al.*, 2018:237).

The role of entrepreneurship in society is of utmost importance, as its practices exert a substantial influence. Hence, it is widely acknowledged as imperative in expediting a more enduring and secure future. According to Shepherd and Patzelt (2011:142),

entrepreneurs must integrate and adapt sustainability principles into their business strategy if their objective is to establish a thriving enterprise that is committed to fostering progress.

Sustainable business promotes productive employment and dignified work opportunities (Mukuhani, 2014:140). Economic consolidation has the potential to achieve the elimination of degrading malpractice tendencies, eradication of exploitation, and unethical contracts (Weidinger, 2014:5). Entrepreneurship is commonly recognised as the driving force behind economic progress, as it generates employment opportunities through the establishment of new enterprises that provide goods and services to consumers (Rahdari *et al.*, 2016:349; Vazquez-Brust & Sarkis, 2012:11). According to Schaltegger *et al.* (2018:36), the attainment of the SDGs can be facilitated by the provision of employment opportunities that offer improved working conditions and equitable remuneration. According to the source, entrepreneurs involved in sustainable development must reimagine existing value chains, restructure employment opportunities with a focus on sustainability, identify the necessary skills, and create opportunities through training initiatives. Moreover, the acquisition of novel talents for the purpose of sustained employment will assist individuals in achieving their stated objectives.

The role of the business sector, namely entrepreneurship, is significant in the context of sustainable development. According to reports, the business community's expectations about the SDGs have grown in light of the lessons learned from the Millennium Development Goals (MDGs). Certain studies acknowledge that the objectives outlined in the SDGs will significantly impact the formulation of a policy framework that aligns with the business sector over an extended period. Hence, it is recommended that the corporate sector should proactively engage in efforts to support the attainment of the Sustainable Development Goals (Pedersen, 2018:23). The SDGs serve as a strategic framework for promoting sustainable entrepreneurship within the business sector. This framework encompasses both profit-driven and socially oriented entrepreneurial endeavours, presenting a wide array of prospects for businesses (Crecente *et al.*, 2021:4). According to Moya-Clemente *et al.* (2020:575), research offers empirical support for the notion that advancements in the SDGs have a favourable impact on sustainable entrepreneurship. Entrepreneurs play a crucial role

in attaining the objectives and aspirations outlined by the SDGs, as Moon (2018:49) emphasised. To this end, entrepreneurs must employ imaginative and inventive approaches to address the challenges.

Sustainable entrepreneurship encompasses the initiation of novel sustainable enterprises and the ongoing management and adaptation of existing ones to enhance their sustainability. Hence, sustainable entrepreneurship can manifest in start-ups, SMEs, and large corporations. Still, to varying extents (Gupta *et al.*, 2023:6). Hall *et al.* (2010:442) argue that sustainable entrepreneurship is of utmost importance due to its objectives of sustainability and fairness. According to Shepherd and Patzelt (2011:140) as well as Dean and McMullen (2007:55), there is a contention among researchers that entrepreneurship can serve as a mechanism to steer various sectors of the economy towards achieving environmental sustainability. According to Sarango-Lalangui *et al.* (2018:7), sustainable entrepreneurship asserts that sustainable development is the basis for establishing sustainable business models. This perspective posits that entrepreneurs possess the ability to identify enduring entrepreneurial opportunities.

Advancing sustainability involves identifying, cultivating, and using business opportunities that contribute to the well-being of local communities in terms of social and environmental advantages. According to Shepherd and Patzelt (2011:140), entrepreneurs must integrate sustainability into their business plan and adapt it to establish a prosperous firm that fosters growth.

The ability of sustainable entrepreneurs to exert influence over other enterprises and the general public to promote the adoption of sustainable practices is of paramount importance for the future of environmental sustainability. This scoping literature analysis investigates the components of sustainable entrepreneurship and evaluates their integration into the global business landscape (Rosário, Raimund & Cruz, 2022:6). To comprehend the significance of sustainable entrepreneurship, one must possess a comprehensive awareness of the operational settings in which it operates. These settings involve several aspects, such as markets and regulatory challenges, which are profoundly impacted by the transformative nature of sustainable entrepreneurship. Entrepreneurs often exhibit diverse sustainability concerns due to

their variable degrees of interaction with different external stakeholders when confronted with various environmental pressures.

Entrepreneurs who have demonstrated sustainable behaviour can fulfil the current generation's needs and expectations without compromising future generations' well-being. These entrepreneurs effectively integrate the three fundamental dimensions of the economy, society, and the environment. According to Larsson *et al.* (2016:10), legislation such as the U.N. initiatives seeks to incentivize individuals involved in business to engage in ethical behaviours that positively impact society and the environment.

To facilitate the creation of impactful strategies, policies, and interventions that promote sustainable development, policymakers, practitioners, and researchers must possess a comprehensive understanding of how sustainable entrepreneurship contributes to the SDGs (Di Vaio *et al.*, 2022:6; Holzmann & Gregori, 2023:4). To gain a thorough understanding of the current state of knowledge, it is imperative to conduct a comprehensive study. This study will allow for the acquisition of valuable insights, identifying research trends, and highlighting potential research gaps. The extant literature on this subject is characterised by its vast size and diverse nature, further emphasising the need for such a study (Sreenivasan & Suresh, 2023:2).

Following this assertion, there exists a substantial body of work that addresses the topic of sustainable entrepreneurship and its relationship to the Sustainable Development Goals (Fischer, Mauer, & Brettel, 2018:412; Pansera & Sarkar, 2016:14; Rahdari, Sepasi, & Moradi, 2016:350). This section aims to discuss the critical connections between several SDGs and the concept of sustainable entrepreneurship over a while.

2.6.1 Contribution of sustainable entrepreneurship to SDG6

The primary objective of SDG6 is to guarantee universal access to water and sanitation, as outlined by the United Nations in 2019. The issue of global access to safe drinking water is a pervasive concern, affecting around one billion individuals who lack such access. Furthermore, more than twice that number lack access to basic

sanitation (Partzsch & Ziegler, 2011:66). In light of the prevailing imperative to address challenges about access to potable water and sanitation, sustainable entrepreneurship has emerged as a viable avenue for leveraging extant opportunities to enhance the overall quality of life concerning water-related concerns (Cohen & Winn, 2007:176; Hanchett, 2016; Sunny & Shu, 2019:2). Patzelt and Shepherd (2011:634) conducted research that focuses on the development of eco-innovations aimed at converting contaminated water into potable water through the utilisation of cost-effective technologies. Similarly, other studies on sustainable entrepreneurship emphasise adopting clean technologies and the efficient utilisation of resources, resulting in reduced water and fossil fuel consumption (Jiang, Chai, Shao, & Feng, 2018:315). Similarly, the field of sustainable business has given rise to several approaches aimed at implementing an ecological psychology that aids in the restoration of depleted fish populations (Patzelt & Shepherd, 2011:634).

2.6.2 Contribution of sustainable entrepreneurship to SDG7

The primary objective of SDG7 is to guarantee universal access to affordable, dependable, sustainable, and modern energy. This goal is driven by the fact that a significant portion of the global population, over 3 billion individuals, lacks access to clean cooking solutions. At the same time, nearly one billion people live without power (United Nations, 2019). This objective represents a target that sustainable entrepreneurship aims to accomplish in the long run (Ploum *et al.*, 2018:586; Sen & Ongsakul, 2018:120). Achieving affordable and clean energy is a significant objective that presents challenges. One such challenge is the underdeveloped state of the electric vehicle industry, which hinders progress in this area.

Additionally, entrepreneurs face limitations in accessing state funds that provide subsidies for renewable energy sources (Pinkse & Groot, 2015:636). However, Schaltegger, Beckmann, and Hockerts (2018:137) have noted that sustainable entrepreneurship has the potential to initiate many activities in the realm of clean energy. These actions encompass the planning, organising, financing, and managing projects focused on renewable energy and energy conservation. Several vital options can be adopted, including technological and organisational solutions for wind, solar, hydro, and biomass energy and solutions to reduce energy use (Schaltegger *et al.*,

2018:137). Sustainable entrepreneurs also focus on developing eco-facilities, which involve the construction of buildings that prioritise energy efficiency (Rodgers, 2010:127; Te Ting, Hsieh, Chang, & Chen, 2019:4).

2.6.3 Contribution of sustainable entrepreneurship to SDG13

SDG13 is centred on the imperative need for expeditious measures to address and mitigate the impacts of climate change. Climate change is associated with the modification of weather patterns, the increase in sea levels, the occurrence of catastrophic weather events, and the elevation of global surface temperatures (United Nations, 2019). The difficulties mentioned above mainly impact those in lower socioeconomic brackets and can be attributed to anthropogenic emissions of greenhouse gases (Dean & McMullen, 2007:56). Climate change is widely acknowledged as a significant market failure, hence necessitating the implementation of climate change policies.

Technological improvements have been proposed as a potential approach to facilitate the transition towards a low-carbon economy (Gibbs, 2009:64). Sustainable entrepreneurship is widely recognised as a powerful catalyst for environmental change. Scholars such as Gibbs (2009:64) and Stål and Bonnedahl (2016:76) have highlighted the various actions and mechanisms to address this issue. These efforts are seen as entrepreneurial opportunities, as emphasised by Bergman *et al.* (2010:4), Burch *et al.* (2013:824), and Pinkse and Kolk (2012:334). One illustration of sustainable entrepreneurial initiatives to address climate change is advancing carbon-neutral products, electricity generation, and infrastructure (Schaltegger *et al.*, 2018:133).

2.6.4 Contribution of sustainable entrepreneurship to SDG15

SDG15 pertains to the sustainable development goal of preserving and promoting terrestrial ecosystems and biodiversity. The United Nations (2019) emphasises the importance of safeguarding, restoring, and advancing the sustainable utilisation of terrestrial ecosystems. This includes the responsible management of forests, the prevention and reversal of desertification, the cessation of land degradation, and the

cessation of biodiversity decline. The terrestrial environment has been experiencing adverse effects such as deforestation, soil erosion, biological degradation, and salinization due to inappropriate commercial practices (Cohen & Winn, 2007:33). The concerns mentioned above result in diminished electricity generation, increased instances of flooding, deterioration of agricultural land, and a quick decline in forest coverage, so giving rise to significant global apprehension (United Nations, 2019).

Promoting sustainable entrepreneurial action is presented as a potential strategy for conserving and restoring the Earth's ecosystems, aiming to reduce or eliminate environmental deterioration (Shepherd & Patzelt, 2011:142). Similarly, sustainable entrepreneurship has been suggested by scholars as a viable solution to address the issues of deforestation, improve agricultural practises, and preserve biodiversity (Bloomfield *et al.*, 2018:159; Dhahri & Omri, 2018:66). According to Schaltegger *et al.* (2018:134), several sustainable entrepreneurship initiatives can be undertaken, such as the effective management of a wilderness area, the founding of ecotourism ventures, and the development of products that contribute to the preservation of ecosystems. According to Dhahri and Omri (2018:66), sustainable entrepreneurship is an effective method for preserving and maintaining nature and ecosystems.

2.6.5 Contribution of sustainable entrepreneurship to SDG8

The primary objective of Sustainable Development Goal 8, as outlined by the United Nations (2019), is to advance the cause of inclusive and sustainable economic growth while ensuring complete and productive job opportunities and decent work conditions for all individuals. SDG8 is primarily concerned with addressing challenges in the labour force, which are characterised by elevated levels of unemployment, child labour, precarious employment, informal economic activity, and limited access to social security (Weidinger *et al.*, 2014:10). In this context, sustainable entrepreneurship aims to facilitate the creation of productive job opportunities and promote decent work conditions (Mukuhani, 2014:140). This is achieved by fostering an economic environment that eliminates degrading practices, eradicates exploitation, and discourages unethical contracting (Weidinger *et al.*, 2014:10).

Entrepreneurship is widely recognised as a crucial driver of economic activity since it fosters the creation of new enterprises that offer goods and services to individuals, hence contributing to overall economic expansion (Chimucheka, 2012:10391; Rahdari *et al.*, 2016:350; Vazquez-Brust & Sarkis, 2012:8). According to Schaltegger *et al.* (2018:133), one potential avenue for sustainable entrepreneurship in pursuit of the Sustainable Development Goals (SDGs) involves the provision of employment opportunities characterised by favourable working conditions and equitable remuneration. To attain this objective, it is imperative to address poverty (SDG 1) by fostering the creation of more employment opportunities and promoting decent work for all individuals (Weidinger *et al.*, 2014:10). Similarly, sustainable entrepreneurs must reconfigure the existing value chains, revamp job roles with a focus on sustainability, ascertain skill requirements, and offer training opportunities. This is crucial as acquiring new skills for sustainable employment will enable individuals to achieve the desired objective (Ward, 2017:6).

2.7 PSYCHOLOGICAL CAPITAL AND SUSTAINABLE ENTREPRENEURSHIP

Psychological capitals are widely recognised for their significant contribution to a corporation's competitive advantage, as they are challenging for competitors to replicate. Psychological Capital, sometimes called PsyCap, has been observed to influence employee behaviour and attitudes, directly enhancing organisational performance (Newman *et al.*, 2014:7).

Fakhri *et al.* (2012:4163) argue that the driving force behind entrepreneurial qualities in individuals is the combination of motivational and cognitive brilliance. The achievement of entrepreneurial endeavour hinges upon the capacity to recognise prospects and undertake requisite measures to surmount all encountered obstacles throughout the undertaking. This necessitates the entrepreneur to possess both cognitive and motivational fortitude. The psychological construct of an individual often emerges during infancy. It is shaped mainly by the environment in which a person is raised. It can be asserted that entrepreneurs who experience favourable personal influences are more likely to attain a higher level of success. In essence, attributes mainly influence an individual's entrepreneurial potential.

A positive psychological capital has been observed to enhance an individual's entrepreneurial development. The fundamental characteristics that delineate an entrepreneur encompass the aptitude to undertake risks, the capacity to foster innovation, the ability to guide a specific team, and numerous more attributes (Langkamp, Bolton & Lane, 2012:221). These characteristics facilitate the firm's engagement in an innovative culture and yield organisational advantages.

The durability of entrepreneurial activity serves as an indicator of heightened entrepreneurial intentions, hence reflecting the extent of their exploratory capacities. Therefore, the correlation between individual attributes and the creative process allows researchers to get insights into how psychological capital can foster the ongoing creation of creativity, which serves as a fundamental basis for entrepreneurial endeavours inside an individual. According to Sweetman *et al.* (2011:8), creativity refers to an individual's ability to generate novel ideas that result in product modifications, services, and procedures, ultimately enhancing the organisation's overall performance. Therefore, creativity can be seen as crucial in attaining organisational competitiveness and ensuring survival within a competitive context.

The propensity to engage in risk-taking behaviours related to a creative process empowers an individual to develop strategic approaches and examine diverse options. Hope is considered one of the four traits related to psychological capital, which facilitates an individual's ability to maintain a sense of optimism. This encourages an individual to undertake calculated risks and achieve success in a process characterised by novelty and originality. The capacity to engage in positive thinking is contingent upon individual traits that facilitate the management of adverse circumstances. Positive psychological capital has been identified as a factor that supports the development and regeneration of creativity in individuals, leading to a higher level of sustainable achievement.

Leadership's significance in maintaining entrepreneurial development progress cannot be overstated. An entrepreneur who possesses sustainable practises, and strong leadership skills can contribute to enhanced economic stability for a new enterprise. This enables the venture to traverse intricate circumstances without succumbing to internal conflicts, poor coordination, and divergent interests and motivations among

partners. Organisations are commonly observed to foster sustainable entrepreneurship by encouraging seasoned individuals in leadership positions to discover opportunities within the external business environment, benefiting the whole organisation. Moreover, an organisation's culture is established and upheld by its leaders, as the effectiveness of leadership directly impacts the ability to guide and manage a particular group of individuals. Therefore, it can be said that a sustainable entrepreneur can inspire and encourage subordinates to adopt sustainable practices, thereby facilitating the attainment of organisational objectives (Tang, 2020:3).

Sustainable entrepreneurs are commonly observed to uphold a harmonious equilibrium among economic, social, and environmental aspects, protecting all stakeholders' interests (Kuckertz & Wagner, 2010:528). This strategic approach will facilitate the organization's ability to endure a highly competitive business landscape by selecting actions that will yield long-term advantages. According to DiVito and Bohnsack (2017:72), a sustainable entrepreneur can effectively manage business operations in a socially responsible manner, ensuring that the activities conducted by the organisation do not result in detrimental effects on the environment. The entrepreneurs aim to make financial gains by considering a range of environmental concerns. Successfully executing these imperatives necessitates entrepreneurs' adept management of their stakeholders within the external environment. Sustainable entrepreneurship is relevant to the organisational sphere as it empowers firms to maintain their viability amidst a competitive landscape. According to Shepherd and Patzelt (2011:139), sustainable entrepreneurship is focused on preserving both the natural environment and the societal context in which it functions, aiming to ensure the continued availability of opportunities in the future. Therefore, it is crucial for sustainable entrepreneurs to carefully choose strategies that correspond with stakeholder objectives and provide long-term stability for the organisation.

The psychological capital possessed by entrepreneurs and their entrepreneurial teams has the potential to enhance communication and collaboration with stakeholders. Optimism, hope, and resilience enable entrepreneurs to communicate effectively and cooperate, especially amid hurdles and arguments. Additionally, self-efficacy can empower entrepreneurs to engage in effective communication and coordination with confidence and charisma, whether at the individual or group level.

Furthermore, PsyCap is crucial in enhancing entrepreneurs' capacity to effectively navigate and adapt to significant shifts in their business environment, potentially resulting in favourable or unfavourable consequences. The entrepreneurial environment is subject to changes in several aspects, including social, political, economic, and technological influences. In light of these conditions, the presence of human talent, particularly that of an entrepreneur, assumes a significant role in facilitating the adaptability of business enterprises to dynamic environmental shifts. The firm can sustain its activities over an extended period by assuring the socio-economic growth of the society from which the enterprise procures resources. PsyCap is a valuable resource that empowers individuals to enhance efficiency and contribute to the overall effectiveness of an organisation. In the context of new ventures, it becomes management's job, specifically the entrepreneurs, to effectively harness and utilise this human resource, i.e., the employees. According to Araque *et al.* (2018:47), implementing effective human resource management practices can facilitate the recruitment and retention of skilled personnel and encourage socially responsible behaviour. In this regard, PsyCap has been identified as a potentially valuable resource.

The management should prioritise the recruitment of personnel who possess good psychological capital since this will contribute to the cultivation of a stimulating organisational culture. This practice has been determined to be beneficial for an entrepreneur, as it has been observed to positively influence the attitude of every employee. Entrepreneurs may find it advantageous to develop training programmes that incorporate the concept of psychological capital. This approach can boost the organization's knowledge base and improve productivity (Smith & Woodworth, 2012:395). The study has revealed that the relationship between entrepreneurs and their subordinates substantially influences employees' psychological capital and attitudes.

Psychological capital (PsyCap) plays a crucial role in fostering entrepreneurial innovation, which contributes to promoting sustainable entrepreneurship. Invention facilitates the efficient use of resources, hence playing a pivotal role in promoting sustainable development. This is accomplished by establishing a suitable price-cost

structure, which allows a company to manage its processes effectively to minimise costs. The advantages of sustainable practices are well recognised for their positive impact on environmental preservation, making them increasingly favoured by contemporary customers. In the current landscape of intense commercial competition, companies that embrace new sustainable practices have been observed to attain a notable standing within the market. According to Welsh and Krueger (2012:275), the entrepreneurial individual's ability to engage in strategic thinking and make informed decisions has been identified as a valuable asset in developing efficient procedures that contribute to the organisation's overall productivity. Entrepreneurial abilities encompass the capacity to discern potential possibilities and effectively transform them into valuable resources by applying suitable strategies. This is because entrepreneurs can examine a particular issue from several perspectives and incorporate innovation to produce a design that benefits the entire organisation.

Psychological capital is crucial in facilitating individuals' generation of innovative ideas and promoting innovation within a particular organisation. Positive psychological capital can be conceptualised as a manifestation of personality attributes, as it pertains to the ability of an individual to contribute value to an organisation through their skill set. An individual's capacity to proficiently employ knowledge and strategically organise it through establishing social connections. The four primary dimensions of psychological capital can be elucidated to illustrate how it facilitates the entrepreneurial journey. Self-efficacy is an individual's confidence level to successfully accomplish a specific objective.

Consequently, it empowers an individual to persist in a specific path of action by surmounting any potential obstacles. In contrast, hope is the optimistic force that propels an individual to actively pursue various prospects and attain a notable standing amidst rivals. On the other hand, optimism allows individuals to anticipate favourable outcomes for their endeavours, enhancing the likelihood of achieving higher success for the organisation. According to Ziyae *et al.* (2015:7), resilience empowers individuals to control their emotional stability, facilitating the ability to navigate and surmount problems in adverse circumstances. Psychological capital is a set of traits that promote entrepreneurial sustainability within an organisation.

In the current competitive landscape, corporate organisations endeavour to identify and implement innovative strategies to attain a prominent standing relative to their counterparts. This has led to a reliance on the new ideas held by the organization's people resources, which will facilitate the firm's long-term sustainability. To thrive in a competitive climate, organisations must engage in the recruitment of individuals who possess a strong inclination towards innovation. This strategic approach serves to foster the establishment of a progressive work culture within the organisation. Ensuring the absence of stress among personnel is equally important to management since it hinders their innovative capacities. To promote the long-term viability of entrepreneurship, management must focus on aspects that contribute to employee happiness (Abbas & Raja, 2015:131).

Conversely, persons with elevated levels of psychological capital exhibit a decreased propensity for experiencing job-related stress. This finding suggests a clear correlation between personal qualities and the sensation of stress and anxiety in individuals. Research has also indicated that personnel with a higher psychological capital demonstrate a greater propensity for innovation, contributing to increased organisational productivity. It can be argued that individuals possessing a greater level of psychological capital have the potential to make valuable contributions to the sustainable development of an organisation by leveraging their entrepreneurial abilities.

The preceding discourse elucidated that sustainable entrepreneurship exhibits a positive correlation with psychological capital and demonstrates variability contingent upon the personal attributes of the entrepreneur.

2.8 SUSTAINABLE ENTREPRENEURSHIP FRAMEWORK

Based on the preceding theoretical progress, it is essential to acknowledge that sustainable entrepreneurship, as a topic of academic investigation, remains in its nascent phase, as posited by Muñoz *et al.* (2018:305). This emerging field poses a variety of challenges and opportunities. Examining sustainable entrepreneurial behaviours, processes, and outcomes is vital, especially given the ever-changing conditions and substantial challenges (Muñoz & Dimov, 2015:638). It is crucial to

transcend ordinary discussion regarding the objectives of sustainable entrepreneurship and instead prioritise the delineation of diverse ways to entrepreneurial practice, with the identification of new challenges that emerge in promoting a sustainable company. Therefore, it is crucial to facilitate the dissemination of research findings across various academic fields, commonly known as "cross-pollination of research" (Anand *et al.*, 2021:15), to advance the domain of sustainable entrepreneurship. The utilisation of an interdisciplinary approach will facilitate a thorough examination of potential possibilities for sustainable opportunities. The achievement of this goal can be accomplished through the establishment and execution of a sustainable entrepreneurial framework.

Numerous academics have directed their attention on comprehending the intricacies of sustainable entrepreneurship, specifically, the mechanisms involved in the establishment of new sustainable enterprises and their specific impact on the attainment of sustainable development objectives (Belz & Binder, 2017:8). The primary focus of scholars in this particular domain revolves around the process of "opportunity exploitation" in the realm of sustainable entrepreneurship, as well as the emergence of "sustainable innovation" and its related activities within organisations (Bapoo *et al.*, 2022:7; Schaltegger & Wagner, 2011:226). In light of the advancing field, contemporary research endeavours to provide comprehensive analyses of the phenomenon, encompassing investigations into the structure of sustainable business models (Lüdeke-Freund, 2019:668; Davies & Chambers, 2018:380), the impact of digital technologies on the attainment of socio-ecological value (Gregori & Holzmann, 2020:3), and the development of sustainable entrepreneurship strategies (Rantala *et al.*, 2019:215).

An expanding body of scholarly work has emerged that examines the various obstacles and impediments sustainable entrepreneurs face. These issues encompass a range of factors, including insufficient institutional backing, limited access to financial resources, perceived risks, inadequate customer knowledge, and information asymmetries (Hoogendoorn *et al.*, 2019:1135; Shahid, 2022:41). The development of a sustainable entrepreneurship framework is influenced by various factors, which can be categorised into three main components: identification of sustainable

entrepreneurial possibilities, implementation of sustainable entrepreneurship practises, and achievement of sustainable entrepreneurship outcomes.

2.8.1 Recognising sustainable entrepreneurial opportunities

What needs to be emphasised is that opportunity recognition is at the heart of the entrepreneurial process, whether it is social, environmental, or commercial, because the entrepreneurial process always begins with the identification of a potential business opportunity that can be intentionally explored and further developed into a new product, service, or process (Shane & Venkataraman, 2000:220; Doyle & Ho, 2010:635). According to Short and Ireland (2010:40), opportunities are essential in entrepreneurship; thus, there is no entrepreneurship without a chance. Understanding sustainable options and how they unfold becomes crucial if one is ready to start structuring a sustainable enterprise (Munoz & Cohen, 2018:14).

The conceptual model of Patzelt and Shepherd (2011:644) is considered one of the most extensively utilised models in the field of opportunity recognition for sustainable development. As the abovementioned model indicates, sustainable growth opportunities are identified following an individual's pre-existing knowledge and motivation. Variations in entrepreneurs' attention towards different components of the natural and community environment and their identification of prospects for sustainable development can be attributed to prior knowledge and motivation disparities. According to Patzelt and Shepherd (2011:645), individuals can identify opportunities that align with their existing knowledge within a particular environmental context.

Additionally, scholarly research on the motivation of entrepreneurs in the agricultural sector has revealed that a significant factor contributing to their success is their entrepreneurial orientation (Grande *et al.*, 2011:103; Verhees *et al.*, 2011:170). According to Wiklund and Shepherd (2005:78), entrepreneurial orientation refers to the inclination to engage in innovation, revitalise market offers, take risks by exploring new and uncertain products, services, and markets, and exhibit a higher level of proactivity compared to competitors in identifying and capitalising on new opportunities in the marketplace. Nevertheless, there has been a query regarding the extent to

which heightened levels of entrepreneurial orientation may enhance the probability of entrepreneurs directing their attention towards business possibilities that incorporate sustainability factors (Verhees *et al.*, 2011:171).

Although there is significant interest in investigating the determinants that promote the identification of sustainable opportunities (Baron & Ensley, 2006:1337; Corbett, 2007:102; Gregoire *et al.*, 2010:128; Shane, 2000:452), there is a lack of empirical studies in this area, with most research remaining predominantly conceptual (Davidsson, 2015:681; Dimov, 2007:568). Consequently, an increasing disparity exists between the conceptualization of sustainable opportunity recognition and the empirical investigation of this phenomenon through rigorous research methodologies.

Entrepreneurial opportunities are cyclical. Therefore, they include a social learning process in which new knowledge arises regularly to address the uncertainty that comes with each stage of development (Dimov, 2007:714). As a result, the sustainability opportunity allows for the development of new combinations to address economic, environmental, and social consequences concurrently. Despite the apparent similarities between commercial and sustainability potential, it has been suggested that the latter has distinct characteristics that merit additional attention (Munoz & Cohen, 2018:15). These opportunities, according to Patzelt and Shepherd (2010), allow sustainable entrepreneurs to preserve the natural and/or community environment while also benefiting the entrepreneur and others. It aims to develop social and environmental benefits to meet society's most pressing quality-of-life requirements, providing diverse business opportunities (Dean & McMullen, 2007:51).

According to Belz and Binder (2017:9), a sustainable entrepreneur identifies a particular ecological or social issue and subsequently identifies an opportunity to address the socio-ecological problem. The entrepreneur then proceeds to design solutions that can effectively launch into the market. According to Cohen and Winn (2007:33), entrepreneurial behaviour may be facilitated by market inefficiencies in the natural environment, creating economic opportunities. According to Muñoz and Cohen (2018:304), a sustainable entrepreneur is willing to engage in a more compassionate and socially responsible approach to business. Furthermore, they possess the necessary skills and motivation to enhance the community's or society's well-being.

Incorporating sustainability into a company's operations creates significant complexity and ambiguity due to the frequently conflicting demands and aims. Organisations must concurrently attain economic, social, and environmental value (Farny *et al.*, 2019:1096; Muñoz & Cohen, 2018:304).

According to Short and Ireland (2010), an opportunity is an idea or dream discovered or purposely generated by an innovative individual or business entity and revealed to be potentially valuable through rigorous research. The first view is that an opportunity is found; opportunities are considered a function of actual reality, and they exist out there waiting to be discovered. The opposing viewpoint holds that opportunities are purposefully produced as a result of enacted behaviours that occur during entrepreneurial processes (Short & Ireland, 2010:54). Ardichvili *et al.* (2003:106), on the other hand, support the second viewpoint, claiming that "opportunities are consciously sought and made, not found." This is in line with the creation theory, which states that new product or service opportunities do not exist unless entrepreneurs create them (Alvarez & Barney, 2007:12). As a result, opportunities necessitate conscious human activity for the establishment of sustainability and social consensus (Alvarez *et al.*, 2013:302).

Some scholars, such as Cohen and Winn (2007:34) and Dean and McMullen (2007:62), claim that market imperfections, or the failure of the market to efficiently allocate finite resources in a way that ultimately benefits society the most, provide the possibility for sustainable entrepreneurship. In agreement with this viewpoint, Villar (2019:104) adds that market failures tend to pique the interest of entrepreneurs and motivate them to exploit market gaps. Externalities, poor knowledge, imperfect pricing, and inefficient enterprises are among the market failures found (Dean & McMullen, 2007:51; Sarasvathy *et al.*, 2003:142). These market flaws, they believe, allow sustainable enterprises to earn rent while improving social and environmental situations.

It's vital to note that the first flaw reveals organizations' failure to allocate resources in the most effective way possible. In this view, entrepreneurs use their cognitive abilities and knowledge to absorb conceptual, abstract information about where and how to access discounted, explicit, and tacit resources and deploy and exploit them (Alvarez

& Busenitz, 2001:762). The entrepreneurial function is defined by both Kirzner (1979:137) and Schumpeter (1934:132) as the decision to direct inputs into specific processes rather than generic strategies. In his famous paper, Schumpeter (1934:132) defines an entrepreneur as someone who creates a product, a service, a manufacturing technique or process, or a specialized market by consciously combining productive components in a novel way.

While agreeing with Schumpeter, Kirzner (1979:137) added that entrepreneurs fortuitously start a new business or expand into a new product market when they consciously believe there is a developing opportunity to redeploy resources away from current, suboptimal configurations to more promising prospects in the future. As a matter of principle, efforts to bring markets closer to equilibrium will thus necessitate an increase in resource allocation efficiency. This can be accomplished through the entrepreneurial process, which Aberejjo (2016:6) refers to as "opportunity identification and exploitation."

The second flaw, according to Aberejjo (2016:6), is the existence of externalities, which can be positive or negative. This flaw indicates that the costs and advantages associated with a firm's production or consumption activities are not accurately reflected in the prices of its products and services (Aberejjo, 2016:6). If an entrepreneur can replace present industrial techniques that generate externalities with novel ones, they will have uncovered a new economic opportunity while also generating positive environmental externalities. Innovative enterprises that can recognize and develop chances to reverse existing negative environmental externalities like air pollution, according to Cohen and Winn (2007:30), could offer triple-bottom-line results.

Their business decisions can have a positive social impact (by improving air quality in communities) and a positive environmental impact (by improving ecosystem functioning) while making a profit. Entrepreneurs can find chances to minimise transaction costs associated with environmental-based externalities and opportunities emerging from improved production techniques (Villar, 2019:104; Aberejjo, 2016:7).

The possibility of an imperfect pricing mechanism is the third market defect that frequently generates entrepreneurial opportunities at a specific organization. This flaw derives from the traditional economics theory's assumption that natural resources are infinitely abundant and have a market value that appropriately reflects supply and demand. Kurz and Salvadori (1997:236) consolidated the classical theory issue by claiming that many natural resources are finite, undervalued, and underutilized. As a result, if natural resources are valued more properly and perfectly priced, demand for non-renewable elements will fall, while demand for renewables will rise. As a result, entrepreneurship principles can help inventive entrepreneurs uncover opportunities in renewable production aspects (Abereijo, 2016:7).

The fourth flaw in the market is knowledge asymmetry. Neoclassical economics believes that providers and purchasers have complete knowledge about prices, products, and the market in a free market. However, there is an imperfect distribution of knowledge, which is occasionally to blame for unsustainable production and consumption habits that manifest themselves in the market. Changes in technology, emotive issues such as tastes and attitudes, and the demographic characteristics of units within the population are all variables that contribute to faulty information (Abereijo, 2016:7). Whether the knowledge gap is between customers or producers, entrepreneurs look for opportunities in brokering information.

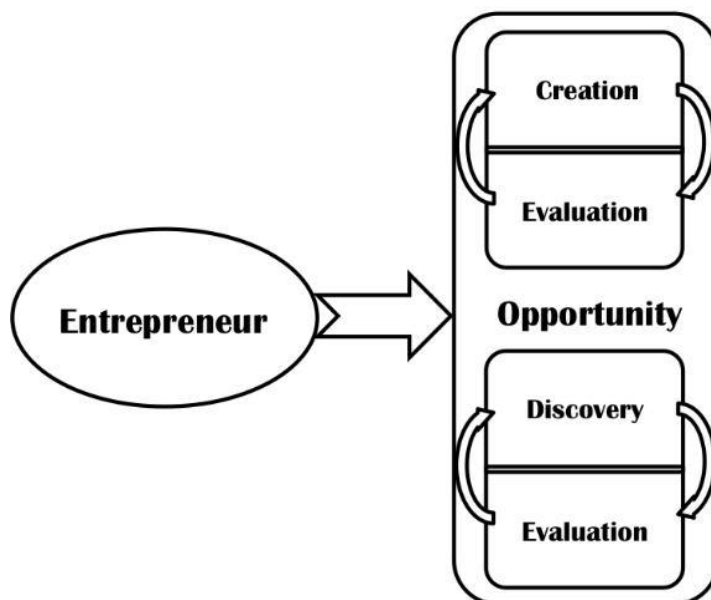
On the one hand, sustainable entrepreneurs can reduce environmental degradation and generate revenue by developing environmentally superior manufacturing methods or marketing environmentally select products to underserved environmental market segments or end-users. Meanwhile, entrepreneurs can exploit possibilities by increasing client awareness of product or service features (Villar, 2019:105).

Although market defects create objective chances for each individual to notice, entrepreneurs range in their level of awareness and alertness, and as a result, they establish and exploit opportunities in different ways (Alvarez & Barney, 2007:16; Ardichvili *et al.*, 2003:113). Opportunity discovery aims to repair market failures by finding new ways to achieve a particular purpose where supply and demand are known. Still, the other needs to be identified (Sarasvathy *et al.*, 2012:1155). Nonetheless, Pacheco *et al.* (2010:470) argue that the opportunity discovery theory

and the opportunity creation theory must be synchronized to comprehend sustainable entrepreneurship fully. Opportunity discovery theory adequately describes the phenomena in ideal economic systems. Still, institutional structures frequently impede sustainable entrepreneurship, resulting in a "green prison" conundrum (Pacheco *et al.*, 2010:465).

As a result, opportunity discovery and creation theories, as depicted in Figure 1 below, cannot be considered discrete processes because they do not represent the whole frame of opportunity identification.

Figure 2.2: Sustainable entrepreneurship opportunities forming



Source: Ahokas and Kuikka (2016:16)

Following this line of reasoning, it is essential to remember that opportunity formation is a cyclical process that includes discovery, creation, and analysis, referred to as opportunity evaluation. Ardichvilli *et al.* (2003:118) claimed in their opportunity model that evaluation functions cyclically throughout the opportunity process. Each stage should ideally be appraised so that an overall quantum of evaluation averages may be established at the conclusion. Because the review is carried out constantly, a cyclical process can finally lead to additional opportunities, revisions to the discovered or produced opportunity, or an exploitation choice. The concurrent process model of Belz

and Binder (2017:11), which provided a detailed description of the phases that sustainable entrepreneurs end up following in creating their businesses, backs up this argument. After calibration, the opportunity recognition stage includes the first and second stages of the sustainable entrepreneurship process, recognizing social and ecological challenges and opportunities.

However, it is essential to note that opportunities are assessed at each level of growth, even if the assessment is informal or unarticulated. Individuals may conduct informal research into alleged market demands or resources until they are convinced that the prospect is worthwhile (Ardichvili *et al.*, 2003:111). For example, the entrepreneur's decision to continue opportunity development, shift to opportunity exploitation or even abandon the process is influenced by the cost of resources and available financial resources (Shane & Venkataraman, 2000:220). As a result, resources are evaluated as part of the opportunity formation process. As a result, the identified opportunity must be gradually exposed to the market as part of the exploitation process.

2.8.2 Exploitation of sustainable entrepreneurship opportunities

Although finding an opportunity is a crucial pre-condition for sustained entrepreneurship, it is insufficient to carry out the entire transaction. After stumbling onto a lucrative opportunity, an entrepreneur should go further to capitalize on lucrative chances across the whole value chain to create value (Shane & Venkataraman, 2000:222).

Once an opportunity has been identified and deemed worthwhile, the entrepreneur engages in a series of exploitation activities, including raising financial and other resources, safeguarding information about the opportunity from competitors, and designing appropriate organizations and business models (Shane, 2003:34). In terms of technology, markets, and rivals, the truth is that the world is unpredictable; things frequently alter without warning. Given this uncertain environment, the entrepreneur devises tactics to deal with it by introducing slack, discovering specialized markets, and building strategic alliances (Shane, 2003:35).

There is little doubt that these opportunities serve as the foundation for an emerging paradigm of sustainable entrepreneurship and that taking advantage of them can help present or aspiring entrepreneurs earn entrepreneurial rents while also improving social and environmental conditions in the future (Abereijo, 2016:6). According to Eckhardt and Shane (2003:339), the critical exploitation decision is based on the opportunity's value. The characteristics of options or parts of possibilities influence people's readiness to exploit opportunities. Each business opportunity is unique in numerous ways, affecting its estimated value. It's worth noting that potential entrepreneurs are more likely to use options if they've built up a relevant information pool for entrepreneurship through previous work or endeavours; this is likely since such information lowers the cost of opportunity exploitation. The capacity to move knowledge between different locations or production cost centres can boost the likelihood of capitalizing on an entrepreneurial opportunity based on prior entrepreneurial experience (Shane & Venkataran, 2000:223).

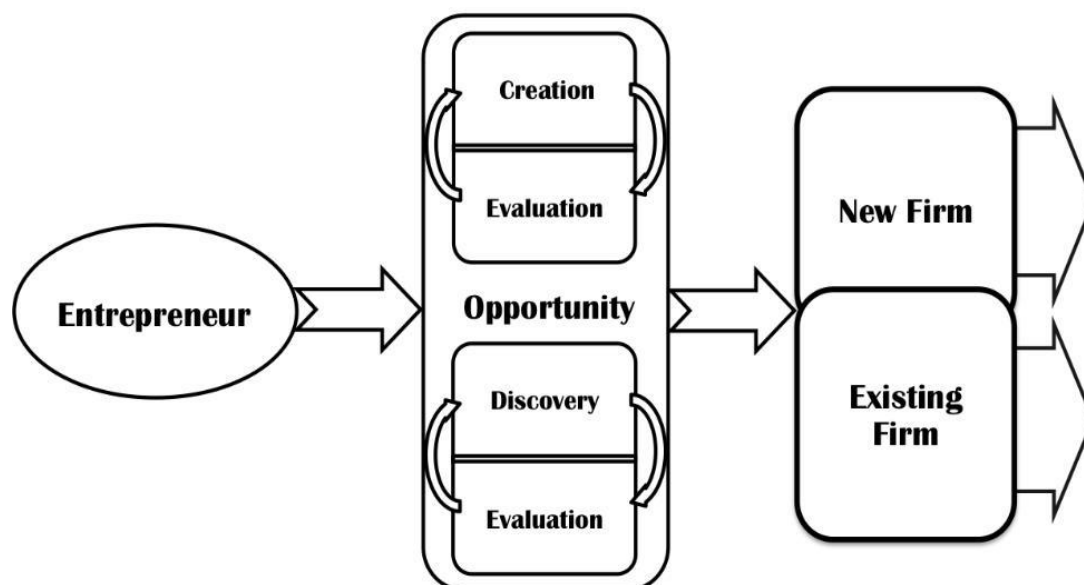
It's worth noting that individual variations among entrepreneurs impact the decision to pursue business possibilities with optimism. Those who take advantage of opportunities often believe their odds of success to be substantially higher than they are and much higher than those of others in their business, location, or sector. This over-optimism stimulates opportunity exploitation by limiting knowledge and generating a rosy picture of the future. However, it is not all roses, as most new businesses fail. People with higher self-efficacy and internal locus of control are more likely to exploit the opportunity, according to Chen, Greene, and Crick (1998), since exploitation requires a small number of risk-takers to act in the face of scepticism from others.

Similarly, opportunity exploitation necessitates ambiguity tolerance, as those more tolerant of ambiguity are likelier to seize opportunities (Shane & Venkataran, 2000:224). Shook *et al.* (2003:380) state that entrepreneurial traits and incentives benefit exploitation decision-making. As a result, it's critical to remember that while stated entrepreneurial characteristics boost the likelihood of opportunity exploitation, they don't ensure success. Shane and Venkataraman (2000:224) argued for cautious optimism, pointing out that over-optimistic behaviour can increase the likelihood of

failure after exploitation while failing to estimate the level of competitiveness or the degree of imitation can result in the establishment of an unsuccessful firm.

Shane and Venkataraman (2000:224) identified two vital institutional arrangements for pursuing these opportunities: starting a new company and following them through an existing company, independent of one another. The opportunity exploitation mechanisms and the opportunity-creating process are linked in Figure 2.3. The third and fourth phases of the convergent process model are combined in this stage, resulting in a double bottom line and, eventually, a triple bottom line solution.

Figure 2.3: Sustainable entrepreneurship opportunity forming and exploitation



Source: Ahokas and Kuikka (2016:18)

Shane and Venkataraman (2000:224) identified two critical institutional arrangements for pursuing these opportunities: starting a new company and following them through an existing company, independent of one another. The opportunity exploitation mechanisms and the opportunity-creating process are linked in Figure 2.3. The third and fourth phases of the convergent process model are combined in this stage, resulting in a double bottom line and, eventually, a triple bottom line solution.

According to Shane and Venkataraman (2000:224), empirical evidence shows that the most typical strategy to utilize possibilities is to start a new company, even though some entrepreneurs chase opportunities on behalf of existing companies or even trade with them. According to Cohen and Levin (1989:1091), entrepreneurship is more likely if individuals lack incentives to pursue opportunities through existing organizations if the present organization sees value as inadequate. According to the Knightian uncertainty model, prospects are pursued through entrepreneurial start-ups if the uncertainty is considerable. In some circumstances, the decision is more of an overlapping hybrid mode, with entrepreneurs following opportunities on behalf of the current firm, eventually forming a subsidiary start-up (Shane & Venkataraman, 2000:224).

2.8.3 Sustainable entrepreneurial outcome

A pressing requirement is to establish deeper involvement with the "outcomes" resulting from sustainable entrepreneurial endeavours. Sustainable enterprises are characterised by their commitment to achieving a net positive effect on persons, societies, and the broader ecological system. The researchers have challenges in objectively capturing and evaluating the consequences of sustainable entrepreneurship due to the organization's commitment to a triple bottom line (Anand *et al.*, 2021:5). There is an increased demand for research that examines how the solutions created and advocated by sustainable ventures directly contribute to enhancing the welfare of social groups and influencing the behaviour of markets, competitors, and industries (Muñoz *et al.*, 2018:328). This objective justifies the integration of sustainable entrepreneurship literature with the theoretical discourse of small, medium, and micro enterprises (SMMEs) to facilitate knowledge exchange.

The outcomes are the ultimate litmus test for determining whether the company has met the end goals of the sustainable entrepreneurship process or not, which include the development of social, economic, and environmental value (Dai *et al.*, 2018:5). Previous studies on sustainable entrepreneurial success have generally focused on two areas: value generation and strategic returns (Munoz & Cohen, 2018:3). Strategic returns focus on enhancing performance by following a sustainable development strategy, whereas value creation refers to integrating sustainable development with

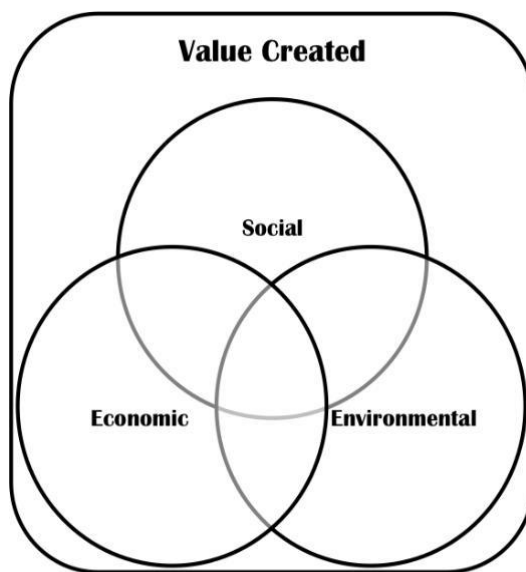
wealth accumulation (Dai *et al.*, 2018:5). Sustainable entrepreneurship is the only approach capable of creating economic, social, and environmental value while also caring about future generations' well-being (Hockerts & Wustenhagen, 2010:483).

The current global crisis is centred on the economic slump but also impacts social well-being and environmental deterioration (Heikkurinen & Bonnedahl, 2013:191). As a result of the negative trend, there is a growing need to restructure businesses and society and adopt more sustainable methods (Adams *et al.*, 2016:180; Slaper & Hall, 2011:4). Similarly, the current business model must be modified away from exploiting Earth's resources to the point where they are exhausted (Ahokas & Kuikka, 2016:19). Triple-bottom-line results can be achieved by innovative companies that can recognize and create possibilities to reverse existing negative environmental externalities, such as air/water pollution. Their entrepreneurial actions can provide social and ecological advantages (through improved community air quality) while also being profitable (Cohen & Winn, 2007).

Sustainable entrepreneurship is about chasing profit opportunities and discovering, inventing, and pursuing opportunities for environmental and social protection and improvement. It is the only conceptual category that focuses solely on sustainable development and gathers a triple-bottom-line new venture (Muñoz, 2013:5). In the end, it's about creating a mix of economic, social, and environmental value, as indicated in Figure 2.4 below, with an eye toward the long-term well-being of multiple generations to come.

The triple-bottom-line model combines each portion of the value created. However, the outcome might be imbalanced, where each part does not have to produce the same output. As a result, the relevance of a single entity's value creation in Figure 2.4 is context-dependent (Ahokas & Kuikka, 2016:22). Slaper and Hall (2011:5) took a similar stance, arguing that there are no universal TBL criteria, and that the framework can be tailored to the situation. Overall, the value outcome is created through developed and exploited opportunities, and sustainable value is believed to be completed in four different forms: economic, social, environmental, or all four forms combined.

Figure 2.4: Sustainable entrepreneurial outcome



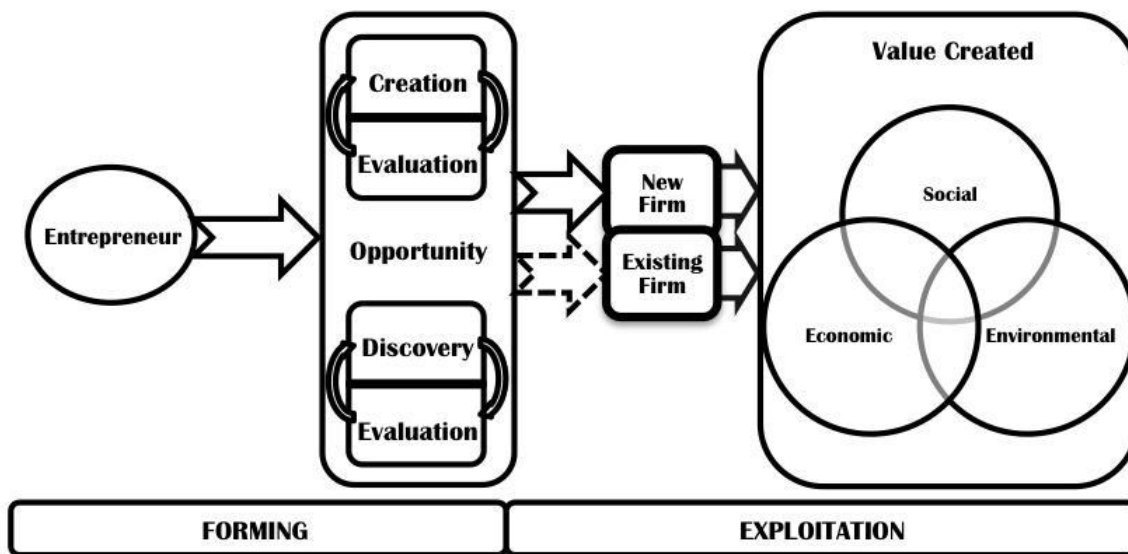
Source: Ahokas and Kuikka (2016:21)

Sustainable entrepreneurial outputs are usually revolutionary and pioneering, ensuring future market-share leadership in a variety of industries while also promoting social change. Sustainable entrepreneurship aims to improve environmental quality and social well-being by inventing innovative products and services to address challenging social and ecological issues (Dai *et al.*, 2018:5). According to Schaltegger and Wagner (2011:223), the essence of sustainable entrepreneurship is not profiting from development, but rather profit as a method of realizing social and environmental value creation. Furthermore, the ultimate purpose is to contribute to the long-term growth of society as a whole.

2.8.4 Framework for sustainable entrepreneurship

We offer a sustainable entrepreneurship paradigm by connecting sustainable opportunity recognition, exploitation, and value creation based on the triple bottom line. The three-stage framework is depicted in Figure 2.5.

Figure 2.5: Framework for sustainable entrepreneurship



Source: Ahokas and Kuikka (2016:30)

Shane and Venkataraman (2000:219) claimed that innovations or new resource combinations are used to realize lucrative, long-term opportunities. The creation of a new firm, acquisition of an existing firm, or a hybrid model in which an existing corporation develops a subsidiary start-up are all options for exploitation. Hockerts and Wusternhagen (2010:489) and York and Venkataraman (2010:461) came to the same result, claiming that exploitation in sustainable entrepreneurship is pushed by new enterprises and mimicked by incumbent firms. The uncertainty model influences the exploitation decision. According to Hall *et al.* (2010:442), most environmental and social opportunities are unknown, which leads to opportunity exploitation by entrepreneurs and new businesses.

Similarly, York and Venkataraman (2010:454) stated that established enterprises' opportunities have higher opportunity costs and a higher degree of uncertainty, both considered unfavourable factors. On the other hand, entrepreneurs find more fantastic opportunities for higher value creation in uncertain conditions and, as a result, strive to create value out of uncertainty.

Adopting a framework emphasizes the necessity of taking a strategic approach so that sustainable development is included in strategic talks, goals, and targets (Hambrick, 2007:1341). This guarantees that sustainable entrepreneurship growth is a strategic

priority, led by visionary leaders who can share their vision as the only way to ensure that it is communicated and implemented at all levels of the organization.

The framework focuses on all socioeconomic, economic, and environmental aspects aimed at improving performance and assisting businesses in achieving strategic and specific sustainable development goals and targets (Nowduri, 2012:59). There has been a lot of discussion about what a framework is like, and several perspectives have evolved. Nowduri (2012:60) presented the following points: He compared the framework to a blueprint plan that is incredibly important for a potential entrepreneur, as it helps balance local market synergies while also assisting in maintaining the competitive market. Given increasing profitability and competitive advantage, a framework should connect opportunity identification, exploitation, and long-term entrepreneurship success (Nowduri, 2012:60).

The fundamental elements of sustainable entrepreneurship have been summarized and outlined in the framework. The associated theories are detailed in the following section, which completes the theoretical framework.

2.9 THEORETICAL FRAMEWORK

According to Fernando and Lawrence (2014:149), studying at least two theories to obtain a better and more complete grasp of practice is prudent because they will complement one another. The Triple Bottom Line, institutional theory, and legitimacy theory are the foundations of this literature study.

2.9.1 Triple Bottom Line (TBL)

The term triple bottom line was initially used in the public realm in the mid-1990s by AccountAbility, an American management think-tank. However, in 1997, professor and author John Elkington wrote *Cannibals Forks: The Triple Bottom Line of 21st Century Business*, which drew widespread attention and acclaim (Norman & MacDonald, 2004:244). Elkington (1999:397) described TBL as "the simultaneous pursuit of economic growth, environmental quality, and social equality" in his essential book. The author concludes that there are three critical value-creating factors in sustainable

conduct in any business enterprise: thriving, flourishing in wealth, atmosphere, and environmental quality, as well as social justice for all (Majid & Koe, 2012:300).

The concept of sustainability is commonly denoted as the triple bottom line (TBL) due to its adoption of a triple-bottom-line framework, which incorporates economic, environmental, and social considerations (Baipai *et al.*, 2023:4). The conceptual framework was introduced by John Elkington in his seminal work published in 1994 after he recognises the inherent challenges in quantifying the scope of corporate sustainability. Furthermore, Elkington posited that the achievement of a business should not solely rely on quantification of financial gain or loss but should also encompass the welfare of individuals and the sustainability of the environment (Alhaddi, 2016:6). Therefore, Elkington introduced the Triple Bottom Line (TBL) framework as a means of facilitating the accurate assessment of sustainability by supplementing the conventional three pillars with additional bottom lines about the social and environmental dimensions (Purvis, 2018:5; Slaper, 2011:6). The TBL framework has emerged as a significant instrument for facilitating sustainability by incorporating the three dimensions of profit, people, and planet (Alhaddi, 2016:6). It is recommended that companies integrate this paradigm into their decision-making processes to prioritise profit generation that positively impacts the economy, society, and the environment (Azevedo & Barros, 2017:289).

Researchers with a deep interest in sustainable development and a value-based reconfiguration of corporate operations have further improved this over time (Hapenciuc *et al.*, 2015:940). The TBL concept emphasizes and integrates the three critical dimensions of sustainable development, 'profits, planet, and people,' which has forced corporations to broaden as well as widen their circle of responsibility, focusing for the first time "not just on the economic value that they add, but also on the environmental and social value that they add or destroy" (Elkington, 1998:3). This demonstrates that all organizations, including SMMEs, have economic, environmental, and social repercussions, consequences, and responsibilities that cannot be disregarded or taken for granted.

It is a well-documented and widely recognized truth that businesses play an essential role in demonstrating a commitment to society, the environment, and the economy.

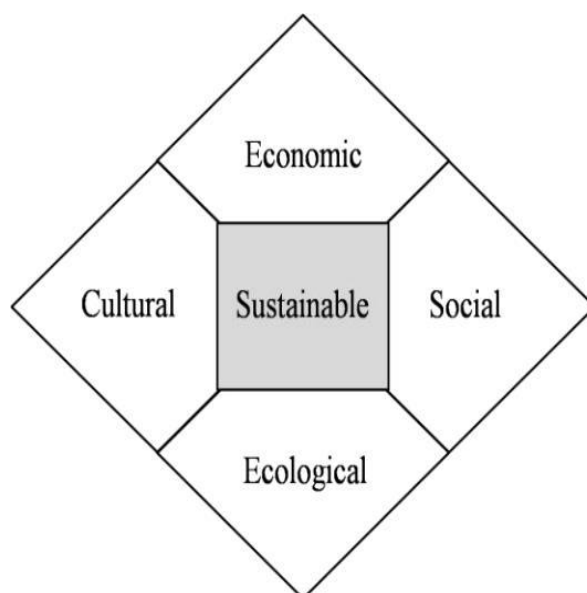
TBL serves as a context-dependent tool for assisting them (Mark-Herbert *et al.*, 2010). According to Slaper and Hall (2011:6), TBL's versatility makes it useful for corporations, non-profit organizations, and government agencies to measure sustainability performance based on individual needs. As a result, it is also appropriate and convenient for SMMEs to use in whichever endeavour they choose. However, there is currently a study void in the literature about a holistic framework for evaluating the contribution of entrepreneurial activity to achieving sustainable development's economic, environmental, and social goals (Dhahri & Omri, 2018:3).

TBL posits that small enterprises are crucial in preserving the environment and achieving economic benefits (Schaltegger & Wagner, 2011:225). The TBL approach is a significant concept that facilitates the ability of small enterprises to do so. Shepherd and Patzelt (2011:141) have undertaken a seminal study on TBL to elucidate the concept of sustainable entrepreneurship. The model established by the authors incorporates the TBL framework, which encompasses the social, economic, and environmental components. This model suggests that entrepreneurs have the potential to effectively manage their firms in a manner that not only maximises profits but also upholds the principles of environmental conservation and societal values.

SMMEs must prioritise optimising their limited resources to effectively balance their operations' social, environmental, and economic dimensions. The origin of this philosophy can be traced back to the concept of "making do with whatever resources are available." In essence, using accessible resources to resolve prevailing challenges and investigate potential prospects has been highlighted by Baker and Nelson (2005:331). According to Di Domenico *et al.* (2010:685), the theory promotes the idea of entrepreneurs utilising pre-existing resources in a manner that allows for their combination and reuse, ultimately leading to achieving their social, environmental, and economic objectives. This implies that SMMEs can modify their business models to see various forms of trash generated during their operations as valuable raw materials that may be repurposed, recycled, mended, and sold to other entrepreneurs. According to Kimuli *et al.* (2022:511), the ultimate outcome will be a reduction in the cost of conducting business, leading to achieving economic, environmental, and social sustainability.

TBL has unquestionably gained much traction among researchers as a tool for explaining sustainable business. However, it has some limits, just like any other hypothesis (Majid & Koe, 2012:301). For example, Austin *et al.* (2006:5) argue that the social dimension of TBL undervalues the effects of specific contextual elements, such as organizational, national, and community pressures, all linked to culture. As a result, Shepherd and Patzelt (2011) deserve credit for correlating the cultural component with community relevance, emphasizing that preserving culture leads to keeping community primacies. O'Neil *et al.* (2009:34) were the game-changing pioneers, pointing out that cultural determinants drive value-creating start-ups and should be viewed as the core component of sustainable entrepreneurship in conjunction with socio-economic and environmental systems. As a result, a TBL-based modified sustainable entrepreneurship model is provided that may be utilized to map out sustainable entrepreneurship. As shown in Figure 2.6 the four domains of sustainable entrepreneurship must compete equally.

Figure 2.6: A modified and reformulated model of sustainable entrepreneurship



Source: Majid and Koe (2012:303)

According to Elkington (1999:72), the TBL strategy attempts to improve sustainability in business practices wherever they occur. Sustainability concepts will be included in the company's design, community, architecture, and the environment in which it will

conduct business. As a result, the most prudent strategy to advance carefully but confidently toward sustainable entrepreneurship is to implement all of the TBL characteristics religiously from the company's roots to the highest corporate levels. All sustainability criteria must be meticulously satisfied before an entrepreneurial entity can be labelled sustainable (Crals & Vereeck, 2004:3).

2.9.1.1 Economic dimension (Profit)

The TBL economic value is calculated differently than the typical profit calculation used in corporate accounting. Profit is the monetary value created by an organization after all input costs, including the cost of context-specific tied-up capital, have been deducted (Bell & Stellingwerf, 2012:5). Economic sustainability entails a manufacturing structure that meets current consumption levels as well as future societal demands (Lobo *et al.*, 2015:10). Traditionally, economists considered that natural resource supply was limitless and placed undue emphasis on the market's ability to efficiently distribute resources at the expense of natural resources (Du & Kang, 2016:30).

The economic dimension of the TBL framework centres on analysing the effects of an organization's operations on the financial system of the country in which it operates (Elkington, 1998). This pertains to the economy's capacity, functioning as a subsystem of sustainability, to adapt and persist across time, hence facilitating the well-being of future generations.

They also believed that economic progress would be accompanied by technological advancement to recover natural resources that had been used during the manufacturing process (Cooper & Vargas, 2004:16). Natural resources, on the other hand, are not endless; in addition, not all of them can be renewed or are renewable. Allan and Clouth (2012:16) share the same viewpoint as the previous authors, namely that human existence on Earth is sustained and perpetuated through utilizing the planet's limited natural resources. Dernbach (2003) claims that due to various factors, such as population growth and basic human needs, such as food, clothing, and shelter, the global means and resources available cannot be increased indefinitely to meet the demands. As a result, economic sustainability necessitates making decisions

in the fairest and fiscally sound manner feasible while also considering other aspects of sustainability (Zhai & Chang, 2019:370).

Although profit should not be the sole goal of sustainable entrepreneurship, any company's ability to survive and develop depends on its ability to be economically viable (Dixon & Clifford, 2007:327). "Economic gains," according to Shepherd and Patzelt (2011:141), are fundamental viewpoints that must be diligently established in sustainable business. Furthermore, Richomme-Huet and De Freyman (2011:5) have emphasized the need for sustainable enterprises to create ideals that promote economic development, social justice and environmental conservation. As a result, the economic dimension, like other sustainable elements such as social, ecological, and cultural, should be given equal weight (Majid & Koe, 2012:303).

2.9.1.2 Social dimension (People)

The second part, 'people,' is concerned with how businesses behave in social and ethical matters (Crals & Vereeck, 2004:3). A long-term business must value its workforce, which includes recruiting, developing, and training the best employees to meet the company's goals (Bell & Stellingwerf, 2012:4). The preservation of human rights, the avoidance of fraud and corruption, the release of child labour, gender balances and the avoidance of all types of discrimination, consultative management style, and a friendly employment code of behaviour are all issues that must be effectively addressed (Crals & Vereeck, 2004:3).

According to Elkington (1998), the social dimension of the TBL pertains to the extent to which an organisation operates advantageously and equitably for its employees and the broader community. The concept posits that the organisation's practices should yield societal advantages and engage in community-oriented initiatives. Illustrative instances of such organisational practise encompass equitable remuneration, educational opportunities, evaluations of competencies, standards of living, availability of social resources, fairness, accumulation of social capital, and provisions for healthcare packages (Azevedo & Barros, 2017:290; Slaper, 2011:6; Woodcraft, 2015:136).

According to Daly (1992), social sustainability includes equity, empowerment, accessibility, participation, cultural identity, and institutional stability. The idea is to create a system that alleviates poverty and protects the environment (Farazmand, 2016:3; Littig & Griebler, 2005:66). In this context, the notion of social sustainability asserts that reducing poverty should not result in unjustified environmental devastation or economic instability. However, it should try to reduce poverty within the society's existing natural and economic resource base (Kumar *et al.*, 2014:6; Scopelliti *et al.*, 2018:971).

The social dimension of sustainable entrepreneurship comprises developing persons, communities, and cultures to help them reach a meaningful life by utilizing good healthcare, education, gender equality, peace, and stability worldwide (Saith, 2006:1168). It is claimed that achieving social sustainability is challenging since social factors are intangible, variable, and difficult to assess (Benaim & Raftis, 2008; Saner *et al.*, 2019:3).

According to Kolk (2016:23), social sustainability entails ensuring that everyone's needs are met and rigorously ensuring that virtually everyone has the intellectual capability to realize their demands if and when they desire, at their speed, time, and whims. Anything obstructing this capacity is often regarded as a roadblock that must be carefully handled for individuals, organizations, or communities to develop toward social sustainability (Pierobon, 2019:149).

Assuring an excellent working environment for employees, a sense of ownership for organizational goals, and a participative organizational framework are all part of the social dimension of sustainable business (Hapenciuc *et al.*, 2015: 940). According to Azapagic and Perdan (2000:244), the social size is divided into three parts: (1) social welfare, which includes education and providing a healthy and safe working and living environment, (2) equal opportunity for the community (non-discrimination), and (3) ethical concerns, which include human rights observance (non-exploitation of young or immigrant workers). According to Pascual *et al.* (2011:4), these organisations have "a personal commitment to make the world a better place for everyone around them."

Furthermore, Richomme-Huet and De Freyman (2011:6) claim that to be a sustainable entrepreneur, one must create "social cohesiveness," which refers to meeting individual and communal requirements.

2.9.1.3 Environmental aspect (Planet)

The concept of a 'planet' highlights the topic of an entity's impact on the environment and natural resources, such as air, water, and energy, and how to mitigate it (Crals & Vereeck, 2004:3). To be honest, these resources are both rare and non-renewable, necessitating their careful preservation (Majid & Koe, 2012:304). Nature and the environment, according to environmental writers Shepherd and Patzelt (2011:141), are vital factors that must be preserved in sustainable entrepreneurship. As a result, it is critical to emphasize that entrepreneurial action can and should help to maintain the ecosystem, combat climate change, reduce environmental degradation and deforestation, improve agricultural practices, and increase freshwater supply, all of which contribute to the preservation of biodiversity. According to Richomme-Huet and De Freyman (2011:6), environmental conservation should be one of the company values of sustainable entrepreneurs.

As Elkington (1998) proposed, the TBL framework advocates for organisations to adopt practices that promote preserving environmental resources, ensuring their availability for future generations. This pertains to the efficient utilisation of energy resources in an economically viable manner, as well as the mitigation of greenhouse gas emissions, improvement of air and water quality, management of solid waste, and the reduction of the ecological impact. The integration of sustainability considerations into various development endeavours, with a specific focus on agriculture, has the potential to improve the well-being of local communities. This approach also contributes to preserving biodiversity, mitigating land degradation, and promoting economic growth without excessive pressure on resources (Baipai *et al.*, 2023:5).

The ecological dimension is concerned with how the natural environment can sustain present and future human requirements in a productive manner (Mensah, 2019:10). To put it another way, the notion of the ecological dimension divides the world into ecosystems, carefully incorporating the human relationship as well as the impact they

have on one another. In this vein, Landoni (2010:2) believes it is time for firms to recognize that unsustainable methods result in losing personnel, customers, and profit. A TBL entity attempts to benefit from its surroundings, and even if there are no benefits, the entity should cause no harm to the environment and try to protect the environment as much as possible.

Furthermore, a TBL entity conducts business in an environmentally responsible manner; it does not manufacture environmentally hazardous or destructive items that endanger the natural environment or biodiversity (Bell & Stellingwerf, 2012:5). Similarly, Goodland and Daly (1996:1003) emphasized the need for exploiting natural capital sustainably and used it as a source of economic inputs and a waste sink wherever it occurs. The implication is that current natural resources should not be depleted faster than they can be replenished. Trash should not be emitted faster than it can be assimilated by the environment in which it exists (Diesendorf, 2000:20; Evers, 2018:12). This is because the earth's systems have limits or boundaries within which equilibrium is meticulously preserved regardless of how things unfold.

Businesses should monitor and control their environmental impacts based on ecological sustainability (Roxas & Chadee, 2012:209). A firm should invest in activities such as reducing water usage (Enrol *et al.*, 2009:51), purchasing green products (Zsidisin & Siferd, 2001:62) and adopting waste reduction and recycling policies to reduce air pollution to be ecologically sustainable (Keijzers, 2002:350). Businesses must employ environmentally friendly technology and materials (Branzei & Vertinsky, 2002:86), use fewer traditional fuels (Lindgreen *et al.*, 2009:446), and minimize negative impacts on animal species and natural environments (Rueda-Manzanares *et al.*, 2008:186). Businesses gain a competitive edge by investing in environmental initiatives, which leads to enhanced operational performance (Yang *et al.*, 2011:252). According to Schoenherr (2011:124), ecological practices are helpful because they are the right and acknowledged way to do things and improve operational performance. As a result, if businesses wish to compete in their business cycles, they must take responsibility for their activities and limit their corporate environmental consequences (Wagner, 2009:292).

2.9.1.4 Dimension of culture

The triple-bottom-line approach to business defines how to balance economic prosperity, environmental quality, and social fairness to achieve long-term success. Many scholars, however, believe that culture should be included as one of the elements of long-term entrepreneurship (Majid & Koe, 2012:305). Culture is a place-based development system that links economic success to societal sustainability and well-being (Huggins & Thompson, 2014:727). Entrepreneurial activity and value generation are influenced by culture, and cultural embeddedness both facilitates and constrains entrepreneurial behaviour (Greenman, 2013:632). Culture can be characterized as a complicated system that examines how an organism does things; this encompasses cognitive issues such as knowledge, belief, and art, as well as effective ones such as morals, law, and custom, as well as any other capacities and habits acquired by humans as members of society (Bjorklund, 2020:27).

In agreement with Bjorklund, Nurse (2006:38) suggests that culture must be viewed as the fulcrum of any society, organization, or entity and must be fully incorporated with the other pillars of the economy, social, and ecological systems. Because people's identities, meaning systems, cosmologies, and epistemic frameworks impact how the environment is understood, conceptualized, and lived in, it should not be viewed as an additional burden or pillar of sustainable development. Bjorklund (2020:27) says that if an entrepreneur fails to understand localized expectations, cultural rules, and relationships, this could indicate hurdles to long-term commercial or social development.

As a result, it is essential to note that various methods of sustainable development prioritize or identify the order of the following values: cultural identity, which includes elements such as birth, food, music, and religion, self-reliance, social justice, and ecological balance (Nurse 2006:38).

Nurse (2006:38) says preserving traditional or indigenous knowledge is necessary to avoid cultural loss and over-dependence on Western culture. On the other hand, Shepherd and Patzelt (2011:142) claimed that maintaining a community's culture is critical to preventing the loss of personal and community identity. However, it has been

noted that culture is difficult to change, and governments can find it challenging to affect spatial cultures as a matter of principle. Creating the correct institutional environment, on the other hand, can encourage behaviours that, over time, become ingrained in the culture and so impact it (Bjorklund, 2020:27). As a result, sustainable entrepreneurship can be seen as a synthesis of social, ecological, economic, and cultural principles (Huggins & Thompson, 2014:727).

2.9.2 Institutional theory

Dacin, Goodstein, and Scott (2002:45) assert that institutional theory has gained significant recognition as a widely accepted and influential framework for comprehending organisational and human behaviours. The origins of institutional theory can be traced back to the early development of the social sciences, incorporating the significant contributions of researchers such as Marx, Weber, Veblen, and Commons (Scott, 2005). The position in question has been widely acknowledged as a prominent viewpoint within the existing literature on organisational theory (Lammers & Garcia, 2017:195; Greenwood, Hinings & Whetten, 2014:1207). The expansion of institutional theory within the field of organisational theory has been ascribed to its extensive applicability (Dillard, Rigsby, & Goodman, 2004:504). According to Scott (2005), a prominent scholar in institutional theory, the theory focuses on examining the "fundamental and enduring elements of social structures."

The concept of institutional theory examines the mechanisms via which social structures, such as schemas, norms, values, and rules, are constructed as authoritative frameworks for guiding social activity (Scott, 2005). According to Dillard *et al.* (2004:508), institutional theory can be conceptualised as a framework for understanding the interplay between formal organisational structures and the underlying processes that shape the formation and evolution of these structures.

Throughout history, several institutionalists have offered diverse and expansive conceptualizations of institutions. The abovementioned conceptualisations indicate many fundamental attributes scholars utilise to delineate institutional theory's essence (Lammers & Garcia, 2017:195). According to institutional theory, an institution is a well-established system of practices governed by rules and standards widely accepted

by society (Dillard *et al.*, 2004:508). According to Lammers and Barbour (2006:357), institutions are collections of established practices led by persistent, codified, rational beliefs that go beyond specific organisations and contexts.

According to certain scholars in the field of institutionalism, such as Greenwood and Suddaby (2006) and March and Olsen (1984:774), institutions can be understood as a set of norms that establish and perpetuate consistent patterns of behaviour. According to Lammers and Garcia (2017:195), the enduring and robust nature of institutions can be attributed to the reproduction of behaviours within these establishments due to established norms. March and Olsen (1984:774) argue that standards prescribe and proscribe certain behaviours, determining what is considered acceptable and what is not. According to Galea, Powell, Loosemore, and Chappell (2020:3), institutions are perceived as distinct entities from organisations. Organisations are commonly perceived as the operational domain within which institutions function (Lowndes, 2019:6).

Hence, an organisation attains the status of an institution when it adheres to established norms and principles and when external stakeholders perceive these institutions as possessing legitimacy. Organisations do not function in isolation (Berthod, 2018:1). These entities are inside institutional settings that impose constraints that determine efficiency, appropriateness, and rationality (Aksom, Zhylinska, & Gaidai, 2020:141). Individual organisations must adhere to specific rules and standards to garner support and establish credibility within their respective institutional contexts (Scott & Meyer, 1983:149). Institutionalised norms or practises are subject to pressure from various sources, including governmental intervention, market dynamics, shifts in legal frameworks, and evolving social expectations (Dacin *et al.*, 2002:46; Oliver, 1997:697). Organisational activities are driven by the necessity of obtaining legitimacy, a behaviour affected by informally and socially formed values and norms (Dillard *et al.*, 2004:508).

It's worth noting that existing research on sustainable entrepreneurs demonstrates that they're always looking for ways to bring user-friendly innovations to society and organizations in general. Despite the above submission, it has been emphasized that for institutional values to succeed, sustainable entrepreneurs must consciously

transform current settings, market regulations, and corporate environments (Dean & McMullen, 2007:51). While Shepherd and Patzelt (2011:138) argue that sustainable entrepreneurs must deliberately modify markets and institutions to create competitive and legitimate pro-environmental conditions that allow sustainable products to become more natural, it is unclear how sustainable entrepreneurs will overcome the challenges of changing or creating new institutions in the long run (Thompson, 2014:608). Fortunately, the researcher elaborated on how sustainable entrepreneurs can strive to induce institutional reform as a matter of principle, resulting in establishing a framework for sustainable development.

The institutional theory, first proposed by John Meyer in the 1970s, aims to understand how entities align with, are related to, and are eventually modified to obtain legitimacy in their locality (Bruton *et al.*, 2010). In other words, the theory provides a theoretical lens through which researchers can pinpoint and investigate stimulants that promote the survival and legitimacy of organizational practices without necessarily excluding societal factors such as culture, social environment, regulation (including the legal environment), traditional background, and commercial incentives, while also acknowledging the importance of resources (Bruton *et al.*, 2010:424; Baumol *et al.*, 2009:5). While agreeing with Bruton *et al.* (2010:424), Glover *et al.* (2014:104) point out that institutional theory has traditionally focused on how groups and organizations can better secure their positions and legitimacy by adhering to the rules (such as regulatory structures, governmental agencies, laws, courts, professions and scripts, and other societal and cultural practices that impose conformance pressures) and norms of the institutional environment (Glover *et al.*, 2014:104). According to this viewpoint, a company's participation in a voluntary environmental project is motivated by financial concerns and a desire to achieve socially constructed environmental legitimacy (Rivera, 2006:782).

2.9.2.1 Institutional pillars

Institutions are multifaceted, enduring social structures made up of symbolic elements, social activities, and material resources, with the three pillars of regulative, normative, and cultural-cognitive aspects (Scott, 2008:48). Furthermore, Scott (2008:50) argued

that the three pillars of institutional theory should be viewed as complementing one other in that they are interconnected and alternately reinforcing each other.

As defined by Murithi *et al.* (2020:160), regulatory aspects encompass a set of codified rules, regulations, and corresponding consequences that encourage specific actions while limiting others. According to Bruton, Ahlstrom, and Li (2010), the regulatory aspects are developed from empirical investigations conducted in various economies. These elements are based on a rational actor behaviour model, emphasising compliance. Scott (2001:77) argues that regulatory aspects acquire legitimacy by adhering to legal obligations. Furthermore, institutions employ isomorphism processes to pressure individuals, groups, and organisations for compliance. Isomorphism pertains to how an organisation adapts an institutional practice (Dillard *et al.*, 2004:509). Coercive isomorphism is primarily linked to the regulatory and institutional components and the implementation of formal norms and laws (Murithi *et al.*, 2020:160; Dillard *et al.*, 2004:509), which arise from power dynamics and political factors (Boxenbaum & Jonsson, 2008:80). Coercive isomorphism refers to the combination of formal and informal constraints that are imposed on an organisation by external entities upon which it relies, as well as by the cultural expectations of the broader society within which the organisation operates (Parada *et al.*, 2010:357; DiMaggio & Powell, 1983:150).

The regulative pillar is built on punishments, regulatory procedures, submissiveness, and conformity and represents a rational actor model of behaviour (Bruton *et al.*, 2010:422). Institutions context-regulate, manage and guide the behaviour of participants in this pillar by establishing norms, monitoring, and enacting a criminal system with punishments (Scott, 2008:52). In this line, Bruton *et al.* (2010:422) argue that the state's parliamentary enactments, as well as industrial agreements and standards, are the primary sources of these regulatory components. These regulations serve as a guide for new business ventures or organizations. They can lead to firms and individuals complying with laws or necessitate a reaction if the entrepreneurial firm's location lacks law or regulation. Rivera (2006:783) believes that imposing mandatory environmental bylaws and supervisory and unambiguous standards that include fines for failure to comply are well-grounded approaches for encouraging businesses to improve their environmental policies.

Furthermore, even in the worst-case scenario, when no regulations or rules have been created, and no particular punishments have been enforced, the state's authority and capability to influence businesses' behaviour are enormous (Raedeke *et al.*, 2001:750). Threats of new environmental legislation or explicit government backing of beyond-compliance environmental activities are acknowledged to be substantial incentives for enterprises to participate in voluntary environmental initiatives, according to Winter and May (2001:680); Cashore and Vertinsky (2000:13). Entrepreneurs are discouraged from launching sustainable businesses, even though they are compelled to comply with far too many laws and procedural requirements. They are expected to report to various institutions and spend significant time and money completing the required documentation (Soto, 2000:12).

Following the regulative pillar is the normative pillar, which represents organizational and individual behaviour models based on mandatory social, professional, and corporate relationship characteristics (Bruton *et al.*, 2010: 422-423). Undoubtedly, professional-network-driven ideals and norms of behaviour espoused by business associations and academic institutions exert normative constraints (Rivera, 2006:783). Normative aspects encompass a culture's broader values and norms (Murithi *et al.*, 2020:160). According to Raynard, Johnson, and Greenwood (2015:1), normative aspects encompass values that dictate suitable and acceptable behaviours. Additionally, Bruton *et al.* (2010:423) assert that norms establish how actions are carried out within a society, aligning with these values. March and Olsen (1989) argue that normative aspects influence individuals and shape their expectations. This effect stems from a societal obligation to conform to a given social context's prescribed values and standards.

According to Galea *et al.* (2020:3) and Kaufmann, Hooghiemstra, and Feeney (2018:387), values and norms are seen as informal institutions that have withstood the test of time. The behaviour of individuals within a society is influenced and directed by the values and norms that prevail in their culture (Bruton *et al.*, 2010:423). Legitimacy in normative aspects is derived from adherence to ethical principles (Scott, 2001:77), while the inclination to conform to broader society norms is primarily linked to normative isomorphism (Lammers & Garcia, 2009:380; Boxenbaum & Jonsson,

2008:80). Normative isomorphism is a concept that pertains to the establishment of conditions and approaches that are commonly acknowledged as appropriate courses of action within a particular profession or organisational context (Parada *et al.*, 2010:357; Boxenbaum & Jonsson, 2008:80; DiMaggio & Powell, 1983:152).

Like the regulative pillar, the normative post directs and guides how the actors (people, firms) should do or behave. The normative pillar is responsible for answering more specific issues such as "What is deemed proper?" or "How are things to be done by the values?" (Bruton *et al.*, 2010:423).

As a result of a social need to follow the rules, normative institutions tend to exert influence based on social necessity or what an organization or individual should be doing. Even though those contexts include societal norms and values that discourage entrepreneurs while impacting the entity's overall success, more favourable normative institutions can assist entrepreneurs in obtaining, for example, finance. (Bruton *et al.*, 2010:423) According to Rivera (2006:783), enterprises that are members of trade associations have greater normative demands to demonstrate exemplary environmental performance and participate in voluntary environmental programs that promote proactive ecological management techniques. Meek *et al.* (2010:494) found that state-level incentives, environmental consumption norms, and family interdependence norms enhance sustainable business development.

The cognitive pillar is the final and third, a phrase loosely derived from the cognitive turn in behavioural sciences (DiMaggio & Powell, 1991). The cultural-cognitive components pertain to how specific acts are normalised through establishing shared understandings (Murithi *et al.*, 2020:160). Raynard *et al.* (2015:1) argue that social prescriptions are internalised and institutionalised, presenting challenges for those seeking to enact change or exhibit resistance. The behaviours and experiences of individuals within a particular culture are impacted and changed by the internalisation and institutionalisation of social prescriptions (Boxenbaum, 2020:307). Incorporating cultural-cognitive components plays a significant role in communities by instilling values (Bruton *et al.*, 2010:423). Following Berthod (2018:1), institutions can be conceptualised as commonly accepted beliefs, regulations, and standards that influence the development of organisational structures and operational procedures.

Cultural-cognitive factors are predominantly linked to mimetic isomorphism (Murithi *et al.*, 2020:160). At the same time, legitimacy is attained through the adoption of a shared framework (Scott, 2001:77). Mimetic isomorphism pertains to circumstances characterised by ambiguity, which compel and incentivize an organisation to replicate or emulate other organisations (Parada *et al.*, 2010:356; Boxenbaum & Jonsson, 2008:80; DiMaggio & Powell, 1983:150).

It represents individual behaviour models based on subjective and manufactured rules and meanings that constrain acceptable beliefs and acts (Scott, 2008:57). In terms of culture and language, as well as other taken-for-granted and preconscious behaviour that society almost ever thinks about, the cognitive pillar appears to operate more on a linear level. This pillar is becoming increasingly crucial to entrepreneurship studies regarding how organisations accept entrepreneurs, instil principles, and even establish a cultural milieu where entrepreneurship is welcomed and supported (Bruton *et al.*, 2010:423). The cognitive pillar, linked to the other two pillars of regulative and normative impact, can be used to investigate external yet subjective motivational influences for sustainable business.

2.9.2.2 Types of institutional carriers

Various carriers, including symbolic systems, relational systems, routines, and artefacts, transfer institutional aspects (Scott, 2003:882). These institutional vehicles facilitate the conveyance of regulatory, normative, and cultural-cognitive elements, as illustrated in Table 2.1.

Table 2.1: Institutional elements and types of carriers

Carriers	Regulative	Normative	Cultural-cognitive
Symbolic systems	Rules, laws	Values, expectations, standards	Categories, typification, schema
Relational systems	Governance systems, power systems	Regimes, authority systems	Structural isomorphism, identities
Routines	Protocols, standard operating procedures	Jobs, roles, obedience to duty	Scripts
Artefacts	Objects complying with mandated specifications	Objects meetings, conventions, standards	Objects possessing symbolic value

Source: Scott (2001:77)

According to Scott (2001:78), symbolic systems can be seen as social entities outside social agents and actors, as well as subjective cognitive frameworks and ideas that individuals internalise. Representational systems, in their capacity as institutional carriers, can encompass several components such as regulative elements (comprising rules and laws), normative elements (consisting of values, expectations, and standards), and cultural-cognitive elements (encompassing categories, typifications, and schemas) (Melin, Axelsson & Löfstedt, 2018:19).

Relational systems exhibit distinctive features, such as linkages among actors and inter-organizational associations (Scott, 2003:886). According to Melin *et al.* (2018:19), relational systems encompass various components, including regulative elements, such as governance and power systems; normative elements, such as authority systems; and cultural-cognitive aspects, such as structural isomorphism and identities.

Routines can be defined as the regularised behaviours or structured acts that embody implicit knowledge, which is possessed and transmitted by individuals within institutions (Scott, 2003:882). According to Melin *et al.* (2018:19), routines encompass various components, including regulative elements such as monitoring and sanctioning, normative features like roles, jobs, routines, and habits, and cultural

cognitive aspects such as predispositions and scripts. According to Melin *et al.* (2018:19), the artefact, in its capacity as the final institutional carrier, can function as a means of conveying regulative elements (things that adhere to specified specifications), normative elements (objects that fulfil established norms), and cultural cognitive components (objects that possess symbolic significance).

The significance of institutional theory in the present study lies in its ability to offer a comprehensive yet intricate perspective on sustainable entrepreneurs (Zucker, 1987:443) as institutions. The institutional approach provides valuable insights into understanding phenomena inside two institutions: SMMEs and sustainable entrepreneurship (Leaptrott, 2005:226). Hence, it can be asserted that SMMEs and sustainable firms are regarded as institutions and social structures (Monticelli, Bernardon & Trez, 2018:57) encompassing institutional logic, including values exhibiting considerable resilience (Almandoz, 2014:444). Almandoz (2014:445) asserts that institutional reason is commonly accepted and implemented as sustainable business practises. In sustainable entrepreneurship, scholars have employed institutional theory to gain insights into interaction influences among SMMEs and the institutions of business, ownership, and society (Parada *et al.*, 2010:357). The institutional theory framework is crucial for comprehending the factors that impact, shape, and legitimise sustainable business practices (Parada *et al.*, 2010:357).

Selznick's idea of organisations as institutions posits that organisations get institutional status when they are acknowledged as representing the values of a particular community (Selznick, 1957:16). SMMEs can be understood as a collective entity characterised by a set of shared belief systems that influence the values and priorities of the community (Sasaki, Ravasi & Micelotta, 2019:797). According to Sasaki *et al.* (2019:797), when SMMEs demonstrate a solid commitment to and alignment with the values of the community they serve and actively contribute to the betterment of that community, they are likely to gain recognition and esteem from their members. According to Sasaki *et al.* (2019:797), there is a perception that SMMEs are considered less dispensable within the community in which they operate. As a result, the community is more inclined to offer exceptional assistance to these enterprises. The societal expectations that establish the parameters of socially acceptable behaviour for corporations operating within the same organisational area can

potentially lead to SMMEs adopting similar practices and activities (Parada *et al.*, 2010:356).

2.9.3 Legitimacy theory

Legitimacy refers to the broad perception or idea that the activities of an entity align with the desired, correct, or appropriate standards within a socially constructed framework of norms, values, beliefs, and definitions (Suchman, 1995:574). The concept of legitimacy has a significant role in shaping individuals' behaviours and perceptions towards institutions. When businesses' actions are perceived as lacking legitimate acceptability, they become more susceptible to being characterised as unreasonable, excessive, or negligent (Meyer & Rowan 1991:43). In her work, Suchman (1995:576) made a distinction between three categories of legitimacy, which are characterised by variations in behavioural dynamics. The three types of legitimacy under consideration are pragmatic, moral, and cognitive.

2.9.3.1 Types of legitimacy

Pragmatic legitimacy pertains to the direct interactions between an organisation and its immediate audience, whose operations may influence welfare. Audiences, driven by their concern for their own interest, critically examine an organization's behaviour and policies, specifically focusing on actions or activities that have tangible implications for their circumstances. Support is given to policies and activities that are anticipated to align with the projected value of the audience. Furthermore, the organisation might attain pragmatic legitimacy when the audiences perceive its actions or policies as demonstrating responsiveness to the broader interests of the audiences. This phenomenon may occur when an organisation integrates the performance standards established by its audiences or incorporates the audiences into its governing mechanisms. In such circumstances, an organisation may be perceived as possessing trustworthiness, honesty, wisdom, decency, and alignment with its audiences' values and best interests, acquiring legitimacy. According to Suchman (1995:576), dispositional attributions can mitigate the impact of individual failures during challenging circumstances, as the organisation is perceived as possessing positive qualities, such as being a good corporate citizen or having excellent character.

In contrast to pragmatic legitimacy, moral legitimacy is not contingent upon the evaluator(s) or audiences' assessment of the benefits they may derive from an organization's actions and policies. Instead, it hinges on evaluating whether the organization's activities are ethically justifiable. The judgement of the audience or evaluator is influenced by the underlying ideas of the socially created system that aims to enhance the overall welfare of society. Therefore, the primary basis of moral legitimacy is in the principles of pro-social logic, contrasting with the restricted self-interest foundations of pragmatic legitimacy. Therefore, ethical considerations exhibit more resilience than practical considerations in the face of attempts to manipulate self-interest. The assessment of moral legitimacy can be categorised into four distinct forms, including outputs and consequences, techniques and procedures, categories and structures, and evaluations by leaders and representatives (Suchman, 1995:577).

Cognitive legitimacy pertains to an organization's acceptance, primarily derived from its perceived necessity or inevitability based on culturally ingrained assumptions. This commonly accepted characteristic can be observed when an individual overlooks the appraisal of an organization's policies and operations, whether favourable, harmful, or non-existent. This statement suggests a lack of interest or assessment based on cognitive legitimacy (Suchman, 1995:577).

The organisation places great importance on legitimacy since it is crucial for garnering support and commitment from internal and external stakeholders towards its operations and policies. Like other types of resources, organisations tend to perform effectively when their legitimacy is not at risk (Tilling & Tilt, 2010:58). Consequently, enterprises need to be prepared to address any harm they may have caused and that has been brought to their knowledge (Campbell, 2007:951). An organisation may establish legitimacy by engaging in exchanges (discourse) with its immediate or broader audiences. The primary goal of the organisation in this discourse is to establish alignment between the accepted norms of the social system and the implied or explicitly stated social values linked with their operations (Lindblom, 1983:92). Hence, the attainment of organisational legitimacy occurs when the value systems of the social system and the organisation are in alignment, demonstrating a congruence between the two (Tregidga *et al.*, 2006:10).

In contemporary society, organisations are confronted with diverse stakeholders who possess divergent perspectives and expectations, to whom they bear responsibility. The need for accountability is becoming apparent, especially concerning sustainability issues (Guerci *et al.*, 2016:265). Sustainable entrepreneurship assumes a crucial role in the legitimacy process, as it involves communicating and exchanging information to address the diverse perspectives and expectations related to sustainability. Stakeholders, seeking both pragmatic and moral legitimacy, evaluate organisations' environmental disclosure and reporting practices. Failure to demonstrate genuine environmental protection may lead to the perception of "greenwash," undermining the credibility of these efforts. The potential consequences of a social audit can be observed in instances where it leads to the delegitimization of the organisation (Suchman, 1995:575). This can have significant repercussions, including the possibility of an operational shutdown (Deegan & Unerman, 2011:162).

Organisations are commonly perceived as bound by a social contract with the various stakeholders impacted by their actions and policies. This contract is based on prevailing value systems inside the respective communities, including conventions and beliefs. The contract conditions can be categorised as either implied or expressed. They may undergo modifications throughout time, necessitating the organisation to make necessary adjustments (Brown & Deegan, 1998:25; Tilling & Tilt, 2010:58). Under the terms of this agreement, the organisation is obligated to provide evidence that its services and benefits offered to any party have obtained societal approval (Shocker & Sethi 1974:69).

2.9.3.2 Legitimation work in sustainable entrepreneurship

Similar to other entrepreneurial endeavours, sustainability initiatives encounter the obstacle of establishing adequate credibility among stakeholders to establish their presence in a market while simultaneously addressing the inherent disadvantages associated with their modest size and recent inception (Singh *et al.*, 1986:175; Fisher, 2020:3). New enterprises must engage in a range of strategic activities to establish their legitimacy (Zott & Huy, 2007:76; Nagy *et al.*, 2012:944; Engel *et al.*, 2020:5), commonly known as legitimation work (Rueede & Kreutzer, 2015:42).

The process of legitimation is of utmost importance in determining the performance (Wang *et al.*, 2017:376) and survival of new ventures in their initial stages of development (Delmar & Shane, 2004:389). Additionally, this phenomenon holds significant consequences for future strategic decision-making since it is the initial stage in establishing audiences' expectations (Garud *et al.*, 2014:1482). As an illustration, the association with a prominent-based company through a partnership might provide early-stage companies with a validation of their future connections to other significant stakeholders (Stuart *et al.*, 1999:318). The acquisition of credibility holds considerable significance for enterprises targeting novel market possibilities and emerging niches (Abrahamson & Rosenkopf, 1993:489). This is particularly relevant in the context of sustainability ventures.

Previous research has demonstrated that the adept execution of symbolic activities enables entrepreneurial enterprises to acquire resources and attain initial success (Zimmerman & Zeitz, 2002:416; Zott & Huy, 2007:77). The process of legitimation work can encompass several facets of organisational design, in which a business demonstrates its dedication to specific aims by establishing internal milestones (Fisher *et al.*, 2016:385). Additional significant actions encompass the establishment of novel inter-organizational connections and the utilisation of personal relationships (Higgins & Gulati, 2003:247, 2006:13). Nevertheless, a considerable aspect observed in many forms of legitimation efforts, such as those undertaken by ventures to secure their initial effective partnership, involves engaging in activities that effectively portray the organisational identity of the initiative (Martens *et al.*, 2007:1114). According to Navis and Glynn (2011:482), this involves articulating a series of assertions regarding the founder, new enterprise, and market potential of the identity and activities of the organisation. Scholars in this field have examined the strategic construction of narratives by ventures (Martens *et al.*, 2007:1114; Moss *et al.*, 2018:645; Navis & Glynn, 2011:483).

Additionally, researchers have explored how entrepreneurs engage in impression management, which includes strategic considerations such as attire and office aesthetics (Clarke, 2011:1368), as well as the naming of their ventures (Engel *et al.*, 2020:6). According to Uberbacher (2014:671), previous studies on venture

legitimation have often approached legitimacy as a singular and unified term. One line of inquiry, however, has recognised that the notion of legitimacy in principle might be perceived as being produced with various audiences (Ruef & Scott, 1998:879; Fisher, 2020:3). New entrepreneurial endeavours may encounter a diverse range of stakeholders, each with distinct interests and cultural norms (Fisher *et al.*, 2016:385). The concept of legitimacy can vary depending on the audience, as noted by Kumar and Das (2007:1428). However, it is vital to recognise significant interdependencies between audiences and changes in legitimacy throughout time, as shown by Weidner *et al.* (2019:496).

Legitimation work refers to intentional acts undertaken by individuals (Rueede & Kreutzer, 2015:44). However, the nature and trajectory of these efforts are influenced by the ambitions and goals of entrepreneurs (Stringfellow *et al.*, 2014:596) as well as the institutional context within which these actions are assessed (Davidsson *et al.*, 2006:118). Academic research on the legitimization of ventures has focused extensively on contexts and circumstances encompassing many institutional spheres or logics and those involving multiple entrepreneurial mindsets. This phenomenon occurs because surroundings with several facets give rise to intricate sets of criteria for the process of legitimation, which are deemed more captivating from an academic standpoint (Wagenschwanz & Grimes, 2021:7). Entrepreneurs may encounter difficulties due to the intricate nature of their job, which necessitates their involvement in the process of translating between different institutional contexts (Tracey *et al.*, 2018:1631). Additionally, they may need to engage in identity work to overcome feelings of being perceived as other or alien (Swail *et al.*, 2018:259).

The literature on sustainable entrepreneurship emphasises the emergence of new ventures that prioritise environmental and/or social concerns as a significant illustration of a complex business environment characterised by multiple logics (York *et al.*, 2016:698; Munoz & Cohen, 2018:305; Outsios & Kittler, 2018:287). The existing body of literature has predominantly centred around firms that face the challenge of reconciling partially conflicting logic. One example is when start-up companies aim to achieve their environmental objectives by surpassing incumbent firms by providing more environmentally friendly product or service solutions (Schaltegger & Wagner, 2011:225; Hockerts & Wüstenhagen, 2010:485). In the context of these particular

environments, the coexistence of two distinct logics gives rise to intrinsic conflicts, necessitating these endeavours to make strategic decisions and seek mutually agreeable solutions during their initial phases of development (Munoz *et al.*, 2018:306; DiVito & Bohnsack, 2017:562).

Research on this form of hybridity has found three distinct approaches organisations might employ to effectively handle and reconcile the contradictory dual logics they encounter to establish legitimacy. According to Battilana and Lee (2014:399), organisations can disentangle the two logics and segregate components corresponding to each logic. Furthermore, it is worth noting that specific details of both logics can undergo compromise and then be integrated into a novel amalgamated sense (Battilana & Dorado, 2010:1423; Savarese *et al.*, 2020:712). In their study, Pache and Santos (2013) argue that organisations may adopt a "selective coupling" strategy to enhance their legitimacy within a specific domain. This strategy involves deliberately selecting and integrating aspects from logic to gain acceptance and recognition.

According to Clarke (2011), gaining legitimacy by adhering to practices or structures deemed acceptable within the organizational field inevitably leads to more effective stakeholder engagement and more profound and successful resource acquisition, and thus increases the chances of long-term enterprise survival over short-term survival (Clarke, 2011). Obtaining and maintaining legitimacy is crucial, though continuously difficult, undertaking for any entrepreneur throughout the business lifecycle, as a matter of principle.

According to this approach, obtaining legitimacy by adhering to acceptable techniques or structures within the corporate sector leads to a better and broader stakeholder engagement practice. Furthermore, more successful resource acquisition increases the likelihood of long-term firm viability (Zimmerman & Zeitz, 2002:414). While agreeing, Suchman (1995:580) also claims that establishing legitimacy can help a business, large or small, have more longevity and meaning. Persistence is increased because legitimacy encourages stakeholders to act favourably towards the entity, resulting in tangible resource acquisition and survival for the entity. Legitimacy can also boost meaning by increasing the generality of stakeholders' understanding of an

entity when society views it as more trustworthy and predictable. As actors exist inside the socially created system of values, ideas, and meaning, meaning is fundamental in the legitimacy literature.

Legitimacy can be used as a resource or capacity of an entity (property), with interactions with dominating stakeholders (process) and favourable social judgments from these stakeholders (perception) finally emerging (Orlagh, 2018:70). Suddaby *et al.* (2017:258) recent review of legitimacy is critical in providing clarity to the conceptualisation of legitimacy. Resources, credibility, and legitimacy acceptance are all needed for effective business development, according to the numerous conceptualisations in the literature. It is critical not just for the success of these entrepreneurs but also for the success of society to have a better grasp of how sustainable entrepreneurs can gain legitimacy. Entrepreneurial individuals' creative and inventive efforts toward sustainability may be hampered if they do not get legitimacy (Orlagh, 2018:6).

Finally, it might be claimed that to obtain resources and support from society in general, entrepreneurial businesses must find a method to legitimize their actions as a matter of principle. No doubt established organizations have an easier time obtaining resources since the way they have operated in the past has helped legitimise their activities and access to resources. However, due to poor or non-existent performance records, the new venture will be unable to do so. By pointing out that organizational structures, procedures, and personnel may be utilized to develop and show an organization's acceptability to critical constituents, institutional theorists have helped to explain and contextualize the legitimacy-building tactics used by new initiatives (Bruton *et al.*, 2010:427).

2.9.4 Reasons for choosing the above theories

The existing body of literature has employed many theoretical frameworks to analyse the phenomena of sustainable entrepreneurship. These frameworks encompass institutional theory, Triple Bottom Line, and legitimacy theory. The academic literature on entrepreneurship has extensively recognised that institutional conditions, the TBL, and legitimation are vital factors influencing the adoption of sustainable

entrepreneurship by enterprises of various sizes. The achievement of central sustainable entrepreneurship necessitates the establishment of robust and efficient institutions, a need for sustainability that aligns with the TBL framework, and the requirement for legitimacy within the operational context.

Examining institutional functioning, balancing the TBL, and the necessity of legitimacy directs focus towards the rules, norms, and beliefs that impact the implementation of sustainable practices by enterprises and their stakeholders. Hence, the nonexistence of these circumstances could present a hurdle in the acceptance of sustainable entrepreneurship, underscoring the significance of these three interconnected theories in comprehensively grasping the implementation of sustainable entrepreneurship by SMMEs in the present investigation.

Hence, the interdependencies among institutional theory, Triple Bottom Line, and legitimacy theory allow entrepreneurs to amass economic, social, and environmental benefits by addressing market flaws through a commitment to sustainable entrepreneurship.

2.10 SUMMARY

Chapter 2 examined the theoretical essence of sustainable entrepreneurship by establishing a comprehensive definition. A thorough evaluation was conducted to analyse the distinctiveness of sustainable entrepreneurship, highlighting the comparative aspects of social, environmental, and sustainable entrepreneurship. The chapter also provided a description of sustainable entrepreneurs. Sustainable entrepreneurs possess distinct attributes that differentiate them from traditional entrepreneurs. Afterwards, the determinants of sustainable entrepreneurship were contextualised. Enterprises' adoption of sustainable practices is driven mainly by motivating considerations, leading to the above conclusion. The chapter delved into the significance of sustainable entrepreneurship in the context of sustainable development. It provided practical illustrations of chosen Sustainable Development Goals (SDGs) to demonstrate how sustainable businesses contribute to achieving these goals.

The evaluated literature has contributed to the advancement of knowledge on the differential abilities of entrepreneurs in recognising and capitalising on sustainable opportunities. Furthermore, it is imperative to note that this chapter has successfully constructed a comprehensive framework for sustainable entrepreneurship. This framework has been achieved by integrating scholarly works on sustainable opportunity identification, exploitation, and achieving sustainable outcomes in the triple-bottom-line.

Lastly, the present study highlighted the underlying theories of sustainable entrepreneurship, which include institutional theory, triple bottom line (TBL), and legitimacy theory. The abovementioned hypotheses were thoroughly examined, and their application was duly justified. The review highlights the importance of adopting a multi-theoretical viewpoint to gain valuable insights into sustainable entrepreneurship. These theories exhibit a high degree of complementarity, as their perspectives overlap significantly, offering a practical theoretical framework.

The current chapter primarily centres around the concept of sustainable entrepreneurship. However, the subsequent chapter will focus on adopting sustainable entrepreneurship by small, medium, and micro enterprises (SMMEs) and its relevance in agriculture.

CHAPTER 3

SMMES LANDSCAPE IN THE AGRICULTURAL SECTOR IN ZIMBABWE

3.1 INTRODUCTION

This chapter examines the state of Zimbabwe's SMMEs and agriculture industry. As a result, significant topics impacting the Zimbabwe SMMEs sector are reviewed, including an overview of the industry, its significance in Zimbabwe's economic development, and its challenges. The chapter gives the uniqueness of SMMEs and a comparison with the large enterprises. To completely comprehend the Zimbabwean agricultural industry, the chapter highlights its historical context, challenges, and importance to Zimbabwe's economic development. The chapter concludes by providing an analysis of sustainability in the agricultural industry, reviewing how SMMEs in the agricultural sector might be persuaded to engage in sustainable entrepreneurship.

3.2 DEFINITIONS AND PRECEPTS OF SMMES

The classification and understanding of Small and Medium Enterprises (SMEs) vary across jurisdictions worldwide, as they employ different categorisation methodologies. These variations give rise to disparities in magnitude, and several scholars concur that these disparities vary across countries and regions. Ruzzier (2007:163) has employed various indicators, including workforce size, turnover rates, aggregate net assets, and capital structure, to assess small and medium-sized enterprises (SMEs). Some scholars have used legal frameworks characterised by a certain level of formalisation as a criterion for classifying small and medium-sized enterprises (SMEs). According to Maseko and Manyani (2011:159), small and medium-sized enterprises (SMEs) are regarded as entities with public accountability, mainly when they receive government funding. As a result, there is an expectation for these SMEs to disclose general-purpose financial statements, which allow external users to assess their performance. The framework established by the World Bank offers a comprehensive perspective and principles for comprehending small and medium-sized enterprises (SMEs).

According to Samudzimu and Munkumba (2022:3), the system exhibits thorough categorization. It is characterised by widely acknowledged and approved definitions across various contexts.

Table 3.1: Global definition of SMEs by the World Bank Group

Type of Enterprise	Number of Employees	Extent of Total Assets	Annual Turnover
Micro Enterprises	1-10 people	Less than USD1,00,000	Less than USD1,00,000
Small Enterprises	11-50 people	Between US\$1,00,000 to US\$3 million	Between US\$1,00,000 to US\$3 Million
Medium Enterprises	51-300 people	Between US\$3 million to US\$15 million	Between US\$3 million to US\$15 million

Source: Ayyagari *et al.* (2007:418)

The classification of an organisation as a SME by the World Bank is based on many key indicators, including the number of employees, revenue turnover, and total asset value. Based on the information above, it is evident that Zimbabwe has embraced the World Bank's methodology, which incorporates the count of personnel inside its definitional framework. It is essential to acknowledge that the country employs a method of categorising sectors into distinct groupings to establish and delineate the classification of SMEs (Samudzimu & Munkumba, 2022:4).

The definitions of small and medium-sized enterprises (SMEs) at the national level exhibit variation (Hillary, 2006:243; Klewitz & Hansen, 2014:61). However, there are consistent quantitative and qualitative attributes that frequently arise in the discourse surrounding SMEs (Loecher, 2000:262).

Quantitative criteria. Many existing definitions of SMEs incorporate quantitative requirements, as noted by Loecher (2000:264) and Oricchio *et al.* (2017:10). According to Loecher (2000:264), there is a substantial body of research that has

identified more than 200 definitions of small and medium-sized enterprises (SMEs) across the globe. This indicates difficulties in accurately identifying SMEs (Klewitz & Hansen 2014:61; Oricchio *et al.* 2017:10; Hillary 2006:242), mainly when relying on quantitative criteria. In light of the divergent perspectives presented in the existing body of literature, a growing consensus acknowledges SMEs as entities that employ less than 500 full-time equivalent employees, as posited by Ayyagari, Beck, and Demircuc-Kunt (2007:420). Within the framework of this scale, small and medium-sized firms (SMEs) are frequently categorised into additional subcategories, including micro, small, and medium-sized enterprises. The precise distinction between these three parts is subject to variation based on national definitions. In addition to augmenting or enhancing personnel numbers, numerous countries establish turnover thresholds to define SMEs. Hence, enterprises with a workforce exceeding 500 may still fall within an SME categorisation if their earnings remain below the designated point. The primary objective of this study is to conduct a comparative analysis of worldwide research. Therefore, we have excluded the quantitative criterion due to its lack of comparability. Instead, our focus is solely on examining staff numbers.

Qualitative criteria: Although several distinctions exist among small and medium-sized enterprises (SMEs), scholarly research has revealed certain commonalities or traits that some SMEs share. Small and medium-sized enterprises (SMEs) frequently encounter challenges related to limited resources, including financial, people, time, and knowledge constraints (del Brio & Junquera, 2003; Spence, 1999; European Union Commission, 2003). In addition, SMEs typically exhibit a higher degree of centralization. They are frequently privately owned, resulting in their leadership predominantly comprising owner-managers who assume a prominent role within the SME (Loecher 2000:264). The business strategy and operations are influenced by the ideas and values of individuals with a personal stake in the organisation.

Furthermore, it is common for owner-managers to be closely associated with their businesses, so their names are often used interchangeably. Consequently, they prefer actively engaging with the local community to establish a favourable reputation for themselves and their businesses. In SMEs, the extent of division of labour is relatively lower due to their smaller scale. This means that employees in SMEs often engage in a broader range of duties rather than being highly specialised in a specific area.

According to Bos-Brouwers (2010:436), the compact nature of their dimensions frequently results in a greater prevalence of casual forms of communication.

In summary, SMEs can be delineated by both quantitative and qualitative criteria. From a quantitative perspective, SMEs are characterised by their employee count. Qualitatively, SMEs are distinguished as organisations managed by their owners, exhibiting informal and adaptable communication practises, using flexible organisational structures, and confronting resource limitations (Beckmann, Garkisch & Zeyen, 2023:518).

The definition of SMEs has been established by reputable institutions such as the European Commission (2014), the World Bank Group (2019), and the Organisation for Economic Cooperation and Development (2019). These institutions have utilised vital factors such as the number of employees, yearly sales, and annual gross asset value to delineate SMEs. Similarly, the Small to Medium Enterprises Development Cooperation (SEDCO, 2010) in Zimbabwe employed various criteria, including the number of employees, annual turnover, and annual asset value, to define SMEs. This approach also involved a sectoral perspective, aligning with the classification utilised by the European Commission. However, distinctions arose in the quantification of employees and turnover (Chokera, 2022:562).

The traditional definition in Zimbabwe comes from the Small and Medium Enterprises Act (Chapter 24:12). In Zimbabwe, an SMME is defined as a legal business entity having a workforce of between one and seventy-five employees, annual turnover of up to one million dollars, and a maximum value of assets excluding fixed assets of five hundred thousand dollars. Table 3.2 below shows the defining specification for SMMEs in Zimbabwe according to the value of assets, employees and turnover.

Table 3.2: Zimbabwe SMMEs specifications

MSME size differs within sectors or sub-sectors, to generalise the findings, the following simplified classifications were applied to all sectors:

	 INDIVIDUAL ENTREPRENEUR <i>(a subset of Micro)</i>	 MICRO	 SMALL	 MEDIUM
Employees	0	1—5	6—30	31—75
Value of assets (USD)	10 000	10 000	250 000	500 000
Turnover (USD)	30 000	Up to 30 000	30 001—500 000	500 001—1 000 000

NB: Mining and quarrying (USD 3 million) and construction (USD 2 million) have higher turnover thresholds to determine enterprise size. This also applies to the value of assets where the energy sector, in addition to the mining and construction sector, have higher thresholds of USD50,000 (micro), USD 1 million (small) and USD 2 million (medium).

Source: Finscope (2022:4)

Like other concepts in management and entrepreneurship, the definition of SMEs has been characterised by a lack of precision.

3.3 OVERVIEW OF SMMES

Small and medium-sized enterprises have a crucial role in the economics of several African countries as well as globally (Ajide & Soyemi, 2022:37). The contributions of SMEs have demonstrated significant progress in both developed and developing nations during the past two decades, as indicated by scholarly sources (Amoah *et al.*, 2021:13; Gavurova *et al.*, 2020:691). The economic growth and development in many African countries are significantly influenced by the operations of small and medium-sized enterprises (Eniola & Entebang, 2015:336; Agbim, 2020:72; Amoah *et al.*, 2022:64).

In the African context, it has been observed that small and medium-sized enterprises constitute a significant proportion, exceeding 90%, of the overall business landscape. Furthermore, these enterprises make a substantial contribution, around 50%, to the Gross National Product (GDP) (Fjose *et al.*, 2010:3; Kamunge *et al.*, 2014:5). According to Mwarari and Ngugi (2013:102), SMEs play a significant role in the

Kenyan economy. These enterprises contribute 40% to the country's gross domestic product (GDP), generate over 50% of new employment opportunities, and employ around 80% of the workforce. In line with the World Bank's (2006) findings, it is evident that SMEs play a significant role in the Nigerian and Ghanaian economies. Specifically, in Nigeria, SMEs contribute to 70% of industrial employment and 95% of the manufacturing sector. Similarly, in Ghana, SMEs constitute 70% of all firms and employ 70% of the workforce.

According to Parker (2006:3), the industry in Zambia comprises 97% of enterprises and employs 18% of the workforce. According to Hongbo *et al.* (2018:6), most of the domestic firms in Cote d'Ivoire were SMEs, constituting approximately 98 per cent. These SMEs played a crucial role in the country's economy, contributing 18 per cent of the Gross Domestic Product (GDP) and accounting for 20 per cent of the total employment. According to Sibanda *et al.* (2018:4), in 2016, Zimbabwe's SMEs significantly contributed US\$8.58 billion to the country's Gross Domestic Product (GDP). Additionally, these SMEs employed approximately 5.9 million individuals, representing a substantial portion of the Zimbabwean population. Furthermore, the study found that SMEs constituted over 70% of the taxpayer database maintained by the Zimbabwe Revenue Authority.

Small and Medium-sized Enterprises (SMEs) are widely acknowledged as essential drivers of innovation, economic expansion, and job generation (Amoah, 2022:65). SMEs in Zimbabwe have been identified as key contributors to economic growth, employment generation, and the development of both rural and urban areas while also playing a significant role in poverty alleviation (Bomani *et al.*, 2018:16). According to a report published by the Capacity Development Centre of Ghana in 2012, a substantial majority of registered companies, precisely 92 per cent, were categorised as micro, small, and medium enterprises. This composition of businesses was shown to have a beneficial influence on the country's socio-economic progress. According to Maholwana (2015:6), it can be inferred that SMEs in South Africa play a significant role in fostering inclusive economic growth and development. The examination of the National Development Plan 2030 (NDP 2030) in this paper demonstrates that the South African government has acknowledged and considered the contributions of SMEs in pursuing its 2030 agenda objectives. Hence, it can be deduced that SMEs

have emerged as a primary concern for policymakers throughout many emerging nations across the African continent.

According to Nuwagaba (2015:7), SMEs in Tanzania have played a significant role in the country's economic transformation, namely in transitioning from a command economy to a market economy. This analysis verified that Tanzania's SMEs comprise 60 per cent of the nation's Gross Domestic Product (GDP). Surprisingly, there is a lack of empirical research on the role and impact of SMEs in African economies, considering their potential for job creation, innovation, business opportunities, and corporate social responsibility provision (Amoah *et al.*, 2022:65).

African nations have created policies that facilitate the promotion and development of small and medium-sized enterprises. The significance of small and medium-sized enterprises in the development process remains a prominent topic of discussion in policy debates within developing countries (Cook, 2001:17). This is primarily because SMEs constitute much of the business population in many nations, thereby exerting a critical influence on the overall economy (Mitchell & Reid, 2000:387). According to Hansen *et al.* (2015:6), the implementation of local content policies and programmes in Tanzania is evident in the Mining Act 2010. This legislation mandates that specific stages of the exploration process must be exclusively carried out by companies wholly owned by Tanzanian citizens. Additionally, the act includes provisions to foster backwards and forward linkages within the mining industry. According to Chaminuka (2015:679), prior research in Southern Africa has indicated that various policies were implemented to support small and medium-sized enterprises (SMEs) following the attainment of independence by these nations.

The promotion and advancement of small and medium-sized enterprises play a crucial role in the overall economic expansion strategy of numerous nations, including Nigeria (Udechukwu, 2003:6). The implementation of government assistance policies serves as a mediator in enhancing the association between entrepreneurial orientation and current marketing with regards to the performance of small and medium-sized enterprises in Nigeria (Ibrahim & Mustapha, 2019:44). The SME policy in Nigeria places significant focus on the performance of entrepreneurs, product marketing, and safeguarding SMEs against external competition that may diminish the demand for

local products. This policy aims to promote the development of indigenous small and medium enterprises by enhancing their market capabilities, leading to improved productivity and performance. The Nigerian government demonstrated its endorsement of small and medium-sized enterprises by formulating policies that created a conducive environment for the operation and growth of SMEs (Musabayana *et al.*, 2022:4).

The Ghanaian government has created favourable conditions for the growth and advancement of small and medium-sized enterprises. The importance of small and medium enterprises to the economy of Ghana is evident, as demonstrated by the significant impact of government support on the intention of SMEs to engage in certain behaviours, as well as the considerable influence on their performance (Awiagah *et al.*, 2015:6). The policies and initiatives implemented by the Ghanaian government have served as a remedial measure by providing subsidies and tax incentives. These measures aim to facilitate small and medium-sized enterprises access to information technology and encourage the adoption and utilisation of e-commerce.

According to Abor and Biekpe (2006:71), the development of small and medium-sized enterprises in Ghana is centred around the concept of promoting SMEs, with the establishment of government agencies such as the Office of Business Promotion and the Ghana Enterprise Development Commission (GEDC) playing a significant role. The primary goal of the GEDC was to facilitate the participation of Ghanaian entrepreneurs in sectors predominantly dominated by foreign entities. The commission offered comprehensive programmes aimed at enhancing the overall capacity of small-scale industries, encompassing both technical and financial aspects (Kayanula & Quartey, 2000:7). The Ghanaian government has created a conducive climate that has facilitated the success of small and medium-sized enterprises, resulting in their significant contribution to the country's economy.

Small-scale firms play a significant part in the Kenyan economy. They are giving considerable attention to the country's development agenda. The assertions made by Oso and Muturi (2013:86) lend support to the notion that small and medium enterprises play a significant role in fostering economic development and wealth generation. This is achieved through various means, such as creating employment

opportunities, generating income, enhancing productivity, facilitating technological transfer facilitation, and establishing market linkages, among other advantages.

According to Chu *et al.* (2007:298), empirical data indicates that small and medium-sized enterprises in Kenya play a significant role in the economy by generating employment opportunities and mitigating the issue of unemployment. Kenya is considered the most industrialised country in the East African area, with its manufacturing sector supported by SMEs, contributing approximately 14% to its Gross Domestic Product (GDP), according to the World Bank in 2016. In the Kenyan context, SMEs play a significant role in several sectors of the economy, serving as a primary driver of employment and income generation.

Botswana's government has formulated a range of policies to facilitate and bolster the operational efficiency of small and medium-sized enterprises. The primary aim of these policies is to incentivize investment in sustainable economic activities, hence providing additional assistance for the growth and establishment of enterprises (Khanie, 2018:16). The government of Botswana demonstrated a sustained commitment to supporting small and medium enterprises by implementing policies aimed at fostering their growth. These policies targeted young individuals' engagement and women's empowerment through dedicated SME programmes. The government of Botswana has actively promoted research and development initiatives to enhance the effectiveness of its policies and their implementation for the nation's benefit. The Botswana Institute for Development Policy Analysis (BIDPA) is an autonomous organisation established in 1995 as a non-governmental institution dedicated to conducting policy research and providing consultancy services. Its primary objective is to contribute to evidence-based policymaking and enhance institutional capabilities through rigorous research. The Botswana Institute for Development Policy Analysis (BIDPA) receives partial funding from the Government of Botswana, which enables it to assist the government in adopting a more impartial approach to the formulation, execution, and assessment of policies (Khanie, 2018:17).

The government of Malawi has prioritised implementing policies that facilitate the growth and advancement of small and medium-sized enterprises inside the nation. Ndala and Moto (2019:84) expressed similar views, affirming that the Malawi

government acknowledges SMEs' significant role in fostering competition, generating employment opportunities, and facilitating wealth distribution. The Malawian government has made efforts to cultivate an entrepreneurial mindset among the population by implementing reforms and reorganising public institutions responsible for national entrepreneurship development, such as the Technical Education and Vocational and Entrepreneurial Training Authority (TEVETA) (Ndala & Pelser, 2019:6). To foster entrepreneurship development within the country, Malawi has implemented a strategy to support Higher Education Institutions (HEIs), both public and private, that offer registered entrepreneurship education and training programmes. The National Council for Higher Education (NCHE) plays a crucial role in overseeing and approving these programmes. The primary objective of this initiative is to enhance entrepreneurship education and training (EET) in Malawi (Delaney *et al.*, 2019:173). The program aimed to improve the performance of small and medium-sized enterprises by providing entrepreneurship education. The government of Malawi has provided funding for exchange programmes with China, intending to foster the growth and development of the small and medium-sized enterprise sector. The government's policies have created a conducive atmosphere for the growth and advancement of small and medium-sized enterprises in Malawi.

Scholars widely concur that small and medium-sized enterprises make substantial contributions to the economic development of nations. These enterprises are recognised for their role in identifying and capitalising on new markets, hence benefiting from them (Muriithi, 2017:5). Similarly, small and medium enterprises (SMEs) are widely acknowledged as the cornerstone of establishing new initiatives and as a significant contributor to income and employment for numerous Africans. Consequently, SMEs play a pivotal role in generating wealth by fostering demand for goods, encouraging investment, and facilitating trade (GEM, 2005). The absence of Small and Medium Enterprises in African countries can lead to financial and developmental limitations, exacerbating the living conditions of low-income individuals typically supported by this sector (Santrelli & Vivarelli, 2007:456). Zimbabwe has the opportunity to gain insights from the existing body of literature that highlights the significant role of small and medium enterprises in driving economic development inside the nation.

A government that fails to provide adequate assistance for small and medium-sized enterprises adversely affects the sector and hampers its overall economic development by experiencing negative growth. The success or failure of small and medium-sized enterprises is heavily influenced by the regulatory environment established by the government, encompassing factors such as wage frameworks, taxation policies, licencing procedures, business prospects, technological assistance, and infrastructure development. Kamunge *et al.* (2014:5) concurred with these comments, summarising the government's role as either facilitating or hindering the small company economy, depending on the regulatory frameworks it establishes. It is worth mentioning that the expansion of SMEs is significantly impeded by an unfriendly tax structure, unfair competition, complex rules and regulations, and a punitive business climate (Krasniqi, 2007:73).

The legislative requirements for small and medium-sized enterprises exhibit variability across different countries, hence exerting an influence on their operational efficacy. According to Agbali and Ukaegbu (2005:15), research has indicated that small and medium-sized enterprises in Africa encounter significant delays and high costs while navigating through several procedures and obtaining various permissions required by regulatory frameworks. The implementation of severe measures by governments has a discouraging effect on development. It has a detrimental impact on small and medium-sized enterprise implementers.

Zimbabwe has the potential to derive valuable insights from the experiences and progress observed in other African nations. Replicating positive lessons in Zimbabwe is beneficial for empowering vulnerable sections of society, such as the youth and women. This can be achieved through the implementation of supportive legislation, the creation of favourable conditions, and the integration of entrepreneurship into the educational curriculum. The promising outcomes observed in the performance of SMEs indicate the government's capacity to enhance the performance of such enterprises. This assertion is corroborated by the findings of Kamunge *et al.* (2014:6) and Beck and Demirguc-Kunt (2006:2934), who have noted that in addition to their beneficial contributions to development, small and medium-sized enterprises encounter numerous barriers that impede their sustained viability.

The mortality rate of SMEs in African countries is notably high, as evidenced by the failure of five out of seven newly established businesses within their initial year of operation. Notwithstanding these disconcerting data, SMEs dominate the African economy, rendering their contributions indubitably significant (Sawers *et al.*, 2008:172). This situation presents an additional opportunity for the Zimbabwean government to recognise that the achievement of SMEs necessitates substantial assistance, perseverance, research and development, as well as the implementation of innovative procedures, such as the enhancement of value in the goods and services generated (Musabayana *et al.*, 2022:5).

3.4 UNIQUENESS OF SMMES

Small and medium-sized enterprises encounter a liability associated with their modest scale. This implies that smaller firms generally possess fewer resources, making them more susceptible to internal and external factors. Examples of such factors include the departure of a key employee, limited financing opportunities, decreased demand resulting from the entry of a competitor into the market, or the occurrence of a global economic crisis. According to Eggers (2020:199), the potential drawbacks of being small frequently align with the possible disadvantages of being new. Eggers (2020:199) asserts that newly founded organisations are more susceptible to failure than their older counterparts due to several factors. These include the absence of proven business models, reliance on unfamiliar individuals for collaboration, and limited levels of legitimacy.

Notwithstanding these drawbacks, small and medium-sized enterprises possess distinctive attributes. Due to their diminutive stature, these entities exhibit notable adaptability in response to emergent possibilities or challenges within their ecological context. Moreover, it has been shown that in smaller organisations, decision-makers maintain closer proximity to their consumers and other stakeholders (Eggers, Hansen, & Davis, 2012:205). Consequently, this can furnish them with significant market intelligence.

According to Desouza and Awazu (2006:33), small and medium-sized enterprises possess a distinct characteristic whereby their primary assets consist predominantly

of intangible resources, particularly expertise. The acquisition and utilisation of organisational knowledge have proven to be a paramount factor in gaining a competitive edge, particularly for SMEs. According to Teece (2003:150), this phenomenon is primarily attributed to the swift growth of goods and factor markets. The competitive nature of small and medium-sized enterprises is further accentuated by their limited physical assets, which compels them to optimise the utilisation of knowledge as their most abundant resource (Desouza & Awazu, 2006:33). According to Magaisa and Matipira (2017:16), in the context of the global arena, where there is an anticipation of improved access to external resources, organisational expertise is recognised as a strategic asset that is difficult for competitors to replicate. As a result, it offers a durable competitive advantage for the firm. To succeed in their particular marketplaces, SMEs must prioritise establishing internal knowledge management systems.

According to Beiferse (2000:162), organisational knowledge management has inherent challenges. SMEs consistently face the risk of knowledge loss due to employee turnover. The author additionally asserts that the extent of the loss extends beyond an individual's knowledge. A deficiency in investment is directed towards the individual's professional development and competence. This exercise involves transferring an expert from one department to another inside an organisation, intending to restructure the workforce. The absence of succession planning in family-owned small and medium-sized enterprises can have severe consequences, particularly in the event of the departure or death of the owner-manager. This can lead to possibly irreversible harm.

According to Wickert and Herschel (2001:330), given the multitude of substantial challenges, SMEs must handle their internal knowledge more internally to prevent permanent loss. Given the prevailing circumstances surrounding SMEs, they must maintain suitable control over their knowledge assets. Implementing knowledge management, which prioritises the acquisition, enhancement, and preservation of organisational knowledge, effectively aligns with the needs of SMEs and serves as a vital instrument for their long-term viability.

While SMEs may not be able to replicate the investment capabilities and economies of scale of Large Enterprises (LEs), they can compete based on service quality and value criteria. According to Antony, Vinodh, and Gijo (2016:7), SMEs possess a greater capacity for adaptability and flexibility in meeting client demands, a capability that is often lacking in LEs. This section compares SMEs and LEs based on their respective characteristics, as presented in Table 3.3.

The organisational structure of SMEs is generally characterised by a straightforward design featuring a limited number of hierarchical levels. Consequently, this structure facilitates heightened transparency and interaction between the uppermost management echelons and the lowermost operational level (Pinho, 2007:718; Laufs, Bembom & Schwens, 2016:248). This phenomenon facilitates expedited communication, expeditious decision-making, and prompt execution of management initiatives (Kotey, 2005:8; Hudson-Smith & Smith, 2007:396). Nevertheless, as mentioned earlier, the benefits are frequently mitigated by an absence of proficiency and restricted specialisation. In contrast, LEs exhibit intricate organisational systems wherein authorities and responsibilities are dispersed across hierarchical tiers. According to Ates and Bititci (2011:5604) and O'Reilly, Kumar, and Adam (2015:1367), SMEs typically employ uncomplicated operational planning and control systems, and their operations and activities are not regulated by formal rules. Simplicity and informality in business operations offer a degree of adaptability (Hudson-Smith & Smith, 2007:396) and prompt client responsiveness (Towers & Burnes, 2008:352). However, it may also result in increased unpredictability and a deficiency in standardised procedures. On the other hand, LEs generally implement standardised and formalised systems and strategies to facilitate the process of planning and allocating resources.

Scholars have observed that the organisational culture of small and medium-sized enterprises (SMEs) frequently mirrors the characteristics and traits of their senior executives (Kotey, 2005:9; Laufs *et al.*, 2016:251). According to Pinho (2007:718), many SMEs focus on achieving results. They are receptive to new change efforts and innovations. The human resources within SMEs exhibit distinct characteristics, including a decentralised decision-making structure with a limited number of key decision-makers, a strong presence of dominant owners, a fostering of individual

creativity (Saunders *et al.*, 2016:146), a moderate level of resistance to change, and a workforce that possesses a diverse range of skills (Darcy *et al.* 2014:402). Despite managers' extensive responsibilities, SMEs frequently encounter difficulties securing sufficient financial backing (Hudson-Smith & Smith 2007:397; Ates *et al.*, 2013:5603) and offering limited opportunities for employee learning and training (Tam & Grey 2016:675). These challenges can occasionally result in the failure of new improvement initiatives.

In contrast to LEs, SMEs exhibit greater adaptability and flexibility. According to Antony (2008:421), the innovation potential is generally lower in SMEs compared to LEs. LEs possess the necessary resources to provide in-house training opportunities and have the financial means to send their workers to participate in external training programmes.

The nature of contacts between SMEs and their suppliers and consumers is often characterised by a limited number of external interactions, strong interpersonal relationships, easy accessibility, focus on local markets, and prompt responsiveness to customer feedback (O'Regan & Ghobadian 2004:405; Darcy *et al.*, 2014:402). LEs maintain global supply chain partnerships and serve a substantial client base. The company retains enduring partnerships with its stakeholders and frequently provides comprehensive post-purchase support. LEs benefit from economies of scale and require significant capital investment, a disadvantage for SMEs (Gnanaraj *et al.*, 2012:602). According to Ates *et al.* (2013:31), small and medium-sized enterprises exhibit a higher risk aversion than large enterprises and tend to have a shorter-term focus.

Table 3.3: Comparison of SMMEs and LEs.

Characteristics	SMMEs	Les
Organizational Structure	Flat with few levels, rapid communication, and rapid decision-making (Laufs, Bembom, and Schwensen 2016).	The organisational framework exhibits a multifaceted hierarchical arrangement characterised by numerous tiers, decentralised authority, and diverse duties and obligations (Antony, Vinodh, & Gijo, 2016).
Organisational Culture and Human Resources	Job insecurity, low trust, poor communication system, lack of expertise, inadequate employees' learning and training, fewer employees-better relationships, high authority and responsibility, and high encouragement of individual creativity. (Ates <i>et al.</i> 2013; Darcy <i>et al.</i> 2014;	Superior communication systems, training facilities, and a high level of innovation (Antony <i>et al.</i> , 2016).
Standard and formalized systems	A lower degree of standardisation and formalisation, informal and straightforward production planning and control, and adaptable procedures (Towers and Burnes 2008).	Standardised and formalised systems are typically inflexible procedures (O'Reilly <i>et al.</i> , 2015).
External links	Few external contacts are readily available and can provide collaborators with a prompt response. (O'Regan and Ghobadian, 2004)	Long-term relationships, global partners, a large customer base, and extensive after-sales services (Darcy <i>et al.</i> , 2014)
Business orientation	Short-term orientation and low risk-taking ability (Antony <i>et al.</i> , 2016).	Long-term exposure, high risk-taking ability (Ates <i>et al.</i> 2013).
Resources	Lack of financial resources and skilled workforce (Gnanaraj <i>et al.</i> , 2012).	Economies of scale and high capital investment (Antony <i>et al.</i> , 2016).

Source: Yadav et al. (2018:534)

In brief, it is commonly observed that big corporations generally possess extensive business models, have a long-term perspective, benefit from economies of scale, demonstrate a propensity for risk-taking, and maintain a high degree of organisational structure. In contrast to LEs, SMEs exhibit a short-term focus, employ straightforward

organisational structures, demonstrate a risk-averse disposition, employ uncomplicated decision-making procedures, face resource limitations, and employ adaptable production systems. Most frameworks in the scholarly literature on sustainable entrepreneurship have developed primarily from the characteristics observed in large firms (Yadav *et al.*, 2018:534). Hence, it is plausible to argue that the sustainable entrepreneurship frameworks designed for large enterprises may not be applicable or appropriate for SMMEs. A comprehensive framework is imperative to effectively implement sustainable entrepreneurship practices inside SMEs.

3.5 IMPORTANCE OF SMMEs TO ECONOMIC DEVELOPMENT

Ajide and Soyemi (2022:38) argue that small and medium-sized enterprises play a crucial role in the economies of many African countries and globally. The collective impact of SMEs over the last twenty years has been noteworthy in both developed and developing nations (Amoah *et al.*, 2021:14; Gavurova *et al.*, 2020:692). The economic growth and development in most African countries are significantly influenced by the operations of small and medium-sized enterprises (Eniola & Entebang, 2015:337; Agbim, 2020:73).

Small and medium enterprises are critical contributors to the process of economic growth. The authors Bomani *et al.* (2018:115), Damoah (2020:391), Dvouletý and Orel (2019:11), Gherghina *et al.* (2020:4), López-Fernández *et al.* (2021:53) and Madison *et al.* (2022:3352) have extensively examined the substantial contributions made by these entities to the gross domestic product, employment opportunities, income generation, and poverty reduction in both developing and developed nations. SMEs have been commonly referred to as catalysts for economic growth in numerous countries (Akin-Adetoro & Kabanda, 2021:6).

The assessment of a country's economic performance can be gauged using a range of metrics, such as national income, per capita income, and employment prospects (Zamfir *et al.*, 2017:5). The development of these metrics is primarily facilitated by engagement with the business sector. The significance of SMEs in the context of emerging nations, such as Zimbabwe, has been well-established. These enterprises play a substantial role in fostering economic and social progress within a country.

According to Ribeiro-Soriano (2017:2), small and medium-sized enterprises can transform and develop communities in developing nations. Small and medium-sized enterprises play a crucial role in facilitating the development of indigenous entrepreneurs through training programmes. This, in turn, contributes to the overall process of wealth creation at many levels. According to Peprah *et al.* (2016:28), small and medium-sized enterprises contribute to the enhancement of local knowledge by making use of locally accessible raw materials that would otherwise be discarded. SMEs serve as the breeding ground for entrepreneurial activities, fostering individual creativity and innovation as the primary catalysts. According to Suárez-Ortega, García-Cabrera, and Knight (2016:24), the significance of SMEs in a nation cannot be overstated. These enterprises drive national industries, generate employment opportunities, and contribute substantially to foreign exchange earnings and tax revenues.

SMEs play a crucial role in driving economic growth as they contribute to job creation, foster national development, and promote social stability (Hyder & Lussier, 2016:84). SMEs utilise labour-intensive technology, directly influencing the production of employment opportunities. According to Ndikubwimana (2016:5), it has been argued that SMEs play a crucial role in bolstering entrepreneurship and fostering innovation within countries. These enterprises contribute significantly to the economy by generating employment opportunities and substantially impacting economic development. According to Tonis (2015:43), SMEs foster an entrepreneurial mindset, drive innovation, and significantly enhance competitiveness and job opportunities. Cant and Wiid (2016:65) argue that governments should prioritise promoting entrepreneurship activities to establish a conducive business climate that enables SME owners to fully use their capabilities and opportunities within the market. According to Musa and Chinniah (2016:257), it has been suggested that SMEs exhibit more flexibility and responsiveness to the frequent changes observed in the current global economy than larger enterprises.

According to Muzamwese (2016:512), certain SMEs engage in primary and secondary economic activities that rely significantly on resources acquired from the local region. Therefore, they can accomplish high-value-added activities, which play a crucial part in the growth and development of any economy. According to Afrifa and Tauringana

(2015:721), the significance of the SME sector in the economy may be effectively harnessed when accompanied by robust government policies that facilitate enhanced resource accessibility for these enterprises. SME owners must formalise their business activities to attract potential investors and secure financial support from financial institutions. According to Eniola and Entebang (2015:337), SMEs are acknowledged as the driving forces that can facilitate the expansion of the middle-income segment of the economy, thereby ensuring the sustainability of the country's economic progress.

The SME sector is widely recognised as a fundamental component of an economy due to its capacity to enhance resilience and stability. This is primarily attributed to SMEs undertaking a substantial share of economic activity. The existing body of literature predominantly illustrates the sector's role in empowering marginalised populations in developing nations, including impoverished individuals, women, and disabled communities. Most governments generally concur on the capacity of SMEs to generate job opportunities, particularly for socioeconomically disadvantaged groups such as impoverished, less educated individuals, women, and disabled communities. This, in turn, contributes to achieving a harmonious combination of development and equitable growth (Ifekwem & Adedamola 2016:105). The primary reason for this phenomenon can be attributed to the labour-intensive characteristics of the industry, along with its minimal barriers to entry.

The issue of generating employment opportunities has consistently posed a significant difficulty for the governments of African nations over several decades. Nevertheless, the problem mentioned above is progressively diminishing due to the endeavours undertaken by SMEs. Most African countries generate employment possibilities from SMEs. SMEs are well recognised for their significant contribution to reducing unemployment and poverty. Apenteng and Doe (2014:78) and Amoah *et al.* (2022:64) assert that small and medium-sized enterprises are responsible for approximately 70 per cent of the overall employment generation. Small and medium-sized enterprises' creation of employment opportunities positively impacts the general well-being, living standards, income levels, and social standing of individuals worldwide. According to Abisuga-Oyekunle *et al.* (2020:409), small and medium-sized enterprises have emerged as a dominant means of generating employment, enhancing the standard of

living, and generating diverse employment prospects for individuals with little financial resources.

According to Ifekwem and Adedamola (2016:104), it has been expounded that small and medium-sized enterprises play a role in upholding the equal distribution of a country's revenue by mitigating the disparity between the affluent and the impoverished. In addition, SMEs are crucial in facilitating the mobilisation of local resources, promoting conservation efforts, generating foreign exchange, and fostering equitable distribution of industries. Furthermore, SMEs contribute to the mitigation of rural-urban migration. The inclusion of women in the entrepreneurial sphere within SMEs is a crucial factor that reinforces the role of SMEs in fostering a balanced development framework characterised by growth and equity.

According to the International Finance Corporation (IFC, 2011), the proportion of small and medium enterprises led by female entrepreneurs in developing nations ranges from 31% to 38%. SMEs play a crucial role in fostering economic stability within a country through their substantial income generation. According to Laurentiu (2016:174), SMEs have a wide-ranging capacity that contributes to developing middle-class societies in nations, fostering a culture of entrepreneurial drive, and facilitating economic and social well-being. Hence, it is imperative to acknowledge that the capacity of SMEs possesses significant potential in promoting the development of a robust middle-class society.

SMEs offer notable benefits due to their utilisation of local resources, including raw materials, as well as their provision of self-employment opportunities, mobilisation of local funds, and training of semi-skilled workers through apprenticeships (Asare *et al.*, 2015:28). One notable characteristic of small and medium-sized enterprises is their ability to serve as a very effective means of generating employment (Jeppesen, 2005:465; Singh *et al.*, 2009:56; Zeng *et al.*, 2010:183; Nikabadi & Jafarian, 2012:88; Asare *et al.*, 2015:29; Auzzir *et al.*, 2018:1132). According to the International Finance Corporation (IFC, 2011), the trade and service sector accounts for 72% of SMEs, the manufacturing process sector represents 20%, and the agriculture and other industries comprise 8%. Moreover, SMEs are predominantly present in sectors that rely heavily on manual labour, have limited expenses related to fixed production costs, and

possess few obstacles for new market entrants. Additionally, these enterprises are commonly associated with the production of goods that are subject to price-taking dynamics. According to numerous experts, SMEs exhibit comparatively diminished job security, quality, and stability levels compared to their larger counterparts. Moreover, the literature frequently highlights a decline in productivity among SMEs, which can be attributed to their limited ability to obtain economies of scale in industrial processes, among other variables (Prasanna *et al.*, 2021:4).

Considerable attention has been devoted by numerous scholars and researchers to the significance of innovation and the potential it has for SMEs in contemporary company operations (Kocot & Kocot, 2020:92; Civelek *et al.*, 2021:416; Ključnikov *et al.*, 2021:172). According to Wach (2020:162), knowledge and innovations have a crucial role in driving the growth of small businesses through the implementation of effective business models. Eniola and Entebang (2015:337) and Kement *et al.* (2021:224) define innovation as using novel concepts to enhance existing products and services or introducing novel products or services into the market. In a recent study conducted by Abisuga-Oyekunle *et al.* (2020:406), the researchers examined the sustainability of SMEs. The study found that contemporary SMEs prioritise the retention of their customer base through innovative practices and creating business opportunities. This approach enables SMEs to consistently meet customer needs and contribute to economic development. Given this trajectory, innovation has facilitated the beneficial transformation of SMEs, positioning them to possess significant potential for fostering sustainable and economic development in several countries. According to Krishnaswamy *et al.* (2014:20), the authors have found that the technical innovation undertaken by SMEs has significantly contributed to economic development. This contribution is mainly attributed to the SMEs' ability to innovate, create, and introduce new products and services. These technological advancements have made avenues for entrepreneurial prospects on both domestic and global scales. The rapid progress of the digital landscape and the opportunities it presents for electronic commerce contribute to accelerating these processes (Roshchuk *et al.*, 2022:212). Amoah *et al.* (2021:12) posit that SMEs generate consumer value by fostering relationships and promoting collaborations through innovative practices and business chances.

Small and medium-sized enterprises have been observed engaging in social services, such as donating computers, offering scholarships, and assisting communities and towns in their operational areas to promote economic development. Amoah *et al.* (2022:66) underscored the significance of proficient social responsibility management, highlighting its positive impact on organisational performance and its potential to enhance the firm's competitive advantage. Given the benefits mentioned above, proprietors endeavour to strengthen their accountability towards stakeholders, with a particular emphasis on employees, across various domains, notably compensation (Oliinyk, 2020:133), career advancement (Akimov *et al.*, 2021:3), and the establishment of an appealing employer value proposition (Samoliuk *et al.*, 2022:63). Amaeshi *et al.* (2016:387) elucidated that in the past, SMEs neglected the provision of social services through Corporate Social Responsibility (CSR) and instead focused solely on their primary objectives or business activities. However, this approach has evolved, leading to the engagement of SMEs in CSR initiatives that contribute to economic development in diverse capacities.

Furthermore, Choongo (2017:238), Jamali *et al.* (2017:13), and Metzker and Streimikis (2020:51) argue that SMEs have placed significant emphasis on CSR as a means of contributing to societal improvement. SMEs' allocation of social services has alleviated the strain on modern governments in implementing crucial social interventions, such as establishing educational institutions or constructing healthcare facilities. In addition, Kongolo (2010:2289) has asserted that the involvement of SMEs in CSR has garnered significant scholarly and academic interest in recent years (Androniceanu, 2019:506; Rozsa *et al.*, 2021:450; Belas *et al.*, 2021:4). This shift can be attributed to the fact that SME management previously prioritised their primary objectives. Still, SMEs significantly emphasise addressing difficulties beyond their primary tasks and obligations by providing essential amenities. According to Amoah *et al.* (2022:65), SMEs have established improved customer relationships and possibilities by implementing corporate social responsibilities. This has resulted in a favourable impact on customer satisfaction and repurchase behaviours.

The primary focus of succeeding governments in both wealthy and developing countries has consistently been on economic development (Horvath *et al.*, 2021:170). In contemporary times, governments have expanded their attention beyond

developing nations' economic progress to include SMEs' growth and development (Dankiewicz *et al.*, 2020:513). Hence, the progress as mentioned above necessitates the generation of wealth, the diversification of the economy, the establishment and preservation of employment chances, and the fostering of innovation and entrepreneurial prospects (Androniceanu *et al.*, 2021:63). The study posited that SMEs had emerged as crucial catalysts for the economic progress of many emerging nations in recent decades. According to Ngeek (2014:255) and Neneh and Van Zyl (2017:168), it is crucial to acknowledge the substantial impact of SMEs on economic development. These contributions include poverty reduction, the enhancement of a country's GDP, the generation of employment opportunities for a significant portion of the population, and the provision of affordable goods, services, and social amenities to the communities in which they operate or reside. According to Etuk *et al.* (2014:658) and Nastisin *et al.* (2021:3), SMEs play a significant role in addressing social issues and implementing policy strategies to reduce poverty through job creation, innovation, and business opportunities.

Additionally, they emphasise that SMEs fulfil their corporate social responsibilities, which benefit governments by generating revenue and contributing to the stability of the country's political system. These measures have facilitated the progress of economic growth within the nation. According to Nuwagaba (2015:6), SMEs play a crucial role in the economic development of many developing countries.

3.6 CHALLENGES ENCOUNTERED BY SMES

Despite the anticipated significance of SMEs on a global scale, many of these establishments encounter challenges stemming from internal and external factors. Consequently, these challenges lead to the persistence of informality among certain SMEs. External variables encompass a range of elements such as diminishing markets, costs, financial challenges, unfavourable government policies, and competition (European Commission, 2006). Conversely, internal causes encompass deficiencies in managerial practises, financial management, marketing and sales administration, and human resource management, as well as organisational challenges and inadequate management of information systems and technology advancements (Hepeng, 2014:7). According to Pandya (2012:6) and Rahman and

Ramos (2013:5), previous research has shown that SMEs encounter significant obstacles, including limited financial resources, inadequate human resource capacities, and insufficient technology capabilities. Pandya (2012:7) asserts that the unpredictable growth of SMEs can be attributed to several key factors: lousy management skills, an absence of a skilled workforce, shortcomings in marketing tactics, and a lack of innovative technologies. It is essential to acknowledge that the relevance of these issues may differ among nations (Bvirindi & Chikwawawa, 2021:332).

Small and Medium-sized Enterprises make a substantial contribution to the economic development of a nation. However, given their significant reliance on markets (Butler & Sullivan, 2005:56; Hill & Narjoko, 2007:346), consumers, and suppliers (Nugent & Yhee, 2002:87), persisting with their operations in the present landscape of economic rivalry could potentially give rise to issues. Consequently, SMEs have numerous obstacles when engaging in globalised commercial operations. Despite being in advantageous circumstances, SMEs encounter challenges, including retaining current clientele, formulating long-term strategies, and managing payroll (Myles, 2010:8). According to Muranda (2003:46), SMEs encounter several issues in developing and developed countries. These challenges include global sourcing, limited managerial capabilities, inadequate funding, economic downturns, low productivity, technological limitations, and regulatory burdens. Small and medium-sized enterprises encounter notable obstacles in sustainable development, including limited availability of capital, formal business opportunities, and social networks (Mboko & Smith-Hunter 2009:49).

According to Ifekwem and Adedamola (2016:107), small and medium-sized enterprises employ many techniques to ensure their survival in the business environment. One of the primary obstacles encountered by SMEs is securing financial resources to expand their operations. According to Ifekwem and Adedamola (2016:107), SMEs face various challenges, including power supply issues, competition and poor patronage, high machine maintenance costs, inconsistent government policies, high tax rates and multiple taxation methods. Additionally, SMEs encounter challenges in infrastructure, networks, and ineffective telephone systems. According to Yoshino and Taghizadeh-Hesary (2016:13), the challenges faced by SMEs in developing countries include restricted availability of financial resources,

inadequate access to comprehensive databases, limited investment in research and development activities, absence of established sales channels, and a low degree of financial inclusivity. These factors have been identified as contributing to the sluggish growth of SMEs.

Alrabeei and Kasi (2014:48) identified several challenges SMEs are facing at present: constrained access to money and capital market, high rate of small business mortality, shortage of skilled workforce, lack of industrial facilities, poor implementation of policies, poor management practices and low entrepreneurial skills, restricted access to the marketplace, corruptions, cultural problems, and non-application of research findings. Most SMEs are unproductive to grow their business due to delays in decision-making, understaffing, inadequate organization, and poor leadership and control (Priyanath, 2006:97).

Based on several articles, Naradda *et al.* (2020:79) identified, in a nutshell, seven challenges SMEs face with globalization. Accordingly, the main challenges are market competition, information and communication technology, global financial and economic crisis, changes in consumer preferences and profiles, global terrorism, multi-national corporations (MNCs) and international dumping. Such information proves that although their contribution is vital for an economy, SMEs confront many challenges to survive in the market while dealing with business activities (Prasanna *et al.*, 2021:5).

At present, economic competition is seen in global domains, and it has become severe after the 1980s with economic globalization (Gunday *et al.* 2011:664) and turned more severe after accessing the WTO trade regime in 1995. As SMEs build a vital corporation to the economies in developed and developing countries, it is critical to consider the influences of economic competition on SMEs than other industries due to industry-specific features such as low technology base, high concentration in the labour-intensive sector, low entry barriers, relatively low fixed costs of production, and mainly producing price-taker goods (Sener *et al.* 2014:215; Prasanna *et al.* 2019:100).

The global economic competition will influence the domestic SMEs more, whose productions are excessively localized and segmented because the trade liberalization

allows the well-performing foreign manufacturers and retailers to penetrate the underdeveloped and remote markets, which makes it difficult for SMEs to maintain their existing sales in the respective small markets (Singh *et al.* 2009:57). In such an environment, SMEs find it challenging to be competitive even in their domestic market. Product innovation has become a demanding procedure for SMEs because of the increasing global economic competition (Gunday *et al.* 2011:664). From research in Malaysia, Mustafa and Yaakub (2018:60) prepared a list of significant challenges for innovation and technology adaptation, including the inadequate budget, lack of resources, difficulties in expanding the existing capacity and improving the quality of products, lack of research and development, low productivity due to inefficient technologies, and lack of new knowledge utilization to develop new products. With many challenges in implementing innovations, Mustafa and Yaakub (2018:59) emphasized that SMEs should make careful decisions regarding planning and operation. They suggest turning to the government for assistance as a strategy. To underscore that strategy, they highlight an example from Malaysia. The government of Malaysia has played a vital role in supporting and designing programs to develop the competitiveness of small firms. The government conducted many programs to improve SMEs' innovations and technology adaptations, including sharing knowledge, fund offerings, and expert advisory.

As Jinjarak and Wignaraja (2016:155) mentioned, overcoming financial barriers, having sufficient capital, efficient management of cash flows, and readily accessing global finance are the prerequisites for ventures to be competitive globally. Access to credit is a challenge for most small firms, especially in developing countries. Overcoming the financial barriers makes the firms more competitive. Hence, less financially constrained firms show more intensives in exporting (Jinjarak & Wignaraja 2016:156), and financing flexibility is also more important for exporting.

The economic competition influences businesses to be vigilant in their business strategies, particularly on innovations (Gunday *et al.*, 2011:665; Garcia *et al.*, 2020:46; Kijkasiwat & Phuensane, 2020:97). Companies start to recognize the significance of innovation with the enhancing competition of global markets when technology changes promptly and when severe international competition rapidly penetrates the value-addition of existing productions and services (Gunday *et al.*, 2011:667). As per Sener

et al. (2014:215), relating to innovation basis, high value-added products and services will expand the SMEs' competitiveness in the global context. According to Ahmedova (2015:1106), redirecting the venture from low value-added industries towards niche markets based upon particular competitive benefits and high value-added productions may strengthen the SMEs to face global competition successfully.

In some incidents, removing government sanctions will enhance the competitiveness of SMEs in the global market (Singh *et al.*, 2008:526). Exposing local SMEs to global competition by decreasing trade tariffs gives international experience for competing worldwide (Jeppesen, 2005:466).

3.6.1 The challenge of global capital and economic crisis

Keynes posits that an economic crisis or downturn can be attributed to a shortfall in the overall demand for goods and services within the economy. The financial crisis has significant implications for economies and SMEs (Sener *et al.*, 2014:216). It can be argued that 2010 experienced the most pronounced effects (Man & Macris, 2014:665). Given the significant reliance of SMEs on their customer base, suppliers (Nugent & Yhee, 2002:87), and the prevailing market conditions (Butler & Sullivan, 2005:56; Narjoko & Hill, 2007:345; OECD, 2008:12), it is plausible that these factors can exacerbate the challenges faced by SMEs in sustaining their operations during times of crisis. According to Jinjara and Wignaraja (2016:98), the global financial crisis resulted in an immediate shortage of international liquidity, a significant decline in international trade, and prolonged unemployment. Tambunan (2018:21) posits that a significant rise in unemployment will likely occur if numerous enterprises face bankruptcy due to a national currency depreciation resulting from a crisis. The impact of the problem became evident through the declining rate of SME growth and the increasing number of bankruptcies (Man & Macris, 2014:665). The global economic crisis led to banks implementing stricter risk management measures, resulting in increased overdraft limitations and a higher rate of loan application rejections for small and medium-sized enterprises (Jinjara & Wignaraja, 2016:99).

According to Papaoikonomou *et al.* (2012:114), it is contended that a significant number of SMEs are likely to experience a negative impact on their demand due to

external factors in the given context. According to the Organisation for Economic Co-operation and Development (OECD, 2009:8), there has been a decline in the demand for goods and services and a restriction in the availability of finance for SMEs globally. Consequently, there has been a rise in the number of limitations imposed on overdrafts and the frequency of loan application rejections targeting small and medium-sized enterprises (SMEs) (Jinjarak & Wignaraja 2016:97).

3.6.2 The challenge of Information Communication Technology (ICT)

The proliferation of information communication technology (ICT) has been recognised as a critical driver in the internationalisation and globalisation of small and medium-sized enterprises (SMEs). Hogeferster (2014:243) asserts that small firms should express gratitude for the presence of well-established telecommunication and IT systems, efficient transport infrastructure, consistent rules and regulations, and widespread internet connectivity when venturing into international markets, which often necessitate substantial financial investments in foreign countries. Furthermore, in light of the significance of knowledge as a fundamental resource and the criticality of resource allocation and transfer for enhancing the utility of resources (Narteh, 2008:84), the Internet has been recognised as a method for disseminating knowledge to SMEs (Hinson & Sorensen, 2006:118).

The importance of ICT has been increasingly crucial in business endeavours, with firms of all sizes recognising ICT as having a comparable impact on their operational activities as a utility (Rappa, 2004:35). In particular, SMEs have the potential to enhance resource utilisation and achieve cost savings through the adoption of internet-based technologies and information and communication technologies (Sener *et al.*, 2014:216). The advent of the internet has enabled institutions to establish global connections with new vendors, resulting in cost reduction. Additionally, institutions can attract new clients, hence enhancing sales. Moreover, using the Internet allows institutions to benefit from reduced communication costs, leading to an efficient and expedited transaction process (Kabanda & Kent 2018:271).

Moreover, Baldacchino (2005:24) argues that the Internet is a valuable marketing tool for small enterprises engaging in price-based competition. Internet marketing has

emerged as a well-recognised and prevalent business strategy. Nugroho *et al.* (2017:332) acknowledged that even small companies, such as handicrafts and creative industries, utilise computer technology and the Internet to promote their products to local and international markets. According to Ndeye *et al.* (2018:271), the availability of comprehensive internet access and affordable web hosting services contributes to the growth of sales and promotional activities for small and medium enterprises. Insufficient infrastructure in sectors such as telecommunications and internet connectivity has been seen as a significant barrier to the growth and progress of small and medium-sized enterprises (Luna *et al.*, 2018:6). Therefore, the limited progress in the field of information technology significantly hinders the advancement of small businesses at a local level, as well as their ability to engage with the global economy (St-Pierre *et al.*, 2015:446).

Several scholars have highlighted the opportunities the electronic environment offers SMEs with limited resources (Sceulovs & Gaile-Sarkane 2014:411). Therefore, prioritising the implementation of ICT is imperative to enhance operational efficiency inside organisations and facilitate entry into the e-business sector (Ahmedova, 2015:1106).

Based on scholarly research examining the use of e-environment by SMEs, it has been found that using electronic tools enhances SMEs' efficacy, financial gains, and competitive advantage (Sceulovs & Gaile-Sarkane, 2014:411). Mobile commerce, often known as m-commerce, is a widely utilised approach that offers significant benefits to SMEs on a global scale. According to Chau and Deng (2018:436), implementing this strategy results in enhanced productivity, heightened customer happiness, and decreased operational expenses for organisations. The challenges faced by SMEs in adopting mobile commerce (m-commerce) include limited information communication technology capabilities (Helen & Milner, 2002:319), inadequate financial resources (Burn & Tettah, 2001:173; Poon, 2002:68), heavy reliance on business partners (Stockdale & Standing, 2004:303), insufficient understanding of the benefits of e-commerce and the potential of m-commerce adoption, limited opportunities to secure investments, and a lack of internal technical expertise (Chau & Deng, 2018:437).

Social internet networks have assumed a crucial role beyond gathering and communicating (Sceulovs & Gaile-Sarkane, 2014:411). The prevalence of smartmobile phones has led to significant investment in mobile internet for various purposes, including entrepreneurship (Sceulovs & Gaile-Sarkane, 2014:412). Institutions encounter numerous obstacles in the e-environment, encompassing the potential risks posed by attackers, spammers, and criminal entities. The level of risk is significantly elevated in industrialised nations, particularly for SMEs, which face challenges related to limited resources and inadequate cybersecurity measures within their organisations (Sulayman *et al.*, 2012:480).

3.6.3 The challenge of Multi-National Corporations (MNC)

Multinational corporations (MNCs) have significantly impacted the escalation of product rivalry in the international market. This influence stems from their monopolistic strategies and the advantages they possess in terms of production and distribution, which are bolstered by robust economies of scale (Prasanna *et al.*, 2019:100). The rise of MNCs in the era of economic globalisation has been a significant challenge for SMEs, as they face increased competition in both domestic and worldwide markets. The marketability of SMEs, particularly in developing countries, has been questioned. This is primarily attributed to factors such as limited technology adoption, inadequate managerial capabilities, productivity challenges, and the labour-intensive structure of their production systems. Therefore, it is recommended that strategic measures be employed to tackle this significant difficulty SMEs encounter (Gamage *et al.*, 2020:10).

3.6.4 The challenge of international terrorism and religious conflicts

Terrorism and religious disputes provide a significant worldwide economic issue in contemporary times, impacting organisations across several sectors. These phenomena engender adverse effects that affect businesses of all kinds. SMEs are widely recognised as highly dynamic and susceptible firms within the global economy, especially in the context of economic competition (Munro, 2013:56). Consequently, the adverse repercussions of such circumstances are particularly pronounced regarding the sustainability of SMEs. Gaibulloev and Sandler (2008:9) argue that industrialised nations can absorb the consequences of terrorism without experiencing

detrimental economic impacts. In contrast, emerging countries lack this capability, hence exacerbating the situation. Both transnational terrorism and internal conflicts have damaging effects on economic growth.

According to Imhonopi and Urim (2016:24), SMEs and large-scale organisations have significantly relocated from areas affected by terrorism to commercial zones to safeguard their economic operations. Terrorism has a detrimental impact on the development of SMEs along the value chain, resulting in significant disruptions and negative consequences for industrial growth. SMEs have challenges while attempting to relocate their business premises. Therefore, the potential effects may be more critical in comparison to those experienced by big corporations. SMEs strategically establish their firms within a particular geographic region, considering the many advantages the chosen location offers.

Moreover, there is a significant influx of skilled labourers who migrate from places plagued by conflict and violence to more quiet areas to ensure their personal safety. Hence, within regions characterised by high levels of insecurity, business proprietors are compelled to assume more significant financial burdens associated with the recruitment and provision of insurance coverage for highly qualified workers. According to Kato and Kato (2016:7), their research demonstrates that conflicts harm the gross value added per labour and the capital-labour ratio. Terrorism poses a significant disruption to nations' education systems, impeding the development of human capital necessary for industrial growth. The absence of trade leads to decreased employment generation and reduced demand for products and services due to unemployment. Additionally, insecurity hampers the trading velocity inside national boundaries (Imhonopi & Urim, 2016:25). Acts of aggression and violence have a detrimental impact on the attraction of foreign investments and the inflow of capital, resulting in significant setbacks to the economic activity and international trade of the nation. SMEs, which constitute approximately 90% of financial operations within states and are direct beneficiaries of foreign investment (Gamage *et al.*, 2019:17), experience heightened insurance, transaction, transportation, and security risks as a result of these attacks (Asgary *et al.*, 2020:62).

3.6.5 The challenge of international dumping

Dumping is widely acknowledged as an unfair commercial practice that has emerged as a prominent concern over the last twenty years (Obalade, 2014:236). According to Shepherd *et al.* (2013:9), the research findings indicate that the proportion of Zimbabwe's manufacturing SMEs concerning the country's gross domestic product (GDP) experienced a decrease from 28% in 1990 to 17% in 2011. The fall in question can be attributed to the contraction of the domestic market, which can be attributed to several sources, with product dumping being a prominent contributor. According to Mwika *et al.* (2018:61), developing nations are susceptible to the practice of export dumping by manufacturers in more advanced economies, resulting in adverse consequences for their SMEs. According to APEC (2010:6), competitors' adoption of dumping practices has been identified as a significant obstacle for SMEs seeking to enter the global market.

Dumping has been recognised as an anti-competitive practice that SMEs encounter, as it creates challenges in aligning with the pricing strategies of their competitors. Consequently, numerous governments, particularly those in the process of development, have taken measures to counteract the practice of dumping (Baghdadi *et al.*, 2016:20). The World Trade Organisation (WTO) has established an agreement about issues concerning dumping, which grants nations the authority to take action against instances of dumping that result in significant harm to domestic businesses. Governments employ elevated tariff rates as a means of discouraging the importation of goods to safeguard SMEs from the practice of dumping. In certain instances, governments may impose a complete prohibition on imports (Eze & Okpala, 2015:29).

3.7 ADOPTION OF SUSTAINABLE ENTREPRENEURSHIP BY SMMEs

Sustainability encompasses various academic disciplines and centres around the imperative of establishing harmonious coexistence between human beings and the natural environment while considering future generations' requirements and well-being. According to Brammer *et al.* (2012:425) and Cassels and Lewis (2011:187), SMEs' adoption of sustainable practices is sluggish. SMEs have emerged as a significant driver of economic growth in numerous countries, particularly developing

nations. They play a critical role in mitigating unemployment by serving as key users of raw materials and other resources. There is a pressing demand to establish accountability for the carbon footprint of SMEs to promote responsible behaviour within their respective contexts. Numerous prominent corporations have adopted sustainability programmes to address social and corporate reputation concerns. However, it is worth noting that sustainability remains inadequately acknowledged within small and medium-sized enterprises operating in the manufacturing and agricultural sectors (Yu & Bell, 2007:23). According to Johnson (2015:274), it has been estimated that approximately 60-70% of global pollution can be attributed to SMEs.

There is a growing recognition among consumers regarding environmental concerns, leading to an increased demand for green products by businesses, homes, and governments. Hence, organisations must adopt strategic measures to mitigate the ecological consequences associated with their offerings (Lewis & Gretsakis, 2001:6; Sarkis, 1995:47; Sarkis & Cordeiro, 2001:106). Hansmann and Claudia (2001:193) argue that effectively resolving environmental concerns can create avenues for competition and enhance the value of fundamental business initiatives. Who should bear the duty and assume the initiative to ensure that the entire industry actively practices sustainable measures to mitigate environmental impact? Whose responsibility is it: the market leader, the government, or the consumers? Therefore, the present study investigates the factors influencing the motivation, methods, benefits, and challenges faced by small, medium, and micro enterprises (SMMEs) in engaging with sustainable entrepreneurship within the agricultural sector. Including business is crucial in addressing environmental degradation and climate change's adverse consequences (Heltberg, Siegel & Jorgensen, 2009:92; Sullivan & Gouldson, 2017:416).

Research has demonstrated that the implementation of sustainability enhancements can have a substantial impact on mitigating and constraining the adverse effects (United Nations, 2010:12; IPCC, 2018:17). There is a growing consensus among scholars that firms should prioritise accountability and actively address the necessary changes to foster improvement (Murray, 2018:6; Laurent *et al.*, 2019:383). In recent years, notable progress has been made in integrating sustainability practises within significant organisations, leading to its emergence as a critical driver of value creation

and its association with enhanced economic returns (Murray 2018:6; Laurent *et al.* 2019:383). There was a belief that the implementation of sustainability initiatives within significant corporations would have a positive impact on the environmental practises of smaller firms, particularly those situated within the supply chains of larger companies (Burke & Gaughran 2007:698; Humes 2011:16; Charlo, Moya & Muñoz, 2015:278). Nevertheless, the current body of research provides limited empirical support for this assertion.

There has been less societal motivation for small and medium-sized enterprises (SMEs) to adopt sustainable practises (Hoskin, 2011:17; Mitchell *et al.*, 2011:16). The media tends to focus on environmental harm caused by large corporations, neglecting the sustainability efforts of SMEs. However, the increasing presence of environmentally concerned consumers (Scott, 2019:14) suggests a potential shift in this trend. According to Constantinos *et al.* (2010:17), SMEs exhibit a more significant environmental impact and generate more trash than larger companies' combined effects. SMEs must demonstrate innovation and sustainability to maintain competitiveness. However, compared to larger organisations, SMEs are less inclined to undertake transformative changes due to resource constraints and limited influence within their supply chains (Côté, Booth & Louis, 2006:546; Constantinos *et al.* 2010:17; Freel, 2000:63; Bititci, Maguire & Gregory, 2010:78). An acceptable strategy for SMEs is to adopt a sustainable approach by incorporating eco-innovation (Carrillo-Hermosilla, Del Río & Totti, 2010:1075; Klewitz & Hansen, 2014:59). Previous studies have demonstrated that SMEs who actively participate in eco-innovation practises with low levels of risk are more likely to encounter additional prospects for enhancement (Klewitz & Hansen, 2014:60; Demirel & Ozturk, 2019:8). Engaging with SMEs about environmental issues has been identified as a challenging task (Côté *et al.*, 2006:547; Klewitz & Hansen, 2014:61).

Furthermore, it is worth noting that this field of study has received limited attention from researchers (Demirel & Ozturk, 2019:8; Hampton, 2018:387). Business support agencies face challenges in effectively aiding small and medium-sized enterprises in their environmental management efforts. However, it is unclear whether these agencies would achieve significant progress in this area without external assistance (Seidel *et al.*, 2009:42; Hoskin, 2011:17; Demirel & Ozturk, 2019:8). Various forms of

support exist; however, the majority of SMEs exhibit a reluctance to fully comprehend the significance of sustainability in their business operations (Mitchell, O'Dowd & Dimache, 2010:5; Demirel & Ozturk, 2019:9). The provision of tailored services for SMEs has been lacking (Klewitz & Hansen, 2014:59).

Irrespective of the scale of the small and medium-sized enterprise, it can engage in sustainable practices. Nevertheless, it is essential to acknowledge that SMEs are not without their constraints since they often encounter various obstacles, as highlighted by Bos-Brouwers (2010:419). Small and Medium Enterprises play a substantial role in emerging and mature economies. Therefore, it is imperative for them to actively participate in matters about sustainable development (Stawinska, 2011:4). According to Adamu *et al.* (2019:184) and Heras and Arana (2010:728), there is consensus that SMEs can derive advantages by adopting sustainable practises, despite the associated additional expenses. These practices have the potential to enhance the competitive advantage of SMEs. As conceptualised via the lens of the triple bottom line (TBL), sustainability encompasses the integration of economic, social, and environmental dimensions as pivotal factors that influence the decision-making processes within business (Dey *et al.*, 2020:144). According to Katz-Gerro *et al.* (2019:487), SMEs would benefit from increased incentives to adopt sustainable practices. This can be achieved by presenting them with evidence from successful situations in which such methods have been implemented.

According to Broccardo and Zicari (2020:259), it is recognised that the sustainable functioning of an organisation is contingent upon the management system employed. According to Stawinska (2011:4), a limited number of SMEs are intensely interested in integrating sustainability practices or have already implemented them. The challenges commonly associated with SMEs include constraints in terms of financial and human resources, as well as a lack of awareness, competence, and access to suitable tools for achieving corporate sustainability (Bos-Brouwer, 2010:419; Braccardo & Zicari, 2020:259).

The rapid changes in the global climate resulting from global warming have led to the perception that industry and agricultural operations are responsible for environmental harm, manifested via the development of waste, disruption of ecosystems, and

depletion of natural resources (Fiksel, 1996:138). The imperative for the industry to respond and undertake a paradigm shift in the operational mechanisms of production systems towards sustainability is evident. Companies frequently resist modifying their business operations, perpetuating inefficient practices that result in avoidable waste and pollution. Organisations aspiring to shift towards a sustainable value chain should seize the occasion to thoroughly assess their operational procedures to pinpoint specific domains where embracing a sustainable perspective might provide tangible enhancements to their business performance. According to Wooi and Zailani (2010:25), it is recommended that organisations undertake a comprehensive evaluation of each process within the value chain to determine whether adopting a more environmentally sustainable strategy may effectively address any existing inefficiencies. Numerous organisations in industrialised nations who have undergone this endeavour have found operational procedures in which there was a significant amount of wastage of raw materials, underutilization of resources, and wasteful energy consumption resulting from the utilisation of inefficient equipment.

In contrast to larger organisations, small and medium-sized enterprises (SMEs) exhibit greater adaptability and a tighter alignment with client expectations. Consequently, it is anticipated that they will reveal more favourable reactions towards environmental factors in their manufacturing and agricultural practises (Spence, 2007:536; Lee & Pati, 2012:83). Nevertheless, the empirical findings shown by Roxus *et al.* (2017:166), Masurel (2007:194), and Boons *et al.* (2013:5) indicate a divergence between the perspective mentioned above and the actual circumstances observed in practice. The primary difficulties with environmental issues from the standpoint of SMEs are attributed to various sources. Several factors contribute to the challenges mentioned above, such as little understanding or awareness of the environmental problems, absence of a well-defined organisational role, and insufficient customer demand for ecological enhancements (Masurel, 2007:194). Given their relatively small scale and adaptable nature, it is anticipated that SMEs can actively engage in the preservation of the environment, thereby ensuring its sustainability for future generations. According to Khor *et al.* (2013:74), the motivation for SMEs to address environmental issues can be attributed to internal and external causes. However, the study suggests that external influences have a more significant impact than internal factors.

Given the escalating demands for environmental sustainability, it is anticipated that organisations would be compelled to adopt measures aimed at mitigating the ecological ramifications associated with their offerings (Lewis & Gretsakis, 2001:7; Sarkis, 1995:48; Sarkis & Cordeiro, 2001:106). Otherwise, companies will experience a decline in their competitive advantage inside the market. Environmental consequences are present throughout the various phases of product production processes and the associated value chain. Hence, companies must guarantee that their production processes and value chains adhere to sustainable practices to mitigate the environmental consequences of a product. Rao and Holt (2005:903) argue that the implementation of sustainable initiatives by enterprises enables them to realise significant cost savings and contributes to the enhancement of sales, market share, and the exploration of new market prospects, ultimately resulting in increased profit margins. All of these advantages contribute to the economic performance of the organisation.

3.8 CRITERIA FOR SMMEs TO CHANGE TO SUSTAINABLE ENTREPRENEURSHIP

The necessity for change is an essential condition for organisations, regardless of their scale, to endure and prosper. For SMMEs to embrace and incorporate change, it is imperative to focus on cultivating staff competencies, assisting employees in implementing change and facilitating performance improvement using appraisals and feedback mechanisms. According to Al-Abbrow and Abrishamkar (2013:296), implementing sustainable entrepreneurship can facilitate the identification of novel markets and attain a competitive edge for SMMEs. The extant body of literature presents established criteria, as shown by Bose (2016:92), Braganza and Myers (1996:41), and Uddin and Bose (2013:168), that are deemed essential for effective change management.

- SMMEs should establish a steering group to lead and promote sustainable entrepreneurship. According to Galuppo *et al.* (2011:149), showing a steering group is crucial. The authors argue that steering groups are vital in enhancing the effectiveness of planning, decision-making, concept exploration, and organisational communication. SMMEs can establish steering groups to

provide assistance and guidance as required. By employing a meticulous process of member selection, steering groups can effectively emulate the advantages of cross-functional teams and harness the specialised knowledge of consultants.

- According to Ehrhardt *et al.* (2014:446), in the current highly competitive business landscape, businesses are increasingly relying on cross-functional teams as a practical approach to address intricate challenges. This model offers notable benefits in bolstering competitiveness, expediting decision-making processes, facilitating effective organisational learning, and boosting performance and coordination among diverse administrative units.
- According to Kirsch *et al.* (2012:168), it is imperative to modify corporate culture to align with changing circumstances and effectively govern staff behaviour and attitudes to successfully implement sustainable entrepreneurship. Hence, incorporating cultural change is a crucial element that SMEs must consider facilitating and augment the change process. According to Achanga *et al.* (2006:464), an SME's organisational culture is believed to mirror its senior executives' characteristics and traits. A participative corporate culture is vital to effectively implementing sustainable entrepreneurship in SMEs (Panizzolo *et al.*, 2012:772; Zhou, 2012:459; Dora *et al.*, 2013:158). According to Dora, Kumar, and Gellynck (2015:6), the successful transition to sustainable entrepreneurship necessitates cultivating a long-term mindset, effective teamwork, and exceptional communication skills. Therefore, establishing a conducive organisational culture is crucial for successfully implementing sustainability practices inside SMEs.
- According to Bouckennooghe (2010:506), employees' attitudes towards change are influenced by various factors, including scepticism towards organisational change, receptiveness to change, ability to cope with change, willingness to accept change, dedication to change, and adaptation to change. The effective management of employee attitudes constitutes a crucial element in the transition towards sustainable entrepreneurship.

- Organisational transformation is commonly acknowledged to possess the capacity to elicit intense emotions and behavioural modifications compared to other workplace occurrences. The compounding of this issue can be attributed to the presence of uncertainty in various shift scenarios, the absence of clear understanding about new duties and responsibilities, and individuals experiencing a sense of diminished status or perceiving the situation as inequitable (Bönigk & Steffgen, 2013:6217).
- According to Charlesworth *et al.* (2013:1), pilot trials are undertaken as smaller-scale iterations of complete tests to verify the strength and appropriateness of the detailed design, methodology, and procedures. SMEs encounter difficulties in implementing pilot projects due to inadequate resources, particularly the scarcity of time required to initiate and manage one or more pilot initiatives.
- According to Bögel *et al.* (2014:501), the utilisation of business process modelling facilitates the administration of effectively planning change through conceptual models. This entails modelling techniques to represent and analyse various processes, organisational structures, and available resources. One of the primary advantages inherent in this modelling approach is its capacity to facilitate rapid reconfiguration.
- Given the availability of resources, certain small and medium-sized enterprises (SMEs) opt to engage external consultants to support their sustainable entrepreneurship endeavours and provide guidance and facilitation throughout the process. During a phase of consultancy, the management of subject matter experts (SMEs) engages in the activities of seeking or generating information, evaluating its quality, and processing it (Buono & Subbiah, 2014:38). Consultants play a crucial role in knowledge transfer to those responsible for managing and executing tasks. This is due to their extensive expertise in change processes, contexts, and decision-making, which enables entrepreneurs to effectively implement change (Scott & Barnes, 2011:6).
- Internal communication, commonly known as employee communication, is significant in facilitating the acceptance of new sustainable practices. According

to Hola (2012:35), internal communication disseminates necessary information to employees. Effective internal communication is founded on employees as internal partners who collaborate towards shared objectives. The successful implementation of sustainable entrepreneurship necessitates effective communication among all stakeholders along the value chain (Timans *et al.*, 2012:342; Hu *et al.*, 2015:982). The negative consequences of ineffective communication are reduced productivity, diminished performance, and compromised quality (Worley & Doolen, 2006:230). The importance of effective communication in integrating sustainability practises inside SMEs has been widely acknowledged in the scholarly literature (Worley & Doolen, 2006:231; Timans *et al.*, 2012:341).

- According to Parand *et al.* (2013:14), providing appropriate assistance to employees by top managers is crucial for successfully implementing organisational initiatives, as it significantly contributes to enhancing sustainable entrepreneurship. According to these experts, managerial commitment is critical to improving employees' comprehension and motivation amidst moments of organisational transition. The dedication of senior management plays a crucial role in ensuring the effective incorporation of sustainable principles inside SMEs (Achanga *et al.*, 2006:465; Worley & Doolen, 2006:231; Timans *et al.*, 2012:341; Dora, Kumar & Gellynck, 2015:6). One of the critical obligations of management is to provide education and motivation to employees to foster the acceptance and implementation of sustainable entrepreneurship across all organisational levels. According to Panizzolo *et al.* (2012:773), senior executives must demonstrate a strong dedication to a forward-thinking perspective on performance and the promotion of employee engagement in improvement initiatives. According to Panizzolo *et al.* (2012:773), high-quality leadership in an organisation is crucial in fostering knowledge enrichment and enhancing the effectiveness of employees' skills. According to Albliwi *et al.* (2014:1015), insufficient commitment and involvement from management have been identified as contributing factors to the unsuccessful adoption of sustainable entrepreneurship in SMEs.

- According to Schipper (2010:312), cost-benefit analysis is a systematic procedure that involves determining the specific time frame for analysis, identifying the costs and benefits associated with each alternative, including the current state of affairs, assigning monetary values to these costs and benefits whenever feasible, and applying an appropriate discount rate to discount the economic importance of costs and benefits. SMMEs ought to conduct a comprehensive cost-benefit analysis of sustainable practices to better understand their significance within the organisational context.
- Identifying intangible organisational resources is crucial, notwithstanding its elusive nature and inherent difficulty in discernment. According to Gunasekaran and Ngai (2008:162), operational levels often yield tangible and financial benefits. In contrast, strategic groups tend to be characterised by non-financial and intangible benefits.
- The successful completion of any project is contingent upon the presence of adequate financial capability. The implementation of sustainable practises may necessitate the allocation of resources towards the development and implementation of training courses and advisory services. Nevertheless, previous studies have indicated that SMEs frequently exhibit inadequate financial arrangements (Achanga *et al.*, 2006:465; Zhou, 2012:459; Dora *et al.*, 2013:158; Chaplin, Heap & O'Rourke, 2016:128). Moreover, the long-term financial advantages associated with sustainable entrepreneurship may not always be readily embraced by SMEs. Hence, the financial capacity of SMEs is a crucial determinant for successfully integrating sustainability practices.
- Mukkelli (2015:173) states that a highly heightened competitive environment contributes to stressful conditions within and outside companies. The outcome has led to a rise in outsourcing, presenting itself as both a challenge and an opportunity. The roles and responsibilities are undergoing transformation as a result of these reasons.
- According to Armstrong (2002:172), employee incentive systems encompass an organization's comprehensive set of policies, methods, and practises

designed to compensate its employees based on their ability, competence, and market value. Implementing an employee reward system is within the organization's reward philosophy and policies. These policies consider suitable forms and amounts of compensation, benefits, and other forms of recognition. Consequently, any modifications to this system must consider these factors, as they will also determine the necessity for change.

- Pillay and Morris (2016:396) conducted a study evaluating individuals' assessments, explicitly focusing on abilities such as self-efficacy, tenacity, creativity, problem-solving, and others. The authors highlight the importance of emphasising experiential learning in this context.
- Skills are commonly delineated based on educational background, qualifications, training, professional experience, or specific job functions. According to Clarke *et al.* (2015:696), it is emphasised that providing a diverse set of skills to staff members has a good influence. The authors also acknowledge that a valuable combination of skills enables organisations to generate knowledge that can improve sustainable performance. SMEs commonly hire employees with a restricted skill set and tend to view training as an optional expense (Achanga *et al.*, 2006:465; Mathur, Mittal & Dangayach, 2012:756; Albliwi *et al.*, 2014:1015). However, achieving sustainability transformation necessitates a considerable level of proficiency and training. According to Dora, Kumar, and Gellynck (2015:7), it is crucial to provide training for employees of SMEs to enhance their soft and technical abilities. Several other scholars, including Zhou (2012:460), Timans *et al.* (2012:342), Dora *et al.* (2013:159) and Hu *et al.* (2015:982), have similarly identified skills and training as a crucial determinant for the uptake of sustainable entrepreneurship among SMMEs.
- According to Atlas and Sobotka (2013:27), businesses must exercise effective control of service providers, especially in light of the trend towards downsizing and increased outsourcing. The need for financial prudence and the resulting need to reduce the number of employees make workforce planning and

intelligence crucial for the successful implementation of sustainable entrepreneurship.

- According to Mitchell *et al.* (2012:1051), organisations must integrate a sustainability goal into their fundamental operations and assume responsibility for their efforts in pursuing that vision when making changes to reporting lines.
- The prevalence of group and team utilisation inside enterprises indicates the prevailing belief that collaborative work offers distinct benefits in contrast to individual employee efforts. The potential benefits of engaging in team collaboration encompass enhanced creativity and the incorporation of diverse perspectives, as well as improved decision-making and problem-solving capabilities (Larson, 2009:36). The need to engage and empower people is a critical factor in driving sustainability efforts (Hu *et al.*, 2015:984). According to Panizzolo *et al.* (2012:772), the successful implementation of sustainable practises necessitates the proactive engagement and empowerment of individuals within the organisational context. The active participation of employees is crucial in addressing cultural barriers and fostering a conducive atmosphere for the sustainable development of entrepreneurship.
- Employee trust in management is contingent upon various relevant factors, including subjective norms, risk perception, confidence levels, and perceptions of security. When individuals or groups collaborate, there is a possibility that trust can be compromised. The significance of confidence lies in its role as a catalyst for voluntary compliance and commitment inside an organisation (Morrow *et al.*, 2012:676). Trust in leadership within an organisation has yielded several advantageous outcomes, including enhanced performance, heightened organisational commitment, increased job satisfaction, and improved ethical decision-making (Smollan, 2013:728). Consequently, the degree of trust established becomes a crucial determinant in shaping employees' cognitive, affective, and behavioural responses towards SME owners who are implementing sustainable entrepreneurship.

- Warnier *et al.* (2013:1382) employ the conceptual framework proposed by Barney (1991:103) to describe the properties of organisational strategic resources, which include value, rarity, inimitability, and non-substitutability. These properties of resources possess the capacity to provide sustainable competitive advantage. Misalignment arises when there is a discrepancy between the strategic resources of companies and the evolving business environment, leading to an inability to effectively adapt to various internal and external conditions. This phenomenon has a significant influence on the investment and productivity of the company.

SMEs may encounter a diverse array of challenges during transitional phases, which can have adverse effects on their operational activities (Nikolić *et al.*, 2015:92). The findings indicate that it is advisable for policymakers to actively promote and enable SMEs to effectively adapt to changes. SMEs must proactively tackle their issues by implementing efficient change management strategies. This study has identified certain elements that SMEs could adopt to achieve sustainability. The expeditiousness of this process can be enhanced through the proactive engagement of policymakers in addressing and fostering knowledge regarding the necessity and advantages of sustainable entrepreneurship (Bazie & Braganza, 2020:5).

3.9 ADVANTAGES OF SMMEs ADOPTING SUSTAINABLE ENTREPRENEURSHIP

Sustainable entrepreneurship allows businesses to fulfil their economic goals while contributing to societal and environmental goals and circumstances (Parrish, 2010:511; Hall *et al.*, 2010:440). The capacity and potential to gain market share while simultaneously capturing innovative markets beyond those previously experienced are the economic benefits of sustainability (OECD, 2018:12). The reasoning for this is that sustainable product niches and practices represent hitherto undiscovered business prospects that SMMEs are especially positioned to address, owing to their modest size and flexibility (UNEP, 2014:9).

Sustainability can help SMMEs achieve efficiency by requiring fewer inputs to create the same output and lowering expenses. The following channels accomplish these cost savings (OECD 2018:13).

- Process efficiency will be accomplished by optimising existing processes or introducing new, more efficient ones. SMMEs use the least number of resources and produce the least amount of trash.
- Product design: SMMEs can re-design their products to reduce the number of required inputs without sacrificing the end value. product's
- Garbage disposal: SMMEs can reuse already generated waste or pass it along to other enterprises in the value chain, in addition to lowering waste through improved process efficiency. Nonetheless, the cost of trash disposal is reduced.
- Source of raw materials: By converting to recycled materials, SMMEs can reduce the cost of raw materials.
- Infrastructure efficiency: SMMEs can save money using energy-efficient lighting, insulating buildings, and efficient heating systems.
- Package and transportation: SMMEs can reduce expenses even more by lowering packaging volume and switching to local suppliers to reduce shipping distances.

However, the relevance and implementation of these cost-cutting strategies and channels can be deliberately varied by sector and area.

Due to the owner-centric qualities of SMMEs, it has been stated that they tend to integrate sustainability into their business production and management plan primarily for commercial, social, and environmental purposes. As a result, for SMMEs, sustainable entrepreneurship is critical since it is just the right thing to do given the circumstances (Turyakira, 2017:466). In response to the expanding sustainability imperative, policy regulations and standards are getting stricter (UNEP, 2014:9). Sustainable SMMEs will be ahead of regulatory needs since they will have tested new technology and procedures. They will be able to gain market leadership because of this.

Dzansi (2011:5712) identified several positive outcomes of SMMEs adopting sustainable entrepreneurship, including increased community goodwill, customer base and loyalty, entrepreneurship productivity, overall sales and profit growth, and highly motivated and loyal employees. Jenkins (2006:255) said that adopting sustainable entrepreneurship would improve an organization's image and reputation, allowing it to access more capital and attract more trading partners and customers. Funding opportunities from local governments, institutions, and regional funding organizations are increasing for SMMEs to implement programs that integrate innovation and sustainability (UNEP, 2014:10).

Crals and Vereeck (2004:7) summarized the benefits of sustainable entrepreneurship as follows: overall less reliance on depleted resources; much more efficient production levels due to far superior technologies and better and multi-skilled staff; incisively exceptional insight into market preferences and opportunities; generally lower burden from changes in environmental adversity.

However, Crals and Vereeck (2004:7) stressed that, despite these advantages, SMMEs must understand that solid financial outcomes are critical for the company's existence in addition to all the benefits mentioned above. There is no corporation, let alone a long-term one, without solid financial outcomes.

3.10 STRATEGIES FOR ADOPTION OF SUSTAINABLE ENTREPRENEURSHIP

There has been a relative lack of focus on sustainable entrepreneurship practises within SMMEs. The persistence of conventional entrepreneurship can be attributed to the perceived challenges of adopting sustainable entrepreneurship practises, which are believed to be linked to costs, intricacies, and uncertainties associated with balancing social and environmental objectives alongside profitability (Belz & Binder, 2017:6). Undoubtedly, small enterprises encounter financial limits, which poses a significant challenge in implementing sustainable entrepreneurship practises. Hence, it is advisable to formulate strategies that facilitate the implementation of sustainable entrepreneurship practises by SMMEs, thereby serving as a catalyst for sustainable company performance.

There are three distinct avenues through which policymakers can effectively facilitate the proliferation of sustainable entrepreneurship. To enhance agricultural entrepreneurs' understanding of their crucial role in fostering a sustainable economy, it is recommended to employ a combination of mass media platforms (such as television and newspapers) and niche media outlets (such as agricultural magazines and exhibitions). Through these channels, the benefits of sustainable entrepreneurship can be effectively communicated. According to Neto *et al.* (2018:1635), this will serve as a source of motivation for organisations to adopt cleaner production methods or sustainable practices, which in turn can contribute to enhancing their commercial operations.

Furthermore, it is imperative to provide education on sustainable entrepreneurship and innovation, including open innovation, alongside essential knowledge, skills, and competencies about sustainable farming. This includes proficiency in resolving weed and pest issues using organic fertilisers and bio-pesticides. These efforts aim to facilitate the establishment of more favourable circumstances for the transition towards sustainable agricultural development. Additionally, it is imperative to provide training on open organisational culture for SMMEs operating in the agricultural sector and their members. This training is necessary to mitigate potential challenges such as resistance and lack of commitment among individuals, which can hinder the successful adoption of open innovations (Popa *et al.*, 2017:139). The adoption of open innovation is contingent upon the presence of a hollow or innovation-oriented culture (Ferraris *et al.*, 2020:1266). The circular economy holds substantial importance as a critical subject of education, as it has the potential to facilitate sustainable transformations (Suchek *et al.*, 2022:2265). These transformations, in turn, can positively impact the food system (Dora *et al.*, 2020:498), intricately linked to socially influenced food supply chains. This emerging phenomenon might exert social constraints on agricultural entrepreneurs, compelling them to prioritise the development of sustainable agriculture to ensure their survival and success within this evolving landscape of consumption and production.

Agricultural entrepreneurs have the potential to engage in collaboration and leverage technology and strategic alliances with large enterprises to generate value for their partners and communities, as well as enhance social benefits (Veleva & Bodkin,

2018:26). In addition, the close geographical proximity of SMMEs as participants in agricultural cooperatives enables the development of reciprocal circularity (Silva *et al.*, 2019:51), hence enhancing circular and sustainable entrepreneurship.

Moreover, implementing policies to foster sustainable entrepreneurship in the agricultural sector is paramount. Financial assistance policies may be implemented to facilitate the acquisition of input materials for organic farming. These policies can include options such as loans or tax allowances to sell or export these commodities. According to Tiwari *et al.* (2020:6), it is recommended that governments establish the necessary physical infrastructure and the institutional and legal framework to enable private market participants to effectively manage risks. Media support for sustainable agriculture and organic agricultural products is noteworthy. SMMEs operating in the agricultural sector have a keen interest in policies that facilitate the acquisition of organic farming certificates and the implementation of punishments to deter fraudulent practices associated with producing and selling counterfeit organic products.

Governmental agencies should prioritise establishing an environment conducive to the needs of sustainable businesses and vulnerable populations, ensuring that it is attractive and comfortable. Additionally, efforts should be made to enhance convenience regarding connectivity, workspace availability, and communication facilities. Improving the quality of service provided by these organisations is expected to have a positive impact on the perceptions, emotions, and social connections of agricultural entrepreneurs with political institutions and their peers (Hua *et al.*, 2021:7). This can be attributed to the establishment of shared norms and the enhancement of trust and trustworthiness.

According to the survey conducted by Lang *et al.* (2023:12), it was found that innovation plays a crucial role in the transition towards sustainable agriculture by establishing favourable conditions for sustainable entrepreneurship. The selection of a practical innovation approach is of utmost importance, especially when considering utilising external knowledge resources (Dabic *et al.*, 2019:789). While it is well acknowledged that superficial knowledge and technology play a crucial role in various contexts (Santoro *et al.*, 2020), these elements must align effectively with the pre-existing infrastructure (Alassaf *et al.*, 2020:2281). Therefore, agricultural

entrepreneurs must focus on organisational capabilities and knowledge management while implementing (open) innovation (Santoro *et al.*, 2020:92) to promote sustainable agricultural development.

The efficacy of open innovation has been demonstrated by scholars; however, the integration of appropriate business models with open innovation methods is crucial (Zhu *et al.*, 2019:78). Hence, it is imperative for SMMEs operating in the agricultural sector to effectively leverage their social capital resources to foster innovation and identify suitable business models. This strategic approach is crucial for the successful implementation of sustainable farming practises, which in turn play a significant role in mitigating supply chain disruptions within the agricultural industry (Yang *et al.*, 2020:1579; Kumar *et al.*, 2021:3; Sodhi *et al.*, 2021:7).

Esper *et al.* (2020:290) suggest that integrating marketing and logistics with a consumer-centric approach to supply chain management may serve as a viable operational strategy for agricultural entrepreneurs among prevailing global challenges. Incorporating many components can contribute to restoring and enhancing sustainable food supply chains and the sustainable entrepreneurial environment. The interconnection between the energy and agricultural sectors has been widely acknowledged (Tiwari *et al.*, 2020:8; Cheng *et al.*, 2021:4). Consequently, the advancement and transition towards sustainable agriculture have the potential to facilitate the growth and evolution of a sustainable-oriented energy market, such as biofuel. Moreover, the implementation of sustainable-oriented agriculture and food supply chains has the potential to enhance direct energy consumption, influence the profitability of the energy sector and food prices, and mitigate the effects of fluctuations in fertiliser and pesticide usage and associated costs (Ball *et al.*, 2015:464).

Using social media platforms can serve as a practical approach to enhance the uptake of sustainable entrepreneurship among SMMEs operating within the agriculture sector. Yigit and Kanbach (2023:20) propose that the influence of social media platforms on drivers can significantly contribute to the advancement of sustainable practices. The strategic utilisation of social media platforms has the potential to expedite client awareness regarding novel developments within an organisation. Another claim is that implementing marketing strategies across various social media

platforms is vital in enhancing the perceived value of items or services that stem from sustainable practices. Increased customer awareness of the advantages associated with sustainable products or services will likely result in a corresponding rise in support for entrepreneurs engaged in sustainable practices.

There is an increasing body of literature that examines the significance of technology in facilitating the advancement of sustainable business (Gerli *et al.*, 2021:7; Ghazinoory *et al.*, 2020:13; Desa & Basu, 2013:31). The context mentioned above implies a necessity for sophisticated methods of integrating knowledge and fostering creativity to generate novel combinations and disruptive technologies that address significant societal issues. To facilitate the transition towards more sustainable entrepreneurship, it is imperative to establish flexible and supportive entrepreneurial ecosystems that actively foster the growth and development of these hybrid organisations (Thompson *et al.*, 2018:102; Del Giudice *et al.*, 2019:4; Hoogendoorn *et al.*, 2019:1138). Understanding the underlying mechanisms that facilitate advancing innovative and sustainable practices in a developing nation is crucial for gaining valuable policy insights. These insights may then be utilised to foster entrepreneurial endeavours that have the potential to bring widespread social and environmental benefits.

It is plausible that adopting transitions that prioritise innovation-driven entrepreneurship as a means to fulfil these demands, as mentioned above, could potentially alleviate the underlying issues associated with conventional approaches (Sarpong & Davies, 2014:25; Cohen, 2006:5). Therefore, the implementation of policies that seek to enhance the legitimacy of sustainable entrepreneurship endeavours might effectively address the current obstacles hindering the progress of sustainable transitions in the agricultural sector (Siqueira *et al.*, 2023:10). In general, these components offer pertinent principles for the formulation of public policies, the establishment of rules for sustainable businesses, and the advancement of impact investment (Bozhikin *et al.*, 2019:740; Gali *et al.*, 2020:8; Cheah *et al.*, 2019:612; Islam, 2020:5).

According to Jütting (2020:12), the resolution of significant global challenges necessitates the involvement of multiple actors, indicating that cooperation among

various entities, including businesses, communities, governments, researchers, and industries, can facilitate the creation of favourable circumstances for a novel and environmentally conscious path of innovation within entrepreneurial ecosystems. According to Siqueira *et al.* (2023:11), directing sustainable entrepreneurship education towards socially and ecologically sustainable objectives is expected to yield significant benefits for the well-being of humanity. Despite the presence of distinct characteristics and compelling evidence of interconnected ecosystems in the realm of sustainable entrepreneurial endeavours, it is imperative to highlight the widespread positive impacts that are directly and indirectly linked to esteemed research universities.

These institutions independently produce significant effects in most of their scientific endeavours. Moreover, these entities play a crucial role in generating and disseminating technological advancements within entrepreneurial ecosystems, functioning as both sources and intermediaries of knowledge. The occurrence of this phenomenon can be reasonably anticipated, given that universities frequently serve as pivotal institutions for entrepreneurial education within developing socioeconomic contexts (Schaeffer *et al.*, 2021:188; Alves *et al.*, 2021:16; Fischer *et al.*, 2018:618). However, it is essential to acknowledge that the relationship between sustainable businesses and universities remains ambiguous (Cinar, 2019:221). Hence, enhancing this association by implementing clearly defined methods to foster impactful contacts, such as collaborations between universities and industries, is imperative. These collaborations can yield valuable resources and solutions that have the potential to generate sound effects on community life (García-González & Ramírez-Montoya, 2020:6; Roslan *et al.*, 2020:11).

According to Khavul and Bruton (2013:287), implementing innovations that promote sustainability can be crucial in addressing unsustainable practices and their associated environmental consequences. The absorption of innovations into communities is significantly influenced by various factors, including the breadth of social networks and commercial ecosystems, the internal hierarchy of networks, and other internal and external links. According to Kaplinsky *et al.* (2009:177), the authors noted that the research and development endeavours undertaken in developing nations have not yielded unique offerings for marketplaces targeting the "bottom of the

pyramid." According to Van den Waeyenbery and Hens (2008:440), innovations must be tailored and promoted to meet the distinct needs of various groups. They argue that a universal design approach is unlikely to gain substantial acceptance. In developing nations, there is a prevailing inclination to see a uniform set of requirements among those in the low-income stratum. Nevertheless, it is worth noting that low-income markets exhibit comparable levels of heterogeneity to developed markets. Consequently, to gain consumer acceptance, companies must engage in relative levels of market research and adapt their business practises, product configurations, and marketing strategies accordingly (Cordes & Marinova, 2022:2). Khavul and Bruton (2013:288) provide three illustrative scenarios to support their assertion.

The three essential needs that are being addressed in this context are (1) stoves that are designed to consume fuel efficiently, (2) access to potable water that is free from any potential health hazards, and (3) the provision of power. Although the instances mentioned above presented clear advantages for customers, the level of acceptance fell short of expectations primarily due to a deficiency in comprehending the industry's intricacies. The involvement of agriculture in developing nations is an inherent component of their marketplaces, necessitating firms seeking to access these markets to actively participate across all dimensions (Khavul & Bruton, 2013:288). According to Kaplinsky *et al.* (2009:179), the authors argue that the introduction of innovation in emerging economies like India and China has the potential to generate products designed explicitly for low-income markets. These products are characterised by lower costs, enhanced user-friendliness, and less need for supporting infrastructure. This assertion is substantiated by the prevalence of affordable and frequently substandard merchandise from India and China within economically disadvantaged nations (Van den Waeyenberg & Hens, 2008:441). To obtain more profound insights into decision processes within communities and tackle profoundly ingrained behaviour, researchers and entrepreneurs must tap into the field of behavioural science (Cordes & Marinova, 2022:3).

The implementation of policies that foster a conducive environment for technological initiatives can serve as a catalyst in attracting foreign venture capital to bolster sustainable entrepreneurship. Foreign venture capital investments have the potential

to expedite the development of local competencies and facilitate the emergence of sustainable innovations at a significantly accelerated pace compared to alternative funding mechanisms. According to Hain and Jurowetzki (2018:451), venture capital investors contribute technical, management, and marketing capabilities to product development, aiming to target local and potentially global markets. Nevertheless, the outcomes associated with microfinance have been relatively discouraging. Arp *et al.* (2017:103) conducted two research studies to examine the efficacy of institutional microfinance, informal moneylenders, and trade finance regarding their performance.

The motivation behind these studies stemmed from the ongoing discourse surrounding the efficacy of microfinance and its influence on sustainability within the framework of the United Nations Sustainable Development Goals. The researchers' findings indicate that microfinance does not lead to long-term sustainability among borrowers residing in low-income communities. The administrative procedures associated with official lending, albeit offering lower interest rates, acted as a disincentive for borrowers. In contrast, the convenience of borrowing from moneylenders, despite incurring higher fees, proved to be more appealing. On the other hand, trade financing was commonly perceived as interest-free due to the absence of direct cash transactions. The agricultural produce was exchanged for offtake arrangements in return for equipment, fertiliser, and seeds. Trade financiers saw increased integration with rural communities, enabling them to provide valuable advice and help. As a result, they gained a higher level of confidence compared to both official and informal moneylenders. In the given setting, trade financiers fulfil a comparable function to venture capitalists, but on a regional scale and with limited emphasis on fostering innovation (Arp *et al.*, 2017:105). Therefore, the provision of financial backing from venture capitalists has the potential to enhance the acceptance and implementation of sustainable business.

According to Reed (2002:178), one of the proposed institutional reforms for promoting sustainable entrepreneurship in low-income nations involves granting greater autonomy to impoverished people in managing natural resources and the environment. The attainment of this objective necessitates enhanced cooperation among all relevant parties, wherein civil society assumes a more prominent role in shaping the final results. In their study, Brown *et al.* (2011:323) documented effective

collaboration in Ethiopia, wherein the Humbo community, governmental and non-governmental organisations, and external stakeholders joined forces to implement a forestry initiative. This endeavour was characterised by the involvement of external participants who provided financial resources and expert guidance. The inception of the Humbo project was motivated by the 1984 famine in Ethiopia, which brought to light the extensive deterioration of Ethiopian forests and the subsequent adverse impact on the dependent communities. The project actively involved the communities by facilitating the creation of cooperatives responsible for managing money generated from carbon credits.

According to Brown *et al.* (2011:323), the cooperatives assume the responsibility of facilitating the growth and establishment of communal assets, including initiatives related to grain milling and other ventures in the field of agriculture. As per the report provided by World Vision Australia, a prominent sponsor of the project, it can be observed that the project has achieved significant success in terms of generating revenue through the sale of carbon credits to the World Bank, carbon sequestration, and investment in local infrastructure (World Vision Australia, 2023). Therefore, the involvement of the local community enhances the acceptance of sustainable entrepreneurship by small, medium, and micro enterprises (SMMEs), as well as increased social support.

Expanding capabilities at the community level is crucial in achieving progress in sustainable development (Maboqune, 2007:16782). Capability deprivation refers to the inability to enact improvements that would benefit the overall welfare of a community due to various factors, such as insufficient social support, limited access to education, inadequate healthcare systems, and lack of tangible assets. According to Mabogunje (2007:167), a project was initiated in the Nigerian city of Ijebu-Ode in 1998. The primary aim of this project was to tackle capability deprivation to provide guidance for poverty reduction efforts and promote sustainable development. The project employed a collaborative approach to actively involve the entire community in both the conceptualization and execution of the plan. Implementing this lateral method facilitated the consolidation of indigenous knowledge, the recognition of expertise, and the promotion of innovative thinking. According to Mabogunje (2007:16783), there was a notable increase in employment, a reduction in poverty, an improvement in skill

levels, and the establishment of cooperatives in the agribusiness field after 7 years. SMMEs have the potential to leverage local knowledge to augment the sustainability of their enterprises.

In a broad sense, regional networks function as platforms for exchanging resources and commercial information and engaging in social activities (Arbuthnott & von Friedrichs, 2013:374). Furthermore, it has been argued that networks have the potential to facilitate the sharing of experiences (Herslund, 2012:237). In a more detailed manner, four distinct instrumental incentives for collaboration have been identified: a) the promotion of innovation, b) the acquisition of non-financial resources, c) the acquisition of financial resources, and d) the access and cultivation of markets.

Facilitating innovation and promoting knowledge exchange: SMEs lacking specialisation or market dominance sometimes encounter difficulties accessing pertinent knowledge. This holds particular significance in rural regions. Establishing networks and interactions plays a crucial role in facilitating the organisation of information flows necessary to adapt products, skills, and processes. In this context, cooperation partners of significant relevance encompass suppliers and clients who contribute to product innovation and co-creation (Salone, Bonini Baraldi & Pazzola, 2017:2119). Additionally, research and education institutions serve as valuable entities for transmitting information and innovations. SMEs can collaborate with actors from their region or beyond territory to acquire or share knowledge (Tregear & Cooper, 2016:104). One noteworthy observation is that knowledge-oriented interactions seem more prevalent between SMEs and players from other regions than those within the same area (Bjerke & Johansson, 2015:223). The observed phenomenon can be attributed to the presence of a predominantly homogeneous local culture and the potential limitations in the knowledge base within a specific location (Bjerke & Johansson, 2015:223; Ramsey *et al.*, 2013:344; Reidolf, 2016:320).

SMEs often rely on collaborative efforts to access non-financial resources and services to overcome their restricted resource base. However, finding suitable companions is typically challenging due to their limited availability. Indeed, it is commonly observed that SMEs located in rural regions frequently have constraints in terms of their ability to avail manufacturing services (Jarvis & Dunham, 2003:249),

information and communication technology (ICT) services (Anderson, Wallace & Townsend, 2016:453), and particularly human capital resources, including skilled labour (Fortunato, 2014:389; Herslund, 2012:237; Reidolf, 2016:320). In light of this context, SMEs endeavour to use networks to identify suitable partners and cultivate ties that can facilitate the establishment of exchange arrangements, such as long-term partnerships with educational institutions.

The ability to obtain financial resources is often a significant obstacle to the expansion of SMEs as a result of the closure of rural banks (Fortunato, 2014:389) and the clustering of financial institutions in larger urban areas (Mercieca, Schaeck, & Wolfe 2009:140). Moreover, scholarly investigations suggest that traditional financial institutions exhibit reluctance to provide financial services to SMEs operating in the agricultural sector, particularly in rural regions (Price, Rae & Cini, 2013:486). In light of the context mentioned above, our comprehensive literature study has shown a modest yet restricted body of research about alternative avenues of financial resources. The sources cited in the text identify various sources of financing for businesses, such as trade credits (Deloof & La Rocca, 2015:908), crowdfunding, private equity funders, local authority loan funds (Price *et al.*, 2013:486), joint public–private investments (Arbuthnott & von Friedrichs, 2013:374), and venture capital (Avdeitchikova, 2009:102; Klagge & Martin, 2005:389; Meccheri & Pelloni, 2006:374).

Although SMEs in the agriculture sector hold significant potential, venture capitalists tend to prefer high-tech enterprises (Avdeitchikova, 2009:102; Klagge & Martin, 2005:389; Meccheri & Pelloni, 2006:374). These high-tech enterprises are predominantly concentrated in urban regions (Avdeitchikova, 2009:102). Consequently, agricultural SMEs in rural areas frequently have limitations in securing official venture financing, thereby resorting to informal sources. Following this thesis, it is noteworthy that these instruments embody collaboration through relationships, such as informal venture capital or trade credits provided by longstanding suppliers (Deloof & La Rocca, 2015:908).

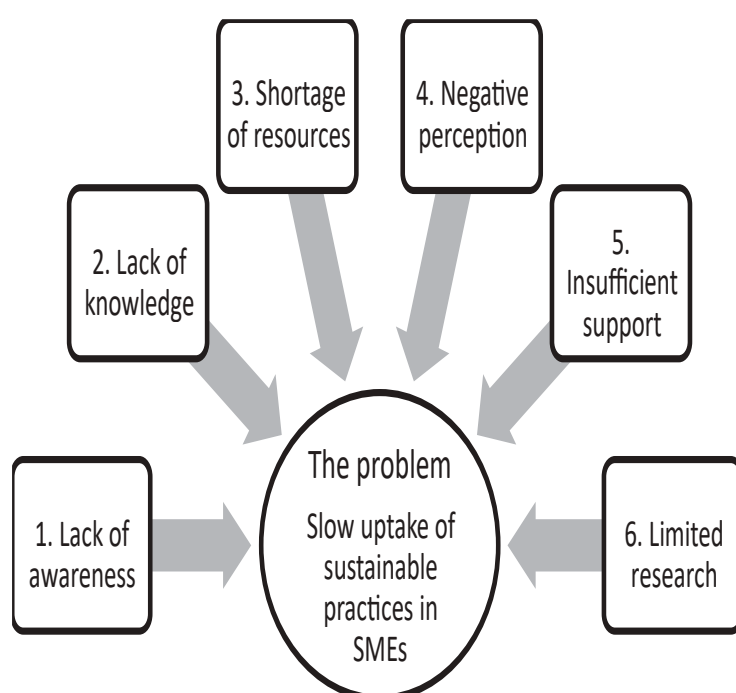
Accessing, establishing, and securing markets is challenging for SMEs because rural markets are constrained. Consequently, these SMEs encounter difficulties in transitioning their local consumer base. Establishing enduring, relationship-oriented

partnerships with clientele can facilitate collaborative innovation and co-creation (Salone *et al.*, 2017:2119) and ensure consumer ties' longevity. Simultaneously, SMEs can utilise networks to discover novel client bases and marketplaces (Dubois, 2016:5), both inside their immediate environment and outside.

3.11 BARRIER TO THE ADOPTION OF SUSTAINABILITY BY SMMEs

SMMEs derive significant advantages from embracing sustainable entrepreneurship. However, it is noteworthy that many SMMEs exhibit limited engagement in sustainability activities. This observation indicates that SMMEs face challenges and obstacles when adopting sustainable entrepreneurship programmes. This study aims to identify the barriers that hinder the adoption of sustainable practices by SMMEs, as depicted in Figure 3.1.

Figure 3.1: Barriers to adoption of sustainable practices in SMMEs



Source: Mitchel *et al.* (2020:160)

The topic of sustainability in SMMEs has received limited attention in the past, but there has been a recent surge in studies on this subject (Klewitz & Hansen, 2014:60; Demirel & Ozturk, 2019:5). The absence of environmental advancements in SMEs

may suggest a lack of awareness regarding their potential and the necessary actions to harness the associated advantages (Demirel & Ozturk, 2019:5). According to Mitchel *et al.* (2020:160), it is imperative to provide support to SMMEs to enhance their sustainability. Furthermore, the assistance provided should be customised to cater to these enterprises' specific needs and requirements. Based on recent research findings, it has been determined that the existing supports are insufficient, and there is limited empirical proof of their efficacy (Romero-Martinez *et al.*, 2010:673; Arbačiauskas *et al.*, 2010:59; Uhlaner *et al.* 2010:8; Hampton 2018:386).

3.11.1 Lack of awareness

The topic of sustainability in SMMEs has received limited attention in the past, but there has been a recent surge in studies on this subject (Klewitz & Hansen, 2014:60; Demirel & Ozturk, 2019:5). The absence of environmental advancements in SMEs may suggest a lack of awareness regarding their potential and the necessary actions to harness the associated advantages (Demirel & Ozturk, 2019:5). According to Mitchel *et al.* (2020:160), it is imperative to provide support to SMMEs to enhance their sustainability. Furthermore, the assistance provided should be customised to cater to these enterprises' specific needs and requirements. Based on recent research findings, it has been determined that the existing supports are insufficient, and there is limited empirical proof of their efficacy (Romero-Martinez *et al.*, 2010:673; Arbačiauskas *et al.*, 2010:59; Uhlaner *et al.* 2010:8; Hampton 2018:386).

3.11.2 Lack of knowledge

One of the obstacles preventing SMMEs from embracing sustainable practises is their limited understanding of sustainability, which includes a lack of awareness regarding the legislation related to environmental concerns (Côté, Booth & Louis 2006:545; Fernández-Viñé, Gómez- Navarro & Capuz-Rizo, 2010:738). According to the research conducted by Simpson *et al.* (2004:158), most SMMEs believe that incorporating effective environmental practices does not confer a competitive advantage or yield commercial gains. Furthermore, these enterprises perceive such practices as an additional financial burden that cannot be transferred to customers. In addition, Van Hemel & Cramer (2002:442) noted a lack of definitive data about the

environmental advantages associated with adopting sustainability. This observation indicates a lack of comprehensive knowledge and awareness among SMMEs on the benefits of sustainable efforts.

In their study, Butkouskaya *et al.* (2020:6) researched the primary barriers to establishing new sustainable businesses. The findings indicated that financial factors exert the most significant influence on entrepreneurial intentions. However, educational, technological, governmental support, legal, and sociocultural factors were found to be nearly equally substantial. Additionally, it was shown that the absence of structured entrepreneurship education and informal elements such as support or incentives hinder the advancement of sustainable business. This observation aligns with the research conducted by Tunio *et al.* (2021:14), wherein it was discovered that engagement in an entrepreneurship course serves as a catalyst for fostering sustainable entrepreneurship. The authors found that SMMEs with entrepreneurial skills are highly motivated to capitalise on entrepreneurial prospects.

3.11.3 Shortage of resources

The adoption of sustainability by SMMEs is hindered by a lack of resources, including financial and human resources (Fliess & Busquets, 2006:18; Aragón-Correa *et al.*, 2008:91). Resource obstacles can be further categorised into two types: financial barriers and human resource barriers. Financial constraints encompass challenges such as insufficient finance for environmental initiatives and extended return on investment periods. The insufficiency of human resources in quantity and quality can provide a significant obstacle for SMMEs in their pursuit of effective environmental management.

It's worth noting that adopting sustainability programs is frequently regarded as too expensive, particularly for SMMEs with little financial resources and/or when survival is often the most pressing economic need (Inyang, 2013:129). While agreeing with the general thrust of the debate on sustainable entrepreneurship, Bergh (2013:12) added that sustainable entrepreneurs face more significant challenges in obtaining seed funding than commercial entrepreneurs because they typically work under difficult conditions on difficult-to-solve problems and are thus considered high-risk ventures.

Sustainable entrepreneurs are denied financial support due to the time it takes for their products to become economically viable.

3.11.4 Negative perception

According to Wooi and Zailani (2010:24), a prevailing negative impression exists regarding the absence of quick advantages for organisations. According to Min and Galle (2001:1224), the primary hindrance to incorporating sustainability factors into SMME processes is worry over costs. Hence, SMEs exhibited a limited awareness of the necessity of environmental enhancement.

It should be mentioned that a lack of awareness of the benefits of sustainable entrepreneurship is a crucial impediment to SMMEs adopting sustainable entrepreneurship. Academic studies have presented several advantages to implementing sustainability. However, most of them have been limited to large corporations. While SMMEs perceive some benefits from sustainability implementation, Yu (2004:16) notes that the overall net profit may be negligible or negative due to their fledgling economies of scale and high management expenditures. Furthermore, where benefits have been realized, some SMMEs may lack the cognitive capacity, knowledge, or inclination to measure them (Friedman & Miles, 2002:328).

3.11.5 Insufficient support

Insufficient assistance and instruments to facilitate the implementation of sustainable entrepreneurship by SMMEs constitute an additional obstacle (Arbačiauskas *et al.*, 2010:60; Romero-Martinez, Ortiz-de-Urbina-Cria & Soriano, 2010:673). The current knowledge of emerging technologies, materials, operations, and industrial processes is sometimes inaccessible to upper management, particularly in SMEs. Additionally, technical support within the sector is not consistently kept up to date. The absence of technical proficiency is, moreover, a significant obstacle.

SMMEs require suitable support services to help them adopt and implement sustainable entrepreneurship programs (Inyang, 2013:129). Legislative support,

sector-specific moral support, training and needed empowerment support, and financial help are all examples of insufficient or ill-suited external support (Yu, 2004:6). Statutes and regulations and government service providers frequently ignore the unique demands of sustainable enterprises. Moral support and focused encouragement are also required to help sustainable entrepreneurs scale up to the point where they can attract severe funders and investors who are willing to fully commit to the products and markets they are attempting to service (Bergh, 2013:13). Crals and Vereeck (2004: 11) further indicated that the support systems are too broad, too passive, too costly, time-consuming, and under-promoted. According to Gutterman (2020:33), government departments lack the necessary resources, expertise, and incentives to assist and support sustainable companies.

3.11.6 Limited research in SMEs and the environment

Insufficient investigation of the environment by SMMES is identified as a hindrance (Daddia, Testaa, & Iraldoa, 2010:75). SMMES frequently exhibit a deficiency in awareness and information dissemination, resulting in a lack of knowledge among management on organisational issues. The organization's activities may not be comprehended regarding their environmental implications. Additionally, the internal communication inside the organisation may be lacking in strength. In addition to the challenges mentioned above, a prevalent issue SMMES encounter is the limited exposure level.

The management lacks access to information regarding the initiatives undertaken by other organisations and their corresponding levels of success. The top management frequently lacks awareness regarding the advantages of adopting a system-based strategy integrated with the business environment. According to Van Hemel and Cramer (2002:442), SMMES face challenges in meeting design-for-environment standards due to insufficient research, which hinders their ability to identify alternative solutions for product design

3.11.7 Attitudinal and perception barriers

Resistance to change is a prevalent attitude frequently noticed within the upper echelons of management, particularly in the context of SMMEs. The predominant factors contributing to this mindset are apprehension towards unfamiliar circumstances and anxiety towards unsuccessful outcomes. Another study reported by Van Hemel and Cramer (2002:443) suggests that SMMEs have difficulties when it comes to adopting sustainable products. One of these barriers is the lack of attitude among SMMEs that sustainable entrepreneurship is their responsibility. This finding aligns with the results obtained by Perron (2005:86), who also identified attitudinal and perception barriers concerning sustainable entrepreneurship.

Walker *et al.* (2008:72) suggest that a more significant number of exterior obstacles exist compared to interior constraints. The external barriers encompass regulatory limitations, inadequate supplier dedication, and industry-specific obstacles. In contrast, the internal challenges pertain to cost considerations and a deficiency in legitimacy. According to Walker *et al.* (2008:72), existing literature suggests a greater prevalence of inner obstacles than exterior barriers.

3.12 SMMEs SECTOR IN ZIMBABWE

In certain nations, establishing an SME is driven by personal choice or a deep-seated passion. In Zimbabwe, individuals' primary focus is securing work opportunities for survival. However, it is worth noting that if such endeavours lead to the generation of wealth for entrepreneurs, it is considered an additional benefit (Zvarivadza, 2018:51). SMEs play a significant role in the local state and government by providing job opportunities to local populations and making contributions to the fiscal system. SMEs are crucial in driving economic growth and alleviating poverty.

Zimbabwe's SME sector encompasses various economic entities: self-employed individuals and dynamic enterprises. These entities are primarily concentrated in urban areas and engage in multiple economic activities such as manufacturing, services, food processing, agriculture, safari and tourism, restaurants, and retail sectors (Moyo & Mandizwidza-Moyo, 2017:18). Given their limited international competitiveness, the primary focus of most SMEs tends to be on the home market. According to Mungozhi and Hlabiso (2017:38), the adverse economic conditions

experienced by the country have led to the closure of numerous large corporations, hence contributing to a significant rise in unemployment rates. Consequently, SMEs have emerged as the sole remaining avenue for economic sustenance.

In most SMEs, the proprietors typically do not establish a clear distinction between their ownership and control over the operational aspects of the organisation. Typically, these businesses lack external equity owners who hold separate ownership stakes. According to Zvarivadza (2018:51), the government's tax regimes and regulatory frameworks have been identified as factors that influence SMEs' efficiency, progress, and expansion. SMEs face various obstacles that significantly impact their operations, such as the scarcity of raw materials, rivalry from larger firms, and limited access to financial support from financial institutions. Chigora and Zvavahera (2015:8) examined the pivotal role of SMEs in fostering and advancing domestic economies and ensuring fair and sustainable development. As countries undergo development and their economies mature, certain SMEs have the potential to transform into significant enterprises. Consequently, implementing development initiatives is often regarded as a remedy for fostering economic growth.

According to Wadesango (2015:746), promoting and maintaining SMEs in Zimbabwe has been a significant concern, with the Small and Medium Enterprises Development Corporation as the focal point. A parastatal entity is established through legislation enacted by the parliament to facilitate the advancement of SMEs and cooperatives within the nation. This is achieved through the provision of financial assistance and the enhancement of their capabilities. In contrast to the circumstances observed in industrialised countries like the United States of America, Zimbabwe's approach to the growth and promotion of SMEs exhibits a lack of dedication towards sponsoring research and fostering initiatives for technological innovation (Makanyeza & Dzvuke, 2015:200).

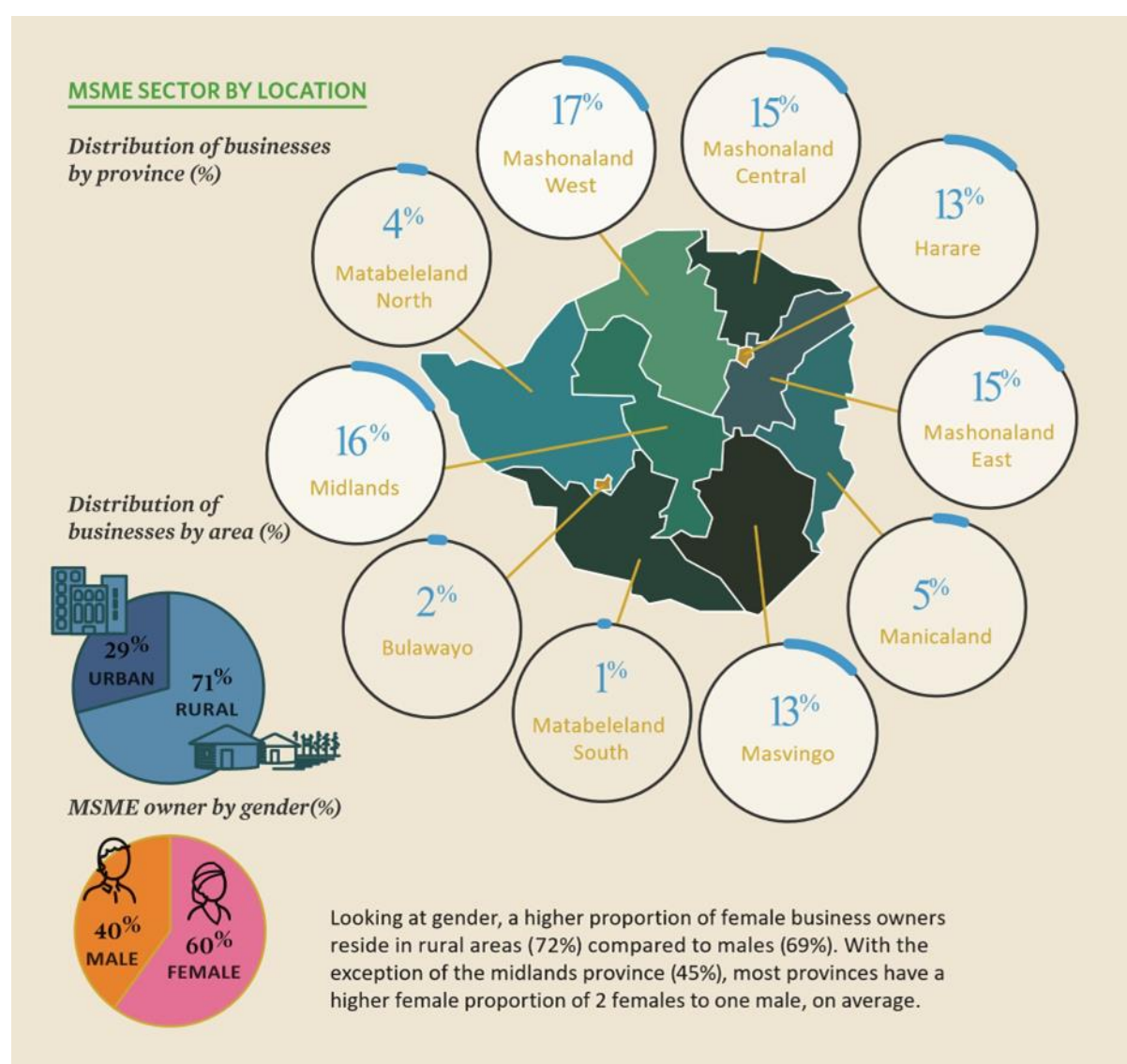
The most recent survey of SMMEs in Zimbabwe was conducted in 2022. The survey was conducted by FinScope MSME Zimbabwe. It was specifically designed to engage a diverse group of stakeholders through a thorough consultation process. This enhances the survey's quality and guarantees its suitability and acceptance by stakeholders. The steering committee responsible for overseeing the project consisted

of various key stakeholders, including the Reserve Bank of Zimbabwe, the Ministry of Finance and Economic Development, the Zimbabwe National Statistics Agency, the Securities and Exchange Commission of Zimbabwe, the Insurance and Pensions Commission of Zimbabwe, the Ministry of Women Affairs, Community, Small and Medium Enterprises, the Small and Medium Enterprises Association, the Zimbabwe Association of Microfinance Institutions, the World Bank, and the Bankers Association of Zimbabwe. FinMark Trust provided expert technical assistance and project management. The data was obtained through the efforts of Probe Market Research, with appropriate statistical oversight, including sampling and weighting techniques. The Zimbabwe National Statistics Agency also provided quality control measures for data gathering (FinScope, 2022:1).

The survey findings unveiled the current state of Zimbabwe's SMMEs sector. The data suggests that most SMMEs are located in rural areas, accounting for 71% of the total SMMEs. Conversely, metropolitan areas are home to 29% of these enterprises, as depicted in Figure 3.2. When examining the gender variable, it becomes apparent that many owners of SMMEs are female. Specifically, female owners constitute 60% of the total, while their male counterparts comprise 40%.

By employing geospatial modelling techniques, it is evident that the spatial distribution of SMMEs exhibits a concentration in the Mashonaland region. Among the Mashonaland provinces, Mashonaland West demonstrates the most incredible attention of SMMEs, followed by Midlands and, subsequently, the other areas within Mashonaland (namely Central and East). The regions with the lowest population are Matabeleland South, Bulawayo, and Matabeleland North.

Figure 3.2 Distribution of SMMEs in Zimbabwe



Source: FinScope (2022:9)

On sectoral distribution, the survey affirmed that Zimbabwe is an agro-economy. The agricultural sector has the most outstanding number of SMMEs, representing 39.2% of the total SMMEs. The second highest sector, as shown in Table 3.4, is wholesale/retail, followed by tourism. The sectors with the least SMMEs are construction, community and households, natural resources and mining. There are few SMMEs in the mining sector because it is capital-intensive; it requires a lot of capital to venture into mining.

Table 3.4: Size and sectorial distribution of the SMMEs sector

Sector	SMMEs	Percentage of sector
Agriculture/Farming	643 314	39.2%
Wholesale/Retail	611 583	37.3%
Tourism	86 300	5.3%
Manufacturing	80 349	4.9%
Other service activities	76 762	4.7%
Business services	60 796	3.7%
Construction	28 817	1.8%
Community and households	27 252	1.7%
Natural Resources & Mining	24 634	1.5%

Source: FinScope (2022:9)

The survey conducted in Zimbabwe has yielded findings and suggestions about the current state of the SMMEs sector.

- The MSME sector is a crucial driver of economic growth, as seen by its contribution to GDP and employment. Following the COVID-19 epidemic, there has been a notable rise in both the estimated number of employees and the sector's profit contribution to GDP, reaching USD 8.6 billion. The ongoing trend of attracting more adult females is crucial in mitigating the gender disparity.
- In 2022, there was an increase in individual entrepreneurs, highlighting the sector's significance as a source of income for many adult Zimbabweans. This trend is particularly notable due to the prevailing low levels of personal monthly payment among individuals involved in this sector. Nevertheless, this group holds significant importance for aspiring entrepreneurs introducing groundbreaking products and services. Notably, most of these ventures (55%) are in the initial stages of establishment and expansion. Over time, the growth of this sector will result in the development of other categories under the micro, small, and medium enterprise category. Nevertheless, the industry is presently characterised by a prevalence of individual and micro-enterprises, most of which are owned by women entrepreneurs.
- The rate of improvement in formalisation has remained stagnant at 14% over the last decade, with the individual to small firms' sector exhibiting the lowest proportion of progress. The primary obstacle arises from the firm's scale,

wherein the enterprise is either insufficiently tiny or lacks the necessary financial resources for registration. Therefore, business proprietors express a willingness to formalise their operations provided the procedure is made accessible without cost and effectively sensitised to educate businesses about the advantages of formalisation.

- The association between compliance and formalisation has been predominantly established, as the advantages of formalisation mostly pertain to adherence to legal requirements and the prevention of potential scrutiny or interference from governing bodies. Regrettably, this stigma hinders the formalisation process and its potential advantages to business owners or enterprises.
- Business support is crucial in facilitating enterprises' development, expansion, and long-term viability. The awareness regarding support institutions is substantial, although the use of these institutions is notably lower. It is imperative to focus on enhancing the recognition and understanding of the Chamber of Small and Medium Enterprises (SMEs) and the Small and Medium Enterprises Development Company (SMEDCO), among other relevant entities.
- The utilisation of technology within the industry seems to be restricted to communication devices and social media platforms, mainly employed for marketing objectives, with a focus on mobile phone applications. The online presence of SMEs in Zimbabwe is now at an early stage of development. However, expanding this online presence will necessitate establishing a robust digital payments infrastructure to facilitate its growth.
- The COVID-19 pandemic has affected SMEs, specifically in sectors that interact directly with consumers and provide non-essential services. These sectors include community and household services, business services, manufacturing, and construction. Various mechanisms were employed to manage the situation, such as implementing business and/or product diversification strategies. Additionally, a small proportion, approximately 5%, of the participants sought financial assistance from government relief programmes.
- Most SMEs primarily engage with individual consumers. Still, some SMEs participate in value chains, connecting them to other SMEs, large corporations,

and government entities. There is a prevailing view that huge enterprises have facilitated avenues for SMEs, necessitating supplier development programmes to elevate the sector's involvement in higher-value chains.

- There is a collective sense of optimism regarding the perceived performance of the firm. Nevertheless, within the business realm, persistent obstacles persist in the form of difficulties in obtaining financial resources, which encompass both the acquisition and expense of funding. Additionally, operational and growth challenges manifest themselves through cashflow constraints. There is a demand for products that effectively address these specific business requirements.
- The limited availability of energy is identified as a significant limitation, with just 30% of SMEs having access to electricity. Approximately 40% of SMEs emphasise infrastructure challenges related to inadequate business premises and storage facilities.

The following sector highlights the role and contribution of these SMMEs to Zimbabwe's economic development.

3.13 THE ROLE OF SMMES IN ZIMBABWE'S ECONOMIC DEVELOPMENT

The significance of the SME sector in the Zimbabwean economy is paramount in attaining overarching development goals, including poverty reduction, job creation, and promoting local ownership of resources within the economy (Chidoko *et al.*, 2011:27). SMEs contribute positively to the development of Zimbabwe due to their capacity for innovation, adaptability, affordability in terms of initial investments, and potential for quick growth (Maseko, 2011:54). SMEs offer a possible resolution to the prevailing employment challenges in Zimbabwe, as a significant portion of the population is engaged in this particular segment of the economy (RBZ, 2009). According to Nyoni (2002:2), the empirical evidence suggests a lack of adequate investment in the Zimbabwean economy, resulting in insufficient job creation opportunities for the annual influx of 300,000 graduates.

SMEs catalyse economic growth, enhance living standards, and generate employment opportunities. According to Zindiye *et al.* (2008:36), in light of the closure

of major corporations and the reduction of their operations, SMEs possess the potential to provide job opportunities for individuals. If provided with support, the SME sector has the potential to contribute to the revival of the economy by generating employment opportunities, developing novel products and services, and introducing innovative technologies. The burgeoning enterprises will assimilate the expanding workforce of school leavers and university graduates. According to Maseko (2011:54), this will contribute to cultivating the entrepreneurial mindset within the community. SMEs contribute to the economy by harnessing and encouraging extensive entrepreneurial potential, facilitating a broad economic foundation and wealth generation. They enhance the nation's wealth by fully utilising the human resources available in the country, fostering a self-sustaining economic structure with significant sectoral interconnections, and promoting indigenous ownership of investments in the economy (Karedza *et al.*, 2014:39).

Many countries recognize SMMEs' contributions to their economy, particularly their significant share of overall goods and services production. Chinembiri (2011:22) claims that SMMEs have played a vital part in Zimbabwe's economic development. The author says SMMEs are more responsive to market opportunities since they require less capital and can create considerable long-term employment for skilled and semi-skilled workers (Chinembiri, 2011:22).

Karedza *et al.* (2014:40) agree with Chinembiri that SMMEs are critical to the development of any economy because they have great potential for job creation, local technology improvement, output diversification, the development of indigenous entrepreneurship, and forward integration with large-scale industries. Much of the current literature on SMMEs' contribution to Zimbabwe's economic development can be summarized as a breeding ground for new businesses, a seedbed for large-company growth, innovation centres, competition stimulators, women's empowerment vehicles, job creation centres, and training and savings mobilization centres, as further elaborated below.

3.13.1 An incubator for fresh business ideas and entrepreneurs

SMMEs are the foundations of any prospect for the encouragement of new business endeavours, including the recruitment of more entrepreneurs, as Chinembiri (2011) and Tonis (2015) both point out. The following circumstances entail this: financial or capital requirements are relatively cheap; technical requirements are not very demanding; extensive administrative expertise is not required; and marketing expenditures are minimal because the market for goods produced or resold is local (Chinembiri, 2011:23). SMMEs, according to Tonis (2015:43), foster an entrepreneurial spirit, creativity, and are critical in increasing competitiveness and employment.

3.13.2 As a seedbed for the development of big corporations

SMMEs have acted as the seedbed from which larger firms have grown in Zimbabwe. As a result, there is little need to emphasize that many great corporations began as modest family firms or single-man operations that, despite all odds and, in some cases, prolonged hardships, managed to survive and grow large (Chinembiri, 2011:23). Given the preceding, it is evident that SMMEs are the cradle of entrepreneurship, with individual creativity and innovation serving as the driving force.

3.13.3 Encourage creativity and adaptability

SMMEs are a source of collective innovation, according to a significant and expanding body of literature (Hodgetts & Kuratko, 1995:56; Landoni *et al.*, 2016:485; Moyo & Mandizwidza-Moyo, 2017:18). Smaller businesses are more adaptable, dynamic, and responsive to market swings than larger businesses. They can also provide new ideas, materials, techniques, and services. Their adaptability allows them to quickly change their production matrix in response to the evolving demands in their field and capacity. SMMEs are also a potential source of innovation because they are capable of producing two and a half times as many innovations as major enterprises when measured by the number of people employed (Hodgetts & Kuratko, 1995:58). While agreeing with Hodgetts and Kuratko (1995:58), Landoni *et al.* (2016:487) add that innovation is one of the most significant engines for corporate growth, and that good innovation may move a company forward in its industry. Furthermore, adopting new technologies can boost the development of individual businesses on a micro level,

with macro-level consequences. The adoption of innovation by SMMEs increases their competitiveness, making it critical for policymakers to recognize the levels of innovation that SMMEs engage in, as well as their dedication to formulating policies aimed at increasing competitiveness in Zimbabwe (Moyo & Mandizwidza-Moyo, 2017:16).

3.13.4 Assistance to large corporations

The complementary supplier and customer ties that SMMEs have with other businesses are another way that they contribute to local and regional economic development. Suppliers to large corporations are one function that SMMEs can play, adding to these organizations' external competitiveness. In Zimbabwe, more small businesses are serving as specialists for big corporations. This can be seen in the growing involvement of small businesses, particularly in acquiring specialized equipment for supply to large organizations. Many large corporations rely heavily on SMMEs for various parts and auxiliary services. SMMEs are also frequently used by large corporations to distribute their products to consumers (Chinembiri, 2011:24). Most SMMEs' production serves as parts or semi-processed goods and services for large-scale businesses, according to Hyder and Lussier (2016:88). Local producers and large-scale firms are linked via mutual industrial linkages created by SMMEs.

3.13.5 Create a competitive environment

According to Chinembiri (2011), one distinguishing feature of SMMEs is that they promote competition in the industry in which they operate. SMMEs can generate competition among themselves and larger enterprises that rely on them since they are more flexible, dynamic, and sensitive to demand movements than larger firms. This improves total country efficiency. Due to the availability of substitutes, they have developed new products and services that have helped lessen monopolies' influence, encourage quality improvement, and regulate prices (Mapeto *et al.*, 2015:116). SMMEs play a vital role in boosting competition and introducing new items to the market.

3.13.6 Training

Chinembiri (2011:25) and Mapeto *et al.* (2015:116) suggest that SMMEs can help industrial workers and entrepreneurs increase their skills and knowledge. The organisation needs to be able to govern for continuing success and growth when the entity becomes established and continues to grow. SMMEs have served as a training ground for semi-skilled workers with no prior job experience in Zimbabwe and those laid off from other industries. Employees at SMMEs are trained to manage multiple tasks at once, resulting in more varied learning experiences than they would have had if they worked for a large corporation (Chinembiri, 2011:25). Mapeto *et al.* (2015:115) discussed the critical roles of SMMEs in Zimbabwe, including job creation, resource utilisation, limiting the challenges of rural-urban migration, vital breeding space and nurturing grounds for local entrepreneurial capacities, and improving the technical skills of the local population.

3.13.7 Women's empowerment

SMMEs contribute to the social and economic empowerment of underprivileged populations. The process of engagement in their enterprise's everyday activities, such as attending meetings and other interactions in the public domain that arise as a result of economic activity, strengthens women's access to knowledge. This gives women the confidence to participate in social and financial organizations and hold leadership roles (Chinembiri, 2011, 25).

3.13.8 Mobilization of savings

According to several pieces of research, SMMEs also aid in enhancing savings in two ways (Chinembiri, 2011:25; Musa & Chinniah, 2016:256; Ndikubwimana, 2016:4). To begin with, most SMMEs receive their initial funding from personal sources. Second, regarding permanent assets like buildings, machinery, and equipment, SMMEs are likelier to spend less. Despite their spending, SMMEs tend to make the most of their assets. Small businesses also buy, use, and frequently revitalize used capital equipment (recycling) to lower enterprises' risks and long-term costs of entrance and expansion (Chinembiri, 2011:25).

3.13.9 The creation of jobs

Musa and Chinniah (2016:256) and Lekhanya (2015:415) have sought to explain why the Zimbabwean economy has suffered protracted economic deterioration marked by company closures and reductions. For the bulk of workers laid off from large businesses in the formal sector, SMMEs have been a primary source of employment. Because SMMEs use labour-intensive technology, they directly influence job creation. According to Ndikubwimana (2016:7), SMMEs assist economies in fostering entrepreneurship and innovation, contributing to the economy by employing many people and playing a significant part in economic development. SMMEs provide workers and entrepreneurs disposable money, improving their living standards and alleviating poverty by providing employment and business opportunities.

3.13.10 Long-term development

SMMEs, according to Musa and Chinniah (2016:256), are more adaptable and responsive to frequent changes in the modern global environment than significant corporations. Some SMMEs engage in primary and secondary economic activities that rely primarily on materials sourced locally (Muzamwese, 2016:512). As a result, they achieve high-value-added operations activities, which are critical to any economy's growth and development. According to Afrifa and Tauringana (2015:721), the SMME sector's crucial role in the economy can only be realized if supportive, solid government policies are in place to help them gain access to resources. Hollender, Zapkau, and Schwens (2017:257) examined the relevance of SMMEs in contributing to output, achieving social objectives, bringing foreign reserves into a country, and creating employment at various stages of economic development. SMMEs might efficiently operate in rural locations, surviving on minimal industrial infrastructure and acting as catalysts for industrial dispersion and long-term economic growth. Owners of SMMEs contribute to economic and social development, according to Muzamwese (2016:513), by assisting technical innovation and managerial abilities, income generation initiatives, using local raw materials, and being a change agent in economic and social transformation. SMME owners give chances for the development of local skills and the learning of technology through adaptation. The SMME sector, according

to Lekhanya (2015:415), is widely recognized as a vital driver of developing socio-economic activity.

3.14 BARRIERS TO SMMES DEVELOPMENT IN ZIMBABWE

The Zimbabwean SMEs have encountered several constraints, as indicated in the literature (Nyoni, 2002:10). The primary limitations identified are as follows:

- Limited access and cost of finance.
- Lack of marketing skills and market knowledge.
- Inadequate management and entrepreneurial skills.
- Lack of access to infrastructure.
- Lack of access to land.
- Lack of information
- A hostile regulatory environment.

SMEs encounter challenges in obtaining sufficient financial resources due to their perceived lack of collateral security, which diminishes banks' interest in funding their business operations. The interest rates charged by banks for financing SME activities are significantly elevated, resulting in substantial costs. The deficiency in marketing skills and insufficient understanding of the market harms SMEs' business operations, hindering their ability to effectively attract and retain clients. Inadequate market knowledge also leads to SMEs failing to meet client demands virtually. In addition, the limited presence of managerial and entrepreneurial competencies hinders the development and expansion of SMEs in Zimbabwe (Nyoni, 2002:10).

Additionally, a significant deficit in infrastructure, encompassing land, buildings, machinery, and equipment, hinders the efficient execution of their operational endeavours. The inadequate availability of market information and the dynamic shifts in customer trends and preferences harm SMEs. This is further exacerbated by an unfavourable regulatory environment that adds to the underperformance of SMEs in Zimbabwe. The challenges SMEs face in maintaining effective operations might be

attributed to the frequent modifications in government policy (Ngwenya & Ndlovu, 2003:5).

SMEs operating in Zimbabwe encounter significant obstacles in accessing transport services. They grapple with limited equipment and inadequate resources to effectively carry out their planned business operations. SMEs in the manufacturing sector encounter challenges when acquiring transportation infrastructure to distribute their completed goods to the market. The performance of a corporation is significantly influenced by its internal environment, as stated by Chadamoyo (2012:8). The primary component of the internal environment of SMEs pertains to the capacity of top-level managers to formulate and implement strategies that provide desirable outcomes. The SME sector in Zimbabwe is now facing challenges, including a deficiency in suitable managerial expertise required for effective business operations. The absence of formal management training tailored explicitly for SMEs is an inherent weakness within these firms. This deficiency immediately becomes a crucial component that hinders the growth and expansion of such enterprises (Yan, 2010:12). This issue is exacerbated by the limited availability of financing, which restricts the establishment of legal frameworks, access to markets, high-quality products, and the bureaucratic process of registration (Masuko & Marufu, 2003:29).

SMEs in Zimbabwe exhibit a deficiency in essential human resources skills, marketing skills, financial management abilities, and general management skills, hence jeopardising the sustained viability of this sector within the nation. The absence of practical managerial skills significantly hinders the progress of Zimbabwe's SME sector. The current regulatory environment in Zimbabwe poses challenges for establishing SMEs. SMEs have constraints in accessing the market due to the dominance of large corporations. Small and Medium Enterprises continue to struggle to produce high-quality products that adhere to international standards. This is mainly attributed to their limited financial resources, which hinder their capacity to procure quality raw materials. According to Chadamoyo (2012:11), SMEs are often perceived as having inadequate management practises, disorganised operations, and a dependence on outdated technologies, producing subpar products and services that fail to attract clientele.

SMEs are seeing intense competition because of the process of globalisation. Globalisation poses many difficulties and opportunities for SMEs (Bowen, Morara, & Mureithi, 2009:10). The complexities surrounding small-scale industries have intensified. Small and medium-sized enterprises face challenges competing in a globalised market due to the necessity of conforming to international product standards. The limited access to capital experienced by SMEs hampers their capacity to acquire high-quality raw materials, hence diminishing their competitiveness (Nyoni, 2002:9). Furthermore, it is worth noting that SMEs in Zimbabwe are currently facing negative coverage in the Western media, as well as grappling with fuel shortages. These challenges significantly contribute to the alarming rate of SME failures inside the country (Ndlovu, 2004:19). The adverse publicity leads to a decrease in foreign direct investments, exacerbating the limited access to financial resources faced by SMEs.

SMEs are crucial for fostering economic development. Nevertheless, various obstacles impede their business performance and hamper their potential for expansion. According to Suárez-Ortega *et al.* (2016:28), findings indicate a notable prevalence of unsuccessful SMEs in Zimbabwe and a comparatively low annual rate of new business establishments. According to Asongu and Tchamyou (2016:105), domestic enterprises frequently encounter difficulties procuring goods and services from market vendors. According to Margaretha and Supartika (2016:134), SME owners must comprehensively understand the factors influencing profitability. This knowledge is essential to formulate and implement effective growth strategies for their enterprises.

According to Wang (2016:170), various hurdles have been identified that have a significant impact on the growth of SMEs, with the unique market conditions playing a crucial role in determining the kind and extent of these barriers. According to Sadeghi (2018:74), the impediments to the expansion of SMEs are influenced by multiple factors, and these conditions exhibit variations across different countries. In their study, Kusi *et al.* (2015:709) examined many factors that impede the expansion of small businesses. These categories encompass individual characteristics, environmental characteristics, strategy development, and organisational development. According to Asongu and Tchamyou (2016:106), SMEs are primarily

influenced by various factors, including the leader's personality, skills, motivational development, and personal background. Baporikar *et al.* (2016:193) identified that among most developing nations, communities composed of underprivileged individuals exhibit entrepreneurial orientations primarily motivated by the necessity and intense aspiration for survival. The aspirations of economically disadvantaged individuals to initiate entrepreneurial endeavours can be viewed as a double-edged sword. On the one hand, the pressing need for survival is a powerful motivator for advancement, leading to beneficial outcomes. On the other hand, this need can constrain innovation and the pursuit of diverse business opportunities.

Most SMEs have constraints in accessing foreign exchange and institutional finance. According to Ndikubwimana (2016:7), a significant obstacle to the expansion of businesses is the limited access of SMEs to financial resources. Due to the effects of industrial transformation and government policy alterations, organisations face mounting pressure to maintain sustainability as they expand their markets and contend with more competitors in the context of heightened global market integration. The impact of this has adversely affected the scale of operations for SMEs. According to Gebremariam (2017:58), it can be inferred that a significant number of SMEs face challenges in obtaining financial support from financial institutions due to their limited creditworthiness and management capabilities. Consequently, financial institutions and banks exhibit reluctance in extending loans to small businesses, as they view them as possessing elevated credit risks. Most SMEs are operated as sole proprietorships, leading banking regulators to approach them cautiously.

According to O'Connor and Kelly (2017:161), several obstacles hinder the expansion of SMEs, including limited access to financial resources, inadequate implementation of marketing plans, insufficient availability of competent personnel, and subpar customer service. SMEs play a significant role in fostering economic growth. According to Seo and Chae (2016:709), a considerable obstacle hindering the expansion of SMEs is the need to enhance their performance by effectively managing innovation over an extended period. The absence of succession plans often leads to operational discontinuity in most small and medium-sized enterprises following their owner's demise. The absence of possible continuity for most SMEs following the owner's passing amplifies the financial risk of supporting such organisations.

According to Seeletse and MaseTshaba (2016:43), several primary factors contribute to the failure of SMEs. These factors include (a) insufficient foundational skills and misguided motivations for establishing an SME, (b) inadequate market access, (c) absence or inadequacy of a comprehensive business plan, (d) limited financial literacy and ineffective money/financial management, and (e) challenges in securing the necessary funding. Kulemeka *et al.* (2015:12) examined the obstacles that hinder SMEs' performance and expansion. These challenges encompass several factors: (a) constrained access to financial resources due to the predominant reliance on owner capitalization, (b) inadequate research and development capabilities, (c) weak organisational structures, (d) ambiguous legal and regulatory frameworks, (e) ineffective marketing channels, (f) difficulties in adapting to environmental changes, (g) insufficient managerial resources, and (h) the absence of supportive institutional structures.

In the context of Zimbabwe, SMEs encounter several obstacles, such as intensified competition from imported goods, insufficient education and skills, technical advancements, limited managerial training and experience, inadequate access to financing facilities, flawed market intelligence, and an unsatisfactory legislative and regulatory framework. According to the research conducted by Wanjohi and Mugure (2008:10), the growth of SMEs is significantly influenced by national policy and the regulatory environment, particularly the business climate. The combination of uncertain government policies, widespread corruption, and high taxation rates presents a significant risk to SMEs and the economy (Farsi & Toghraee, 2015:6).

3.15 AGRICULTURAL LANDSCAPE IN ZIMBABWE

Zimbabwe has a total surface area of 390 760km², with agricultural land accounting for 42 per cent, arable land for 10.9 per cent, and permanent cropland accounting for 0.3 per cent. Only 37% of the country receives enough rainfall to support rain-fed food production (FAO, 2013). Natural regions 111, 1V, and V are home to almost 80% of rural households. The rainfall pattern in these places is irregular, exacerbating an already difficult situation by making dry-land cultivation difficult and increasing the danger of food insecurity. Droughts and floods are more likely to occur as a result of global climate change, which has increased variability (Sneller & Schelling, 2014:15).

It is, therefore, unnecessary to emphasize that, in this climate, investing in sustainable agriculture becomes a critical mitigating factor that ensures productivity, farm production, sustainability, and viability.

A little historical context of land allocation is required to comprehend Zimbabwe's agriculture sector completely. About 3000 European farmers were given 51 per cent of the land by the 1931 Land Apportionment Act, while 1.2 million ethnic Africans were confined to native Reserves with generally worse land and irregular rainfall patterns. The 1969 Land Tenure Act cemented the inequitable distribution of land ownership after Southern Rhodesia (the forerunner of today's Zimbabwe) unilaterally declared independence from the United Kingdom in 1965. The forced and arbitrary removal of the African population in support of early twentieth-century land policies fortuitously nurtured the conditions for armed resistance, igniting the liberation struggle in 1964, which culminated in the 1979 Lancaster House Constitution, paving the way for universal adult suffrage and internationally recognised independence in 1980. Since then, land reform has been a top focus for the Zimbabwean government, despite criticism that the eventual push to take over land was marred by a lack of planning (Thomas, 2003:692)

It is critical to remember that the Zimbabwean government set out in 1980 to purchase 8.3 million hectares of land to relocate 162,000 families as part of phase one of its Land Reform and Resettlement Programme (LRRP). However, it only bought 2.6 million ha and resettled 52,000 inhabitants between 1980 and 1989, with 70% resettled by 1983. (Alexander, 1994:335; Christiansen, 1993:1552; Potts & Mutambirwa, 1997:550). A crucial part of the so-called "willing seller" approach at the time ensured that whites only sold land that had been abandoned during the War of Liberation or was otherwise of inferior quality, depriving new settlers of the chance to build a thriving economic sector (Alexander, 1994:343-344; Cliffe, 2000:37). However, over 90% of the families who were resettled at the time were in so-called Model A schemes, in which farmers were given tiny plots of land ranging from 6-7 hectares to cultivate and some grazing area, which was typically shared with other families (Kinsey, 1999:175; Potts & Mutambirwa, 1997:551). The majority of the others (Model B) were collective co-operatives.

By 1990, Zimbabwe had achieved remarkable accomplishments in food security, primary health care, and universal education, making it the envy of many other post-colonial countries. SADCC had assigned the government to ensure enough food reserves throughout the sub-region regarding food security, hence the term "breadbasket" of Southern Africa (Sneller & Schelling, 2014:18).

With time, the government revised its constitution to allow for the forceful purchase of land with "minimal compensation and limited rights of appeal to the courts" after the Lancaster House agreement expired in 1990 (Palmer & Birch, 1992:25). One of the most significant developments of the 1990s was the passage of the Land Acquisition Act in 1991, which made it easier to purchase farms more orderly. The government, with good intentions, planned to buy around half of the remaining commercial farming land under this act. Despite this fundamental goal, donor pressure prevailed, ensuring that the Lancaster House clause of the "willing buyer, willing seller" requirement remained in place and that, given the growing land values at the time, minimal land redistribution, if any, took place (Potts & Mutambirwa, 1997:552).

However, due to a lack of progress on the government's land redistribution initiative, the government initiated the second phase of the Land Reform and Resettlement Programme (LRRP2) in 1997, which was based on forcible acquisition but included compensation measures (Cliff, 2000:43). The government designated many farms for purchase based on the criteria spelt out in the 1990 Land Policy Declaration, still in good faith. These included: when an individual farmer-owned more than one farm, the farmer had to stay with one; second, where the farmer was an absentee landlord; third, where the farm was derelict or under-utilized; and finally, where the farm bordered on a communal area (Thomas, 2003:700). Despite the government's tight devotion to the rule of law, the rate of land transfer under the LRRP2 was prolonged, resulting in 15 significant land invasions in 1997 and 1998 as the population grew increasingly impatient to be resettled (Moyo *et al.*, 2000:185).

The government, which had abandoned the land reform initiative in the preceding two decades despite constitutional constraints restricting its power, tried again in 2000 through a vote. As a result, a draft constitution that included a section making compulsory acquisition easier was defeated in a national referendum in February

2000. (Moyo *et al.*, 2000:186). Unlike prior attempts, the government modified the constitution on April 6, 2000, granting itself extrajudicial powers, including the right to acquire commercial farms, despite the referendum setback (Meldrum & MacAskill, 2000). In May 2000, the law was changed to allow the government of the Republic of Zimbabwe to confiscate land without a court order. Thomas (2003:701) adequately summarizes the situation, as this was the beginning of the government's "Fast Track Land Resettlement (FTLRP) Program." The administration declared the closure of the FTLRP in August 2002.

The fact that land ownership was skewed in favour of white large-scale commercial farmers before the FTLRP in 2000 is a significant part of Zimbabwe's land redistribution push. Thus, before the FTLRP of 2000, large-scale commercial white farmers, who accounted for 1% of the total population, held 49% of the whole agricultural land, while indigenous farmers, who accounted for 99% of the people, owned just 51% of the land (Masiyandima *et al.*, 2011:8). Given the historical inequality in land distribution, the Zimbabwean government took the bull by the horns. It launched a series of land distribution programs to rectify historically induced land ownership imbalances and inequities.

These events in the year 2000 were a seismic game-changer, ensuring that the dualistic nature of large-scale commercial white farmers occupying disproportionately large and high-potential agricultural land was replaced by a structure of smallholder farmers who are nearly 70% of all farmlands. There are currently many medium to big commercial farmers on lesser landholdings. Large-scale commercial farm sizes were reduced, adding 145,000 new A1 and 18,000 new A2 farmers to the existing communal and elderly relocated farmers, bringing the total number of smallholders to almost 1.3 million (MLARR, 2018:1).

However, despite what the promoters' thought were noble intentions, the compulsory acquisition of farms after 2000 sent the economy into a tailspin from which it has not yet recovered (Degeorges & Reilly, 2007:575). Despite the enormous increase in smallholder farmers, the post-2000 FTLRP in Zimbabwe resulted in a drop in farm production, resulting in widespread food scarcity, insecurity, and unprecedented inflation and poverty. Inflation reached world records of 135 per cent in the summer

of 2002, 1281.11 per cent in 2006, and 231 150 888.87 per cent in 2008. The country's instability was fuelled by widespread food insecurity, significant unemployment owing to farm retrenchments, and economic deterioration (Ndlovu, 2015:9).

3.16 IMPORTANCE OF ZIMBABWE'S AGRICULTURAL SECTOR TO THE COUNTRY'S ECONOMY

According to Keynesian theory, sectoral expansion generates additional income growth in the short run due to backward and forward linkages and the multiplier effect. The agricultural sector's development aids the enlargement of the economy's other sectors. Agriculture plays a variety of essential roles in the economy, including job creation, GDP contribution, food supply, raising more foreign exchange that can be used to buy manufacturing goods, capital goods, and technology, and providing raw materials for the agro-processing industries, to name a few (Matandare, 2017:1258).

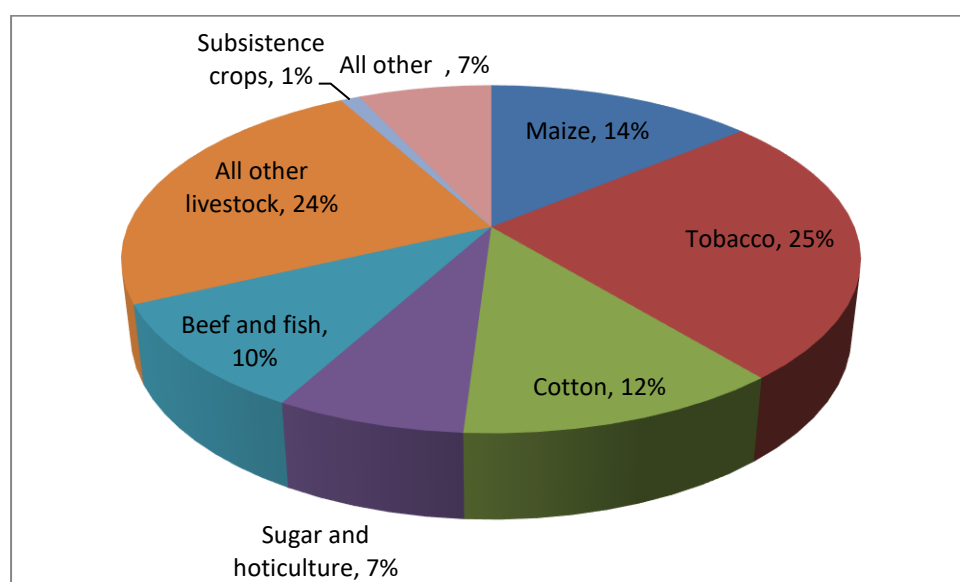
The concept that the agricultural sector is the backbone of the economy, which sustains any economic growth, poverty eradication, and food self-sufficiency, is central to the argument for economic progress in Zimbabwe (ZEPARU, 2014:7). This is because agriculture generates at least 15-20% of annual GDP and over 40% of national export revenues through the sale and export of tobacco, cotton, and horticulture products, among other things (Mudzonga & Chigwada, 2009:2).

Agriculture, however, has always occupied, still occupies, and will always occupy an essential position in the Zimbabwe economy despite the changes witnessed by Zimbabweans over the last two decades. According to historical and present trends, agriculture provides livelihood and employment to over 70% of the country's people (ZEPARU, 2014:7). Agriculture now employs 66% of the country's workforce (54% of which are women). In the food production value chain, agriculture supplies about 63 per cent of industrial raw materials, with agriculture accounting for over 60% of manufacturing value-added. Agriculture provides feedstock to fifteen Zimbabwe's 31 manufacturing clusters (MLARR, 2018:2). The agriculture sector's performance influences people's living standards and economic development. The African Commission, in recognition of the importance of agriculture in economic development,

encouraged member states to devote at least 10% of their national budget to agriculture in the Maputo Declaration of 2003 (GoZ, 2012:1).

Zimbabwe's diversified agro-climatic conditions allow it to grow a wide range of food and cash crops, with over 23 different food and cash crops being grown. The main crops are maize, sorghum, pearl millet, finger millet, groundnuts, wheat, cowpeas, and sweet potatoes. The leading basic food is white maize. Examples of cash crops include tobacco, cotton, tea, coffee, sugarcane, soya bean, sunflower, and horticultural products. Beef, dairy, poultry, pigs, goats, and sheep are all part of Zimbabwe's livestock industry (GoZ, 2012:1).

Figure 3.3: Agriculture GDP contribution by various agro-subsectors



Source: MLARR (2018:2)

The contribution of several commodities to agricultural GDP is depicted in Figure 3.3. Over half of the agricultural GDP is accounted for by maize, tobacco, and cotton, with tobacco accounting for 25% of the total, maize for 14%, and cotton for 12%. The cattle and fishery sectors contribute 10% of the total, while the remainder of the livestock accounts for around 24%. The agricultural sector's success thus has a direct impact on total national economic performance and human development, particularly in terms of national and household food and nutrition security (MLARR, 2018:2).

Since the dawn of time, agriculture has been recognized as the foundation of economic progress (Masiyandima *et al.*, 2011:11). Proponents of this viewpoint argue that the agricultural sector's success is necessary for industrialization and economic growth. There are two main points of view on the importance of agriculture in economic growth and development. The first viewpoint emphasizes agriculture's passive position as a provider of resources to the economy, hence moving it forward. Second, agriculture is viewed as a sector promoting economic growth through specific pro-growth behaviours and behaviours (FAO, 2013). The FAO identified two broad kinds of agricultural involvement in economic development: financial and non-economic roles. The FAO notes that the market either underestimated or ignored these roles in both circumstances. Income generation, poverty alleviation, and food security are economic positions. At the same time, non-economic functions include natural resource management and conservation, social cohesion, stability, and cultural preservation are examples of non-economic roles. This will boost growth, increase farmer incomes, increase job creation, and reduce poverty across the economy via numerous channels and chain effects (Masiyandima *et al.*, 2011:11).

Agriculture is the backbone of most emerging countries, including Zimbabwe, accounting for more than 10% of GDP. Agriculture directly impacts the economy by increasing sector output on GDP. Through backward and forward links between agriculture and the rest of the economy, the indirect influence is felt (Masiyandima *et al.*, 2011:11). Because of the significant backward and forward links that exist between agriculture and other productive activities and commercial services, the state of the agriculture sector heavily influences the performance of the entire economy. Seeds, insecticides, herbicides, and equipment are among agriculture's inputs. At the same time, the agriculture sector provides the required information to the agro-processing sectors. Therefore, any positive developments in the agriculture sector have a ripple effect across the economy. Agriculture and manufacturing have particularly strong backwards and forward links. The latter processes Many agricultural outputs, supplying agriculture with many input requirements. As a result, agriculture plays a critical role in determining the nation's well-being (Matandare, 2017:1256).

Agriculture is one of two sectors in Zimbabwe capable of growth (the other being mining) that might drive the rest of the economy, including the manufacturing sector,

according to the 2012 Growth Notes. The fundamental link between the agricultural and manufacturing industries is agribusiness. Assessing market channels for agriculture value chain partners, working with suitable domestic and multinational corporations to encourage business linkages with SMEs and smallholder farmers, implementing customised training for smallholder farmers and SMEs, and developing value chain linkages are all critical activities for strengthening this link (World Bank, 2014:48).

Agro-processing is the transformation of agricultural commodities into various forms that add value to the item, and it can be either primary or secondary. Preceding procedures such as drying, grading, and packaging only result in modest changes to the product; however, secondary processing results in a significant transformation, increasing market share and nutritional value (ZEPARU, 2014:9). The Zimbabwean economy has previously been bolstered by a thriving agricultural sector that has consistently given chances for agro-processing and agrarian value addition. However, agricultural production has decreased since 2001 due to a poor economy, poor rainfall patterns, poor input quality, and seed and fertiliser shortages, among other issues. As a result, the agro-processing sector, which relies mainly on the agricultural industry for raw materials, has suffered. Most newcomers are small and medium-sized businesses with somewhat automated processes (ZEPARU, 2014:9).

3.17 CHALLENGES CONFRONTING ZIMBABWE'S AGRICULTURE INDUSTRY

The need for food has risen dramatically due to the world's rapidly growing population. However, many countries' food-producing ability is being hampered by dwindling chances to bring new land into production and decreased productivity of over-cultivated areas due to natural resource degradation (Maiyaki, 2010:4165). This pattern is similar to the current situation in Zimbabwe. As a result, the country's agriculture industry faces many severe difficulties that must be addressed head-on.

3.17.1 Knowledge, Technology, and Innovation System in Agriculture (AKTIS)

In Zimbabwe, the AKTIS is failing to keep up with changes in state-of-the-art knowledge, technology, and innovations, the integration of market-centric and

business-facing agricultural practices, emerging global opportunities and challenges, and responsiveness to the needs and demands of agricultural value chain actors. The farm sector has struggled to embrace the information and communication technology revolution completely. As a result of the increased demand for agricultural research, technology, extension services, and more human skills and development in the post-FTLRP era, there was an increase in demand for agricultural research, technology, extension services, and more human skills and development to meet this new demand. Agricultural education is currently provided in Zimbabwe through eight public agricultural colleges scattered across the country's provinces. However, training institutions confront issues such as insufficient money to conduct their programs effectively, insufficiently skilled employees to respond to the different sectoral changes and needs, and a lack of current infrastructural support.

The government in Zimbabwe supplies extension services through the Agricultural Technical and Extension Services (AGRITEX), which are offered at no cost to farmers. Many historians (Matandare, 2017:6) have claimed that the extension system was previously very successful and efficient. However, its performance has altered dramatically due to structural reforms in the 1990s, the HIV/AIDS pandemic, and the economic crisis in the 2000s. The irony of Zimbabwe's FTLRP is that the rising demand for extension services from the land reform program in the 2000s, which increased the number of smallholder farmers, further weakened the extension. Critics argue this disproves the claim that the post-2000 land reform process was chaotic (Makina *et al.*, 2014:13; MLARR, 2018). There are roughly 4200 extension employees, compared to an estimated 1,800,000 farmers, resulting in an 800:1 farmer-to-extension ratio (MLARR, 2018:15). Unfortunately, this has resulted in increased inefficiencies in the delivery of extension services.

Another contradiction in Zimbabwe's land reform push has been the reality that research institutions and extension services have been hampered by a lack of resources from government financial allocations to support them. Funding for research and extension has decreased dramatically over the years, with some of the lowest funding ever allocated to research institutions and extension services in the 2016 and 2017 national budgets. Critics have argued that budgetary constraints have significantly reduced research activities and the mobility of extension workers to carry

out their mandate, which is extension activities, in-service training to stay current with technological advances, and, worst of all, procurement of basic research and extension equipment (World Bank, 2014; MLARR, 2018). To make matters worse, value-adding activities such as links with other relevant institutions, extension work, universities, the commercial sector, and farmers' unions/associations have deteriorated to the point that they are almost non-existent in most cases. Without a doubt, this hinders the distribution of study findings on any leftover research that may have harmed the adoption of new technology (MLARR, 2018:16).

3.17.2 Production and supply of agricultural inputs

Zimbabwe's agricultural productivity remains dismally poor due to the obstacles mentioned above. Low productivity is exacerbated by a lack of farm inputs on the market and a lack of effective demand. The agricultural sector has seen a dramatic, albeit negative, transition since the start of the land reform program in the early 2000s, with a sharp fall in commercial production. The macroeconomic environment has been unfavourable, which has had repercussions throughout the agriculture value chain. In general, farmers' inputs are expensive and unaffordable.

In contrast, on the demand side, farmers and other value chain operators confront the crippling curse of liquidity constraints in their efforts to obtain better inputs. On the supply side, local input production has been reduced due to the limited availability of foreign money to assist the acquisition of additional intermediate inputs that are not locally available. Low effective demand on the market does not inspire production, exacerbating an already terrible scenario. Limited access to agricultural finance among young farmers has also contributed to agro-input manufacturers' low demand and capacity utilization. Input distribution systems are inefficient due to unfavourable macroeconomic conditions, and agro-dealers networks are not entirely developed (MLARR, 2018:18).

3.17.3 Agricultural infrastructure development

Agricultural infrastructure is well-known for its importance in increasing farm productivity and output. Access to affordable physical infrastructures such as irrigation,

pre- and post-harvest storage, energy, transportation, and telecommunications is a primary source of competitiveness within agricultural value chains. Inadequate development, repair, and modernization of agricultural infrastructure across all categories have undoubtedly contributed to low productivity, production, and, eventually, competitiveness in the agricultural industry. Smallholder farmers lack appropriate expertise in the usage and upkeep of agrarian infrastructure, reducing the infrastructure's lifespan (MLARR, 2018:20).

3.17.4 Water management and irrigation

Zimbabwe faces a significant issue as a result of its reliance on rain. The unpredictability and change in rainfall patterns affect Food supply, production availability, food utilisation, food costs, and general access to food in the country (Matandare, 2017:1261). Irrigation is crucial in agriculture because it lessens the sensitivity of farmers to weather and climate shocks and risks. Zimbabwe can irrigate almost 2 million hectares of land, but only about 206,000 hectares are currently irrigated. Due to a lack of investment in irrigation development, restoration, and modernization, accessible water bodies are now underutilized. This underutilization is exacerbated by ineffective technologies that do not account for varying farm sizes (MLARR, 2018:21). Between 30 and 75 per cent of the installed irrigation infrastructure is considered operational (World Bank, 2014:34).

3.17.5 Agriculture and energy development

Access to affordable and reliable energy for agriculture at all stages of the value chain is crucial to maintaining agricultural commodities' competitiveness and comparative advantage both within and outside the country. However, it is essential to note that Zimbabwe is experiencing energy shortages, with supply failing to keep up with demand. The fact that these issues are owing to inadequate investment in the agricultural industry, which has resulted in irregular energy supply, is at the heart of the discussion regarding energy in the agricultural sector. Climate variability has exacerbated the situation since it has resulted in more droughts, which have harmed hydropower generation at Lake Kariba, which accounts for almost 80% of all hydropower generated in the country (MLARR,2018:21). Only approximately 40% of

Zimbabwe's population has access to electricity, while the rest rely on firewood for cooking (MLARR,2028:21). Unfortunately, smallholder farmers in communal areas, who make up the majority of individuals dependent on firewood for energy, bear the burden of wood fuel shortages caused by land removal for agricultural output and unsustainable fuelwood gathering. Despite the plethora of issues mentioned above, one of the concerns expressed in most of the debate on energy in Zimbabwe is that the country's enormous renewable resources for sustainable energy production are scarcely tapped (MLARR, 2018:21).

3.17.6 Agriculture marketing and trade development

Policy inconsistencies in marketing and trade policy space are significant sources of risk for Zimbabwe's agricultural sector, which typically involve discretionary and government intervention in the market, especially for maize, the main staple. Trading restrictions (import and export bans) have been the primary policy responses in the past, with the government frequently backing above-market prices. Food security, poverty, and foreign exchange gains have all suffered due to the impact of such trade instruments on price volatility (MLARR, 2018:22). It's no secret that Zimbabwe has a bad reputation for having a demanding business environment. While Zimbabwe has faced unprecedented obstacles over the last two decades, the general business climate remains dismal. Zimbabwe's business climate was placed 170 out of 185 nations in the World Bank/IFC Doing Business rankings in 2013, among other problems (significantly behind the Sub-Sahara Africa average of 140). Zimbabwe's lowest Doing Business factors were dealing with construction permits, resolving insolvency, trading across borders, getting electricity, starting a business, enforcing contracts, and protecting investors (World Bank, 2014:45). The ease of doing business has been harmed by liquidity crises, as well as the imposition of several taxes and levies that have resulted in over-regulation of the general business environment, which includes the agriculture sector (MLARR, 2018:22). Webber *et al.* (2013:21) argue that an onerous regulatory, legal, and policy environment stifles industry growth, reduces competitiveness, restricts local firms' capital investments, and obstructs international investment.

3.17.7 Agricultural credit and finance

Agricultural funding is essential for the agricultural sector's investment resurgence. It encourages the adoption of improved agricultural and livestock types and the acquisition of other inputs at the farm level. However, statistics show that commercial sources of finance to the agricultural sector in Zimbabwe are limited, owing to the inherent risk of agricultural production, which includes high costs of finance, inappropriate loan portfolios, and low financial literacy among farmers, as well as a lack of collateral among smallholder farmers, high transaction costs, and limited affordable lines of credit in the country (Makina, Chiwunze & Ndai, 2014:16). While 99-year leases are now bankable, they are still in their infancy and have yet to inspire confidence in banking institutions. As a result, the most readily acceptable collateral is transportable assets. However, only a small percentage of farmers, particularly community farmers, have movable property as collateral. Agricultural insurance coverage is minimal, exposing farmers to risks such as climate change and other dangers, making the industry riskier for investors (MLARR, 2018:24).

3.17.8 Biodiversity management and agriculture

There are 1 117 wetlands dispersed around the country, spanning 793,000 ha of land, that serve as a crossroads for agriculture, natural resource protection, and biodiversity conservation. These wetlands are natural ecosystems that filter water, control flooding and erosion, and offer food and shelter for fish and other land and water-based species. They also serve as a water supply and provide a source of income for people and wildlife, albeit their numbers have fallen dramatically. About 21% of the country's wetlands are in good shape, 20% have severely deteriorated, and the rest are on the verge of being lost forever (MLARR, 2018:25).

3.17.9 Changes in the climate

Due to the increased frequency of droughts, floods, and intense storms in recent years, climate change has played a crucial role in Zimbabwe's economic woes, resulting in massive financial losses in agriculture (Matandare, 2017:1260). For agricultural output in Zimbabwe, the influence of global warming on climate change

and productivity is a hot topic of dispute. According to international and local estimates, changes in rainfall, temperature and the duration of growing seasons are predicted to impact agricultural productivity. The repercussions of climate change are already visible, as evidenced by the El Nino weather phenomena, which has left 2.8 million people food insecure (MLARR, 2018:27).

Low levels of irrigation investment; weak early warning systems that impede timely generation and dissemination of early warning information; limited funding for drought-tolerant variety research and development; and a lack of resources for adequate extension service provision, disease control, and livestock development, as well as limited adoption of sustainable agricultural practices, are all contributing factors to limited adaptive capacity. Furthermore, the industry contributes to the phenomena despite being touched by climate change and hazards (MLARR,2018:27). Agriculture is Zimbabwe's third-largest contributor to greenhouse gas emissions, accounting for 16.3 per cent of the 63.8 megatonnes of greenhouse gases that contribute to global warming yearly. The cattle industry is the source of the most greenhouse gases in agriculture. Deforestation has reduced the forest's ability to act as a carbon sink. Agriculture is the leading cause of forest loss, both through agricultural area development and inside agriculture, with some sectors like tobacco processing requiring a large number of trees and inefficient curing methods (MLARR, 2028:27). Soil erosion and fertility loss have also increased as a result of this. Limited soil testing and the potential overuse of inorganic fertilizer due to blanket recommendations contribute to global warming and soil deterioration across the country (MLARR, 2018:27).

3.17.10 Sustainable agriculture

Zimbabwean smallholder farmers continue to use ancient, old, and conventional farming practices and obsolete implements, lowering agricultural productivity (Matandare, 2017:1261). Developing and using an inclusive and sustainable knowledge, technology, and innovation system must be at the heart of increasing agricultural productivity and production. This system must balance the sustainable use and restoration of environmental ecosystem services and the exploitation of farmland and its environs to build the economy and sustain livelihoods. Despite the strategies'

well-known advantages in climate change mitigation, adaptation, and sustainable agriculture, they have not been widely embraced in the country.

Conservation agricultural approaches, for example, are expected to be used by just 100,000 smallholder farmers on 125,000 hectares of cropland. Fertilizer placement is not accurate, and overuse contributes to greenhouse gas emissions. In addition, the high incidence of wildfires, limited use of improved livestock management practices, and farming systems' reliance on inorganic fertilisers threaten agricultural production's long-term viability. Under these conditions, agrarian land expansion will be the primary means of increasing food production, but at the expense of environmental degradation (MLARR, 2018:27).

3.18 SUSTAINABILITY ENTREPRENEURSHIP IN THE AGRICULTURAL SECTOR

Currently, the agricultural sector is confronted with many challenges that necessitate sustainable solutions to address the escalating global population growth and mitigate the adverse effects of climate change (Vermuelen *et al.*, 2012:197). Additionally, the sector must contend with the depletion of resources (Firbank *et al.*, 2018:2), concerns regarding food safety (Sharma *et al.*, 2020:6), the reclamation of unused land (Garrone *et al.*, 2014:132), the exploitation of labour (Almasi *et al.*, 2021:826), and the runoff of pesticides (Tilman & Clark, 2014:520). As mentioned above, the situation raises many environmental concerns about energy, materials, water consumption, and greenhouse gas emissions. Consequently, the agri-food sector is the industrial domain with the most substantial ecological footprint (Bryngelsson *et al.*, 2016:157; Notarnicola *et al.*, 2016:402). In 2015, the United Nations (UN) introduced its 2030 agenda for sustainable development, aiming to address a pressing global concern: hunger. This initiative sought to offer remedial measures to alleviate the long-standing issue that has plagued the world for an extended period.

Nevertheless, attaining this objective remains a distant possibility, as about 800 million individuals across the globe continue to endure the plight of hunger. Furthermore, it is projected that by 2030, approximately 650 million of these individuals will persist in experiencing undernourishment. According to Latino *et al.* (2023:3680), there is a

projected need to increase food production by 70% by the year 2050. However, it is noteworthy that the agricultural sector's contribution to the global Gross Domestic Product (GDP) has declined to a mere 3%, one-third of its previous proportion in previous decades.

While there is a growing demand for increased food production, there are also emerging concerns regarding food fraud and safety. These issues necessitate the agri-food sector prioritising food safety and addressing the information gap between farmers and consumers (Banerjee & Hysjulien, 2018:158; Olsen & Borit, 2013:145). To mitigate the possibility of severe repercussions, any substantial augmentation in food production must adhere to sustainability and social responsibility principles, effectively addressing both production and sustainability objectives (Hunter *et al.*, 2017:389). The achievement of sustainability necessitates a paradigm shift in thinking, and the primary means of applying novel approaches and progress is the generation of fresh information and its application through innovative practices (Neutzling *et al.*, 2018:3450).

Innovation is a crucial strategic factor for enhancing productivity across various national sectors. According to Latino *et al.* (2023:3680), agricultural businesses can experience an enhancement in positive externalities and economic performance through investments in innovation. To confront the current challenges, Adams *et al.* (2016:187) propose the concept of sustainable entrepreneurship, which seeks to transform philosophies, values, technologies, products, processes, and practices to generate social and environmental benefits alongside economic value.

The field of agriculture has witnessed numerous advancements throughout its history (Depken & Zeman, 2018:46), which can be categorised into four distinct revolutions (Rose & Chilvers, 2018:4). The initial phase was marked by the emergence of hunter-gatherer societies transitioning towards a more sedentary agricultural system. The utilisation of novel machinery, such as the seed drill, was a prominent feature of the Second Agricultural Revolution, facilitating the advancement of many farming practices. Implementing green innovations was deemed necessary during the third revolution to promote the environmental transition in emerging nations. Presently, humanity finds itself engaged in the fourth agricultural revolution, commonly referred

to as Agriculture 4.0 (Rose & Chilvers, 2018:5). The primary objective of this revolution is to cultivate the agricultural sector, enhancing both the volume and calibre of food production, so presenting a viable remedy to the global sustainability predicaments. Agriculture 4.0 possesses the capacity to embody a transformative innovation for the entirety of the agriculture industry. The use of this technology has the potential to significantly transform the production system and agricultural value chain, resulting in the creation of environmental, social, and economic benefits. For instance, it can ensure adequate nutrition, enhance food security (Klerk & Rose, 2020:8), and preserve the landscape.

The implementation of Agriculture 4.0 has the potential to revolutionise the agri-food sector, leading to a transition from a traditional production system to a more sustainable one. This transformation is accompanied by the emergence of new business models that capitalise on the benefits derived from the adoption of innovative technologies (Gacar, 2017:186; Klerkx, Jakku & Lubarthe, 2022:9). As per Adams *et al.* (2016:187), organisations must modify their operational strategies to foster sustainable growth utilizing innovation. According to Klerkx and Rose (2020:9), the agri-food sector may achieve a fairer redistribution of power and provide access to safe and healthy food by considering innovation from a perspective beyond technology. Sustainable entrepreneurship surpasses conventional entrepreneurship by deliberately altering a company's values to generate environmental, social, and economic value. This is achieved through advancements in processes, products, organisation, business models, and markets (Brown, Bocken & Balkenende, 2019:13).

According to McElwee *et al.* (2011:46), it was also acknowledged that confident entrepreneurs in the agricultural industry initially engaged in entrepreneurship intending to satisfy their personal self-interests. In light of the growing global awareness surrounding significant contemporary issues such as the preservation of ecosystems, mitigation of climate change, and reduction of environmental degradation, there has been a nascent body of scholarly work exploring the concept of sustainable entrepreneurship (Patzelt & Shepherd, 2011:642; Pacheco *et al.*, 2010:471). Sustainable entrepreneurship refers to the identification, cultivation, and utilisation of prospects by individuals to create forthcoming products and services that yield economic, social, and ecological benefits (Belz & Binder, 2017:6). According to

Shane and Venkataraman (2001:14), the fundamental process and actions of entrepreneurship can be characterised by the identification, cultivation, and utilisation of opportunities. According to Shane and Venkataraman (2000:219), the initial stage of the entrepreneurial process involves the recognition of a prospective company concept that has the potential to be investigated and advanced into a novel product, service, or method. The element of sustainability in this context lies in the fact that sustainable entrepreneurs are driven by factors beyond individual economic interests. The importance of personal ethical beliefs and reasons for social or environmental concerns is well recognised in sustainable business. In fact, these values and motives are often regarded as fundamental and even characteristic traits of sustainable entrepreneurs (Patzelt & Shepherd, 2011:643).

The interrelationship between financial, social, and environmental factors can be perceived as integral components within a multifaceted framework known as the 3Ps. From an ecological standpoint, agriculture revolves around the growth of plants and the various factors that influence it, including soil fertility, climate conditions, and pest infestations. The primary emphasis lies in examining the impact of several management practices and environmental factors on crop production and exploring potential strategies for enhancing these circumstances. Sustainable agriculture primarily emphasises preserving or enhancing existing levels of biophysical output. From a profitability standpoint, agriculture is considered a business venture at the individual farm level and a significant economic sector at several scales, including worldwide, regional, national, and local community levels.

The primary catalyst behind the green revolution, often called the industrialised or conventional model of agriculture, was the emphasis on extensive production. One of the drawbacks associated with traditional agriculture pertains to the comprehensive implementation of contemporary agricultural practices, which has given rise to many ecological disadvantages. These include the mismanagement of resources, land degradation, the impoverishment of rural communities, and increasing farmers' reliance on a limited number of agricultural multinational corporations. From a sociological standpoint, agriculture is perceived as a productive industry that primarily aims to meet the demands for food and fibre.

Sustainable agriculture is commonly linked to the potential to address domestic and international food requirements, ensure the provision of high-quality and secure food supplies, improve labour conditions, promote educational opportunities, enhance the overall well-being of individuals, and foster human development on a broader scale. Human development encompasses the progression of enhancing individuals' opportunities in three fundamental dimensions: the ability to live a prolonged and healthy life, the acquisition of knowledge, and the attainment of a satisfactory level of living (McKinney & Schoch, 2003:48; Szirmai, 2005:28; Mupfasoni *et al.*, 2018:65).

There has been a notable disparity between the global population growth rate and food production in recent years. This discrepancy has led to significant food shortages, chronic hunger, and malnutrition, particularly in the least developed regions of the world (Smith & Glauber, 2020:162). Several African nations are presently classified inside this group. Despite agriculture being widely recognised as a crucial component of the economy and playing a vital role in the livelihoods of most African individuals, many countries continue to face various challenges that hinder agricultural productivity. These challenges include declining soil fertility, the adverse effects of climate change, limited access to water resources, post-harvest losses, and restricted market opportunities, among other factors (Gashu *et al.*, 2019:14194). Currently, this circumstance has led to issues in ensuring food security. Therefore, there is a pressing requirement for a novel framework for agricultural expansion that promotes environmentally sustainable, biologically varied, enduring, adaptable, and socially endorsed agrarian methodologies.

According to Altieri *et al.* (2012:6), it has been estimated that smallholder farmers play a crucial role in providing sustenance to almost one-third of the urban population, which amounts to 238 million individuals. Additionally, these farmers feed most of the 712 million individuals who experience hunger and reside in rural and remote regions worldwide. According to Kihara *et al.* (2020:370) and Sheppard *et al.* (2020:8), it may be inferred that small-scale farming sustains approximately 50% of the global population and contributes to producing at least 70% of the world's food. The current inquiry pertains to the factors that prompt farmers to embrace sustainable farming practices to nourish the expanding population while safeguarding ecological integrity. The objective of the subsequent section is to elucidate the intended aim or goal.

3.19 ADOPTION OF SUSTAINABLE AGRICULTURAL PRACTICES

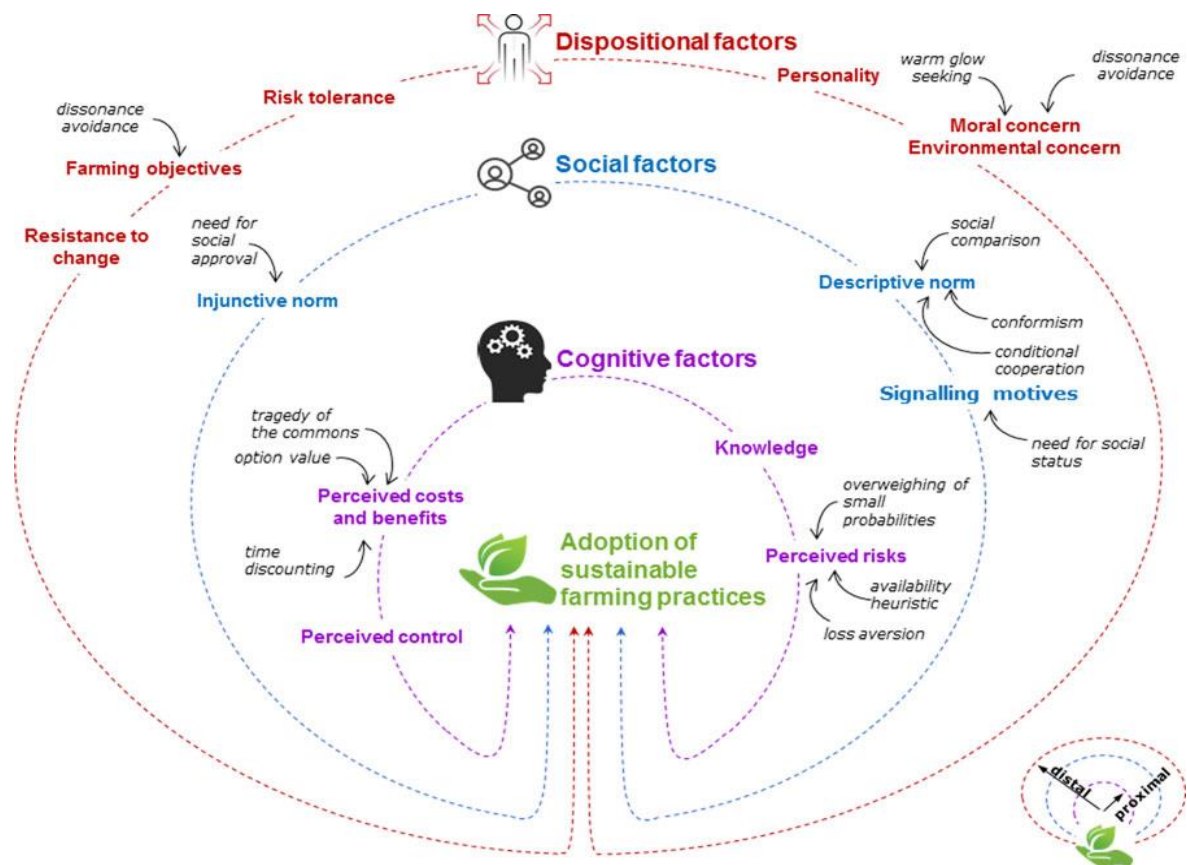
Numerous scholarly investigations have examined the determinants that facilitate or impede the adoption of sustainable agriculture practices among farmers (Agula *et al.*, 2018:5; Bukckin & Kerret, 2020:4; Mishra *et al.*, 2018:1063; Mutyasiri *et al.*, 2028:12; Tu *et al.*, 2018:7; Wang *et al.*, 2020:11). The primary emphasis of these studies has been on examining the impact of farmer demographics and socio-economic variables, such as business size and availability to financial resources, on the adoption of environmentally sustainable practises. Agula *et al.* (2018:5) discovered that various factors significantly impact the degree to which farmers adopt sustainable practices. These factors include the age of the farmers, the proximity of their farms, their perception of soil fertility, the frequency of extension visits, and the type of irrigation system accessible to them. Moreover, Mishra *et al.* (2018:12) demonstrated that farmers who cultivated row crops had access to irrigation infrastructure and expressed agreement with crop diversification exhibited a considerably higher propensity to embrace sustainable agricultural practices than their counterparts. The researchers concluded that participation of farming cooperatives or clubs, farmer expertise, and the perceived disparity in selling price had a beneficial impact on the adoption process.

Contemporary research endeavours have increasingly acknowledged the importance of behavioural aspects in elucidating the motivations behind adopting sustainable practices. Prior studies have examined the particulars of individual adoptions by employing diverse adoption theories. The examination of behavioural patterns related to the adoption and dissemination of innovations, with a specific focus on the technical aspects of adoption and diffusion, presents a distinct departure from Rogers' theory (Ajzen & Fishbein 1980:21). Based on this viewpoint, the prevailing theoretical frameworks encompass the idea of reasoned action and its extension, the theory of planned behaviour (TPB), as posited by Ajzen and Fishbein (1980:21). The TPB, as conceptualised by Ajzen (1991:183), examines the influence of subjective norms, attitudes, and perceived behavioural control on the purposeful adoption and observable characteristics of an invention. Despite the widespread use of the TPB, researchers have encountered numerous challenges in its application and understanding of the underlying factors that influence human behaviour in agricultural

and food systems. Consequently, alternative theories and models have been developed to better comprehend how individuals perceive and respond to changes in these systems (Hou & Hou, 2019:12; Nguyen & Drakou, 2021:303; Menozzi *et al.*, 2019:230; Coulibaly *et al.*, 2021:9; Akyuz & Theuvsen, 2020:13). Irrespective of the theoretical framework employed, contemporary studies present a growing body of evidence highlighting the significance of farmers' viewpoints concerning the adoption and diffusion of sustainable agricultural technology, namely green farming, as well as their contentment with the utilisation of such systems (Adnan, Nordin, & Rasli, 2019:27199). Nevertheless, the extensive range of scholarly investigations about farmers' perspectives implies that comprehending the concept of innovation adoption remains a complex endeavour. The categorization of numerous farmers as modest adopters has introduced complexities, particularly in developing and rising countries (Khan *et al.*, 2020:441).

Based on the literature mentioned above, it can be inferred that a significant study exists void about the influence of farmers' attitudes and intentions on adopting environmentally sustainable agricultural practices, particularly in underdeveloped nations. Hence, this study's primary objective was to examine farmers' attitudes and preferences, explicitly identifying the elements influencing the adoption and ongoing application of sustainable agricultural practices. This study addresses a gap in the existing literature by utilising the complete framework proposed by Dessart *et al.* (2019:421) (Figure 3.4) to investigate the behavioural aspects that facilitate the adoption process.

Figure 3.4: Farmers' adoption of ecologically friendly techniques



Source: Dessart *et al.* (2019:421).

In a recent study conducted by Dessart *et al.* (2019:422), an examination was undertaken to assess the influence of behavioural elements on farmers' decision-making processes. The authors have presented a comprehensive paradigm encompassing many behavioural aspects influencing farmers' decisions towards adoption. The behavioural elements are categorically arranged according to their proximity to the decision-making process under consideration. Behavioural factors are classified as distal when they are overarching, broad "macro" concepts that are somewhat distant from specific decision-making contexts. On the opposite side of the continuum, factors are considered proximal when they encompass lower-level, "micro" variables directly or nearly directly associated with the central focus of the decision-making process. In their study, Dessart *et al.* (2019:422) identified three overarching categories of behavioural elements along the distal-proximal continuum. These categories include dispositional, social, and cognitive aspects.

According to Malle (2011:76), dispositional characteristics indicate farmers' inclination to exhibit certain behaviours. The aforementioned distal elements are relatively stable, fundamental characteristics associated with personality traits, motivations, values, principles, aspirations, and objectives. Various research has identified a notable impact of dispositional characteristics on the endorsement of environmentally friendly practices among farmers (Hermann *et al.*, 2016:321; Yeboah *et al.*, 2015:77; Floress *et al.*, 2017:76; Palm-Forster, 2017:496). Farmers' interactions with individuals, including their peers and superiors, as well as their adherence to social standards and incentives for signalling, are shaped by social factors. Social norms are the collective understanding of acceptable behaviour and the personal endorsement of specific conduct by others (Lapinski & Rimal, 2005:131).

According to Dessart *et al.* (2019:421), the acceptance of eco-friendly practices by farmers is influenced by interpersonal relationships. Social factors can be categorised as either proximal or distal in nature. In agricultural practices, the influence of injunctive norms, which refer to farmers' perceptions of societal expectations towards them, might potentially impact their adoption of specific procedures or their overall inclination towards eco-friendly practices. Numerous scholarly sources have highlighted the notable correlation between social aspects and farmers' adoption of sustainable agricultural practices (Kuhfuss *et al.*, 2016:643; van Dijk *et al.*, 2016:211). Cognitive elements are commonly regarded as proximal and primarily focus on the processes of learning and thinking. The above aspects pertain to farmers' perspectives regarding the comparative expenses, advantages, and hazards of a particular environmentally conscious methodology. For example, one farmer may perceive implementing a specific strategy as costly or unsafe. In contrast, another farmer may view it as comparatively less expensive or hazardous. Previous research has demonstrated a noteworthy influence of cognitive variables on farmers' adoption of environmentally sustainable farming practices (van Dijk *et al.*, 2016; Villanueva *et al.*, 2017:682; Pavlis *et al.*, 2016:805).

One crucial prerequisite for farmers to embrace sustainable agricultural practices is knowledge of the prevailing Agricultural Good Practices and Technologies (AGPTs) and the present governmental laws about AGPTs. According to Palvis *et al.* (2016:805), farmers' limited awareness of sustainable farming hinders their motivation

to embrace sustainable practices. In contrast, their familiarity with these practices enhances their inclination to adopt them. To improve farmers' knowledge, it is imperative to construct an advisory service to promote their awareness and understanding of sustainable practices and governmental legislation.

The perceived benefits of sustainable agriculture practices also influence small farmers' decisions to embrace such practices. Adopting sustainable technologies involves expenses and advantages (Lefebvre *et al.*, 2015:31). Furthermore, implementing sustainable farming practices may incur costs associated with acquiring specialised equipment or adopting novel agricultural techniques. The implementation of sustainable practices has the potential to yield time-saving benefits, lower labour expenses, and enhance overall productivity. Nevertheless, producers carefully evaluate whether the anticipated advantages of implementing sustainable agricultural practices justify the associated fees. The management of perceived costs and benefits can be effectively addressed by implementing government-subsidized policies. The government has the potential to offer sustainable farming inputs at reduced costs, alleviating the financial difficulties faced by these farmers. Previous research has put forth comparable suggestions (Hellerstein, 2017:605).

The descriptive norms, which elucidate the impact of a neighbour's behaviour on their decision to adopt AGPTs, also encourage the adoption of AGPTs. According to D'Emden *et al.* (2008:173), farmers who possess less awareness of the environmental techniques employed by their neighbouring farmers are less inclined to adopt AGPTs. To incentivize the adoption of AGPTs among farmers, those who have already implemented these sustainable practices might engage in communication efforts to promote and urge their peers to recognise the importance of embracing such policies. Previous research has demonstrated the efficacy of a comparable approach in stimulating consumer behaviour across several domains (Allcott, 2011:1085).

Moral and environmental considerations provide an additional influential element in accepting AGPT. Adopting sustainable agricultural practices is influenced by various reasons, including personal conscience, ethics, concern for others' wellbeing, and ecological considerations. According to Kielland *et al.* (2010:2999), farmers with solid moral and environmental principles are more inclined to adopt conservative practices.

In contrast, those with lower morale and ecological considerations are less inclined to engage in sustainable farming practices. Therefore, it is recommended that policyholders establish initiatives to elucidate to farmers the significance of environmental conservation.

Multiple studies have demonstrated that cognitive variables related to adopting good agricultural practice technology are essential for farmers. The cognitive elements discussed in this context are closely associated with the decision-making process, and it is imperative to ensure their effective integration to promote the widespread adoption of sustainable agricultural practices. The cognitive aspects encompass several elements, such as perceived danger, perceived control, perceived cost and reward, and knowledge. Therefore, enhancing farmers' awareness of the presence, policies, and perceived advantages derived from these practices is imperative. Previous research has acknowledged the importance of cognitive factors in the context of agri-environmental practices (Villanueva *et al.*, 2017:682). The social dimension succeeds the cognitive extent. The present study elucidates the role of social factors on farmers' decision-making processes on adopting sustainable farming practices, with a particular focus on societal norms and the perceptions of others. To expedite the adoption of AGPTs, individuals who have already implemented these practices can function as advocates, elucidating the potential benefits of their adoption to those who have not yet embraced them. Prior research has documented the efficacy of employing comparable methodologies within agriculture (Mutyasira *et al.*, 2018:12; Kuhfuss *et al.*, 2016:643).

3.16 SUMMARY

This chapter demonstrated that SMMEs are an essential sector that may help Zimbabwe thrive economically. While it is common knowledge that agriculture is the backbone of the Zimbabwean economy, smallholder farmers are now undeniably the most critical component of the Zimbabwean agricultural industry. However, they face numerous obstacles that make it difficult for them to implement sustainable practices. They don't have enough information to help them overcome the barriers that stand in the way of their being successful businesses. The adoption of sustainable entrepreneurship by SMMEs will be aided by knowledge sharing through a framework

which will benefit Zimbabwe's agriculture industry and the economy as a whole. The methodology followed in the study will be discussed in the following chapter.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

The chapter comes after two consecutive chapters (2 and 3), which gave a literature overview on the nature and role of sustainable entrepreneurship in agriculture. Three significant theories that guide SMMEs to include sustainability in their business. Determining factors, challenges, and strategies that increase the adoption of sustainable entrepreneurship by SMMEs were all elaborated. The literature review gave a strong base and good insight into the research methodology.

This chapter concentrates on the methodological approach, guiding the research throughout the process. The first section addresses the underlying philosophical stance from the epistemological perspective. Further, the research approach, design, strategies, sample and participant selection criteria will be discussed. The justification for the chosen data collection instruments and data analysis methods are also discussed. The chapter concludes by presenting the relevant quality criteria of data and the ethical considerations that govern the study.

4.2 RESEARCH PHILOSOPHY AND PARADIGM

Hillman and Radel (2018:9) argue that research investigations do not occur in isolation. All study inquiries are shaped by the criteria of the selected research paradigm (Hillman & Radel, 2018:9). According to Maree (2016:52), a paradigm can be defined as a collection of assumptions or beliefs concerning fundamental features of reality that form the basis for a particular worldview. The premises above encompass various aspects, including the assumptions about the truths that the researcher will encounter (ontology), beliefs regarding the nature of the knowledge

that the researcher will acquire (epistemology), and assumptions concerning the approach to be employed in obtaining the necessary knowledge (methodology) (Saunders *et al.*, 2019:130). A research philosophy that is trustworthy and well-considered will serve as the foundation for guiding the selection of methodology, research plan, data collecting, and data analysis. A meticulously formulated research philosophy will facilitate a cohesive study design, harmonising all research components (Saunders *et al.*, 2019:130).

According to Saunders *et al.* (2016:124) and Picciano (2015:13), the concept of a research paradigm is seen as a conceptual structure that provides a foundation for the development of theories, laws, generalisations, and the research conducted to support these theoretical frameworks. Consequently, the terms "research paradigm" and "research philosophy" are sometimes seen as interchangeable. According to Brunt, Horner, and Semley (2017:17), a paradigm is a framework that shapes the researcher's understanding of the world. According to Picciano (2015:13) and Bryman (2012:45), it significantly impacts the methodologies employed in research and how individuals engage with the generation, interpretation, and examination of information. According to Maree (2016:52), reality is interpreted through these structuring principles. Paradigms frequently function in the background of an inquiry and influence various methodological choices (Durdella, 2018:91).

According to Shannon-Baker (2016:321), it is argued that research paradigms are not fixed entities that impose limitations on all facets of the research process. Paradigms serve as a valuable tool for researchers to structure their approach towards a study subject and provide guidance on tackling it based on specific ideas and assumptions about the world (Shannon-Baker, 2016:321). A paradigm is a comprehensive framework encompassing an individual's worldview and cognitive processes, shaping their perception and understanding of the world. The description above contains perspectives on values, morals, and aesthetics (Morgan, 2007:50). Paradigms can be differentiated based on four fundamental philosophical assumptions: ontology, epistemology, axiology, and methodology. These assumptions will now be briefly examined.

4.2.1 Ontology assumptions

Lee (2012:406) defines ontology as a conceptual framework that explores the fundamental nature of existence, encompassing the study of reality and the essence of human beings. According to Jarvie (2018:4), the concept of ontology pertains to the examination of the entities and processes that exist inside the social realm and the determination of whether they can be differentiated from those found in the natural domain. Ontological research investigates the fundamental aspects of being or existence (Creswell, 2013:20; Wegerif, 2008:347; Jankowicz, 2005:106). The primary focus of ontological orientation revolves around whether social things possess an objective reality independent of the individuals involved in social interactions (Bryman, 2012:32).

The ontological concerns pertain to the phenomena under investigation and the researcher's approach. These considerations influence the researcher's perception and examination of the research objects (Saunders *et al.*, 2019:133). Within business and management studies, the ontological aspect encompasses the entities of organisations, management teams, and persons who possess ownership or are employed by said businesses (Saunders *et al.*, 2019:140).

4.2.2 Epistemology assumptions

Epistemology, as defined by Gaudet and Robert (2018:4) and Jankowicz (2005:108), refers to the scholarly examination of the essence and generation of knowledge. According to Lee (2012:407), epistemology is a theoretical framework that investigates the interplay between the individual seeking knowledge and the realm of expertise, or alternatively, between the one possessing knowledge and the entity providing the information. Bryman (2012:27) states that epistemology determines valid expertise within a specific academic field.

According to Compton-Lilly, Rogers, and Lewis (2012:35), an individual's perception of the world is shaped by their existing knowledge, and their worldview significantly influences their ability to acquire knowledge. According to Blaikie (2007:19), Eriksson and Kovalainen (2008:15), and Mack (2010:5), there is a consensus that epistemology

encompasses several aspects. These include establishing criteria for gathering information, identifying methods for accessing knowledge, developing processes for assessing the data, and utilising techniques to evaluate the limitations and intricacies of expertise. According to Ritchie and Lewis (2003:13), epistemology comprises a range of methods for acquiring knowledge and understanding the social world and endeavours to explain how individuals in society may come to know about reality.

4.2.3 Axiology assumptions

Creswell (2013:20) posits that researchers' inherent values influence their study approach. This can be referred to as their axiological assumptions. In the realm of axiology, the researcher must recognise the intrinsic presence of biases and the value-laden nature of research (Creswell, 2013:21). According to Saunders *et al.* (2016:128), axiology pertains to the ethical considerations that researchers must take into account while formulating study plans.

The values assigned to various components of research, such as the participants, data, and the intended audience for research findings dissemination, are thus delineated (Kivunja & Kuyini, 2017:28). According to Saunders *et al.* (2016:128), the development of axiological abilities among researchers involves the ability to effectively express their beliefs as a foundation for making informed decisions regarding their research endeavours.

4.2.4 Methodology assumption

The concept of methodology assumption pertains to the approach employed by the researcher in determining the knowledge they deem attainable (Guba & Lincoln, 1994:108). Wahyuni (2012:72) states that a technique refers to a framework utilised for research within a specific paradigm's confines. As mentioned above, the model elucidates the methodology employed in the study and the underlying philosophical assumptions that serve as its foundation (Quinlan *et al.*, 2015:143). This model encompasses the "foundational systems of beliefs" that inform the researcher's decision to select a particular set of research methodologies over others (Wahyuni,

2012:70). According to Wahyuni (2012:72), a methodology can be seen as the conceptual and ideological basis of a specific method.

4.2.5 Epistemology and ontology assumptions of the researcher

The research employed epistemological and ontological presuppositions. Ontological assumptions pertain to the researcher's underlying beliefs and assumptions on the nature of reality. In the present study, the researcher posits that small, medium, and micro enterprises (SMMEs) in developing nations have diverse and distinct social attributes and encounters. These social qualities and experiences are assumed to differ from those of small, medium, and micro enterprises (SMMEs) in industrialised nations. Indeed, a significant portion of the scholarly investigations about sustainable entrepreneurship conducted on small, medium, and micro enterprises (SMMEs) have predominantly focused on the European context. However, it is essential to acknowledge that the findings and conclusions derived from these studies may not necessarily be directly transferable or relevant to the African context due to the inherent disparities in the socioeconomic landscapes of these respective areas (Baipai *et al.*, 2023:4).

The applicability and generalizability of these tactics to the entire population are limited due to variations in economic backgrounds. Moreover, the concept of sustainability has predominantly been examined within the context of large corporations, leading researchers to assume that its principles may not be applicable to small, medium, and micro enterprises (SMMEs) due to their distinct nature as non-corporate entities.

The researcher employed epistemological assumptions within the scope of the investigation. Epistemological assumptions pertain to the underlying beliefs regarding knowledge and the criteria used to determine acceptable, valid, and genuine expertise (Saunders *et al.*, 2016:127). The researcher utilised a qualitative research approach, indicating their active involvement in data generation and interpretation (Ritchie & Lewis, 2003:139). In qualitative research, the researchers serve as the primary data collection instruments (Marshall & Rossman, 2011:112; Ritchie & Lewis, 2003:142).

According to Rutberg and Bouikidis (2018:211), the researcher serves as the primary instrument for the research. According to Creswell and Poth (2018:43), qualitative researchers gather data by observing behaviour or conducting interviews with subjects. The fundamental nature of their participation in the lives of the research participants has been emphasised (Marshall & Rossman, 2011:112). The role of the researcher extends beyond being a mere conduit for knowledge transmission. Instead, knowledge is constructed throughout the interview through a collaborative effort between the interviewer and successful sustainable entrepreneurs operating within Zimbabwe's agricultural sector. Conducting qualitative research in participants' natural environments is crucial for understanding individuals' behaviours, knowledge acquisition, and communication patterns. By employing an epistemological framework, the researcher acquired the participants' experiential knowledge by actively engaging with them and eliciting their unique perspectives. However, it is worth noting that a heightened dependence existed on subjective evidence, a concern mitigated by dedicating additional time to engaging with the individuals in their natural environment, thereby gathering more dependable data (Creswell, 2007:40).

In summary, Kvale and Brinkmann (2009:178) suggest that acquiring information through dialogues is characterised by intersubjectivity and social interaction, wherein both the interviewer and interviewee actively contribute to constructing knowledge. The collaborative process between the researcher and the sustainable entrepreneurs involved in the study facilitates the joint creation of knowledge.

The concepts of ontology and epistemology are intricately interconnected, as they mutually contribute to the acquisition of knowledge and rely on one another within the study context (Mack, 2010:15). The researcher included ontological and epistemological assumptions derived from the paradigm of the study.

4.2.6 Research philosophy

In addition to research assumptions, ideologies guide the investigation. According to Saunderson *et al.* (2019:144), business and management encompass five prominent

philosophical perspectives: positivism, critical realism, interpretivism, postmodernism, and pragmatism.

According to Eriksson and Kovalainen (2016:19), the objective empiricism perspective posits the existence of an external and theory-neutral universe wherein reality comprises observable material entities. According to Merriam and Tisdell (2016), the positivist orientation asserts the presence of an external reality that is observable, stable, and measurable. According to positivist researchers, truth is considered to be objectively existing. It may be characterised by quantifiable attributes unaffected by the researcher and their tools (Myers, 2013:38). The fundamental tenet of positivism posits that the social realm is an external entity. The features of the subject can be quantified using objective methodologies, as opposed to relying on subjective experiences such as sense, reflection, or intuition (Easterby-Smith *et al.*, 2015:51). Positivists adhere to the philosophical doctrine of empiricism, which posits that scientific inquiry is fundamentally grounded in observation and measurement. According to this perspective, only phenomena that can be quantitatively assessed are amenable to scientific investigation, and research endeavours are aimed at generating factual knowledge (Eriksson & Kovalainen, 2016:19).

The origins of quantitative methods can be traced back to objectivist or positivist philosophy. At the same time, the development of most qualitative approaches can be attributed to constructivist philosophy (Caelli *et al.*, 2003:4). In this particular role, individuals generate knowledge through their subjective interaction with individuals in their environment (Caelli *et al.*, 2003:4). According to Eriksson and Kovalainen (2016:15), the subjective constructivist perspective posits that individuals can only perceive and interpret the external world through observations and that social processes shape reality. Furthermore, knowledge is believed to be accessible alone through the involvement of social actors.

The interpretivist perspective challenges the positivist notion that research methodologies employed in chemistry and physics may be applied to studying human behaviour (Willis, 2007:6). Interpretivism is commonly seen as a theoretical framework that offers an alternate perspective to the dominant positivist paradigm. The underlying assumption is that an effective approach necessitates acknowledging the distinctions

between individuals and entities; hence compelling social scientists to comprehend the subjective significance of social behaviour (Bryman & Bell, 2011:17). Humans are additionally impacted by their interpretation of their surroundings - their subjective reality (Willis, 2007:6).

Interpretive scholars posit the assumption that the apprehension of reality is contingent upon social constructions, including language and shared meanings. The researcher's primary interest lies in the intricate nature of human sense-making as it unfolds in various situations. They seek to comprehend phenomena by examining the subjective interpretations and significance that individuals attribute to them (Myers, 2013:39). Interpretivism posits that researchers are required to conduct a comprehensive investigation of a given scenario to gain a nuanced understanding of the phenomena at hand, as well as the various ways in which realities manifest across diverse historical, geographical, and socio-cultural contexts (Saunders *et al.*, 2019:137).

According to Eriksson and Kovalainen (2008:20-21), the interpretivist perspective posits that language and shared meanings play a significant role in shaping an individual's constructed reality. Interpretivism is inclined towards employing qualitative research methods, such as case studies, interviews, and observation, due to its superior ability to elucidate how individuals perceive and make sense of their surrounding environment (Willis, 2007:6; Ritchie & Lewis, 2003:22).

According to Saunders *et al.* (2016:141), interpretivism is characterised by its apparent subjectivity. According to Gaudet and Robert (2018:16), an ontological perspective posits the subjective construction of reality. The presence of a significant degree of subjectivity in research has axiological implications, as it entails that researchers inevitably bring their own values and beliefs into the process of interpreting study materials and data (Saunders *et al.*, 2016:141).

Interpretivists posit that reality is shaped by social actors and their perceptions, leading to a high degree of subjectivity (Hillman & Radel, 2018:11; Bloomberg & Volpe, 2016:44; Quinlan *et al.*, 2015:57; Wahyuni, 2012:71). Additionally, interpretivists argue that individuals construct subjective meanings based on their personal experiences (Creswell, 2013:24). Interpretivism places significant emphasis on the capacity of

individuals to build sense by interpreting the environment around them (Maree, 2016:60). Interpretivists contend that the subjective nature of interpretation leads to the generation of diverse knowledge. This occurs when interpreters of equal competence hold differing viewpoints, which can be attributed to various factors such as social, ethnic, cultural, political, economic, and gender distinctions among the interpreters (Guba & Lincoln, 1994:113).

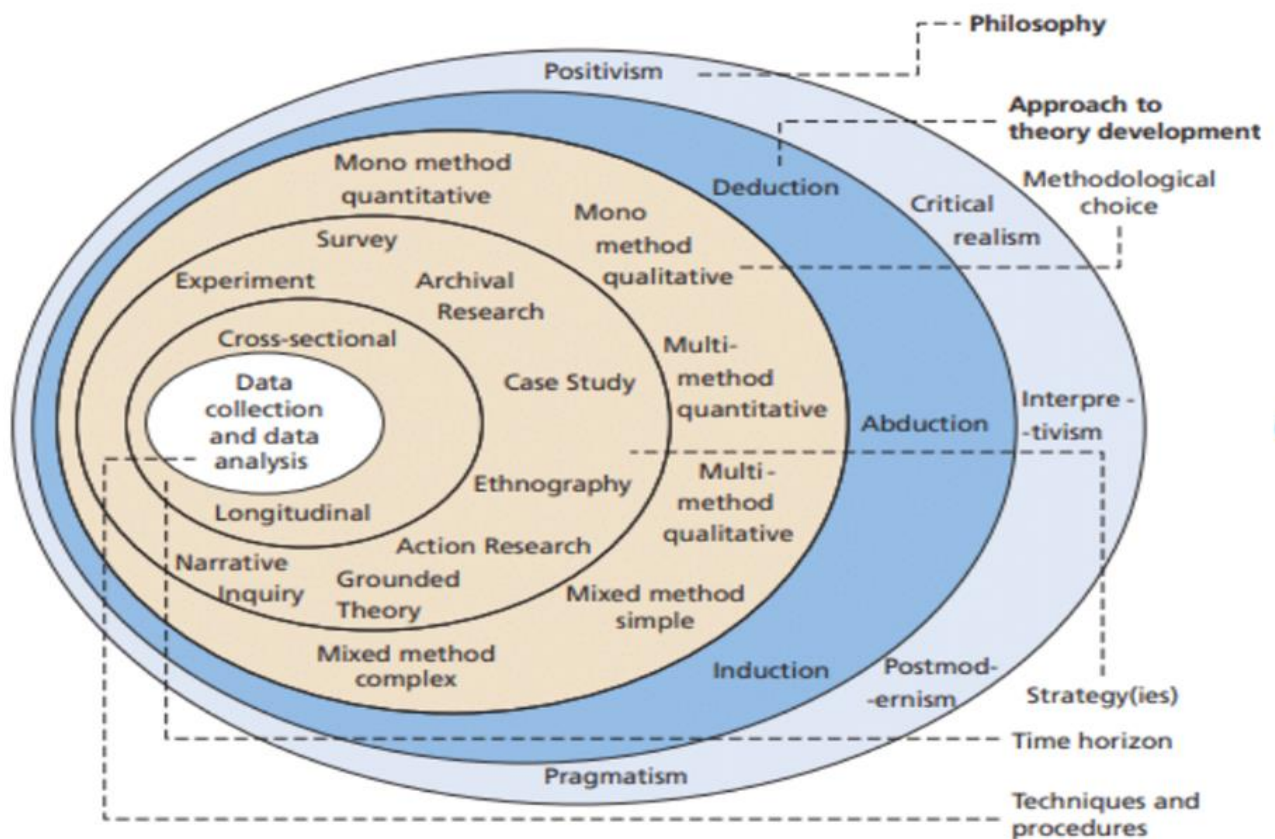
The present study employed an interpretivist perspective, which is often referred to as social constructivism. The researcher generated knowledge by engaging in a somewhat subjective manner with the successful sustainable entrepreneurs who participated in the semi-structured interviews. The utilisation of interpretivism offers several advantages to the researcher when constructing a framework for sustainable entrepreneurship for small, medium, and micro enterprises (SMMEs) in the agricultural industry. According to Creswell (2013:44), this approach enables researchers to comprehensively understand the social interactions among participants. Additionally, it facilitates a qualitative exploration of the factors, obstacles, and tactics that contribute to promoting sustainable entrepreneurship among small, medium, and micro enterprises (SMMEs).

It has been posited that there exists a perception that the significance of the societal realm is concealed and can be elucidated by profound contemplation (Brunt *et al.*, 2017:19). Scholars employing this research paradigm are encouraged to actively engage with the lived experiences of the participants and establish meaningful interactions with them (Bloomberg & Volpe, 2016:44). Hillman and Radel (2018:11) and Bloomberg and Volpe (2016:43) both agree that it is essential for researchers to fully engage with the research environment to accurately interpret and create the social realities experienced by the participants.

Hillman and Radel (2018:10) assert that interpretivist researchers contribute to establishing a theory firmly rooted in the empirical facts obtained through their research endeavours. Moreover, considering the study's target, the researcher aims to generate novel insights that enable small, medium, and micro enterprises (SMMEs) to recognise the significance of integrating sustainability practices into their company operations.

The research onion by Saunders *et al.* (2019:130), shown in Figure 4.1 below, served as the researcher's guide to establishing and implementing suitable techniques. As a result, this section will follow the research onion's layers.

Figure 4.1: Research Onion



Source: Saunders *et al.* (2019:130)

4.3 APPROACH TO THEORY DEVELOPMENT

According to Saunders *et al.* (2016:144), it is vital for researchers to clearly articulate the theoretical framework they plan to employ in their research, regardless of whether or not it is explicitly incorporated into the research design. According to Saunders *et al.* (2016:144), proponents assert that this approach facilitates the researcher's comprehension of the crucial inquiry about the structure of their research endeavour. According to scholarly sources (Brinkmann & Kvale, 2018:118; Picardi & Masick, 2014:6), the existing body of literature proposes three distinct methods for constructing

theories: deduction, induction, and abduction. These approaches are further outlined and consolidated in Table 4.1.

Table 4.1: Deduction, induction and abduction: from reason to research

	Deduction	Induction	Abduction
Logic	When the premises of a deductive inference are true, the conclusion must also be proper.	Inductive reasoning uses known premises to generate unverified conclusions.	Abductive reasoning employs known premises to generate testable conclusions.
Generalisability	Generalising from the general to the specific	Generalising from the particular to the general	Generalisations based on the interactions between the particular and the universal
Use of data	Data collection aims to evaluate hypotheses or propositions related to an existing theory.	Data collection aims to investigate a phenomenon, identify themes and patterns, and develop a conceptual framework.	Data collection is used to investigate a phenomenon, identify themes and patterns, locate these within a conceptual framework, verify this framework through additional data collection, etc.
Theory	Theory falsification or Verification	Theory generation and building	Generation or modification of theory; incorporation of existing approach where appropriate to generate new theory or modify existing theory

Source: Saunders *et al.* (2019:153)

Deductive, inductive, and abductive theories are the three types of theories. A deductive technique is when research begins with a theory, generally established from reading academic literature, and designs a research plan to test the theory. Inductive analysis, on the other hand, begins with data collection to investigate a phenomenon before developing or generating a hypothesis (typically in the form of a conceptual framework). It will be an abductive method when data is collected to investigate a phenomenon, find themes, and explain patterns to develop a new theory or change an existing one (Saunders *et al.*, 2019:152).

In light of this investigation's principal aim, deductive and inductive reasoning were employed to construct theories. The study utilises deductive reasoning to organise the gathered data, drawing upon existing knowledge regarding sustainable entrepreneurship in the agriculture sector. Hyde (2000:83) states that deductive reasoning is a systematic approach to evaluating hypotheses. In this procedure, researchers begin by utilising existing theories such as the TBL, institutional, and legitimate theories. According to Venter and van Zyl (2017:8), deductive reasoning can be defined as a rational procedure that draws conclusions about a particular case by utilising a recognised general proposition.

Consequently, research projects that employ deductive reasoning commence with a robust theoretical foundation (Venter & van Zyl, 2017:8). Deductive reasoning has traditionally been linked to quantitative and explanatory research (Janzen, Nguyen, Stobbe & Araujo, 2015:47; Bryman & Bell, 2014:). However, certain scholars (Casula, Rangarajan & Shields, 2021:1708; Hyde, 2000:85) contend that qualitative studies can also employ deductive reasoning, both formally and informally, in theory development.

According to Patton (1991:194), it is recommended that researchers maintain an open mindset towards the knowledge that emerges from the data during the commencement of fieldwork. Moreover, the researcher may employ deductive reasoning to assess the data and should prioritise verifying and explicating emerging patterns within the data. Nevertheless, certain proponents of inductive reasoning frequently disapprove of deductive reasoning due to its inclination towards establishing a "rigid methodology that restricts the consideration of alternative explanations" (Saunders *et al.*, 2016:147). To address this limitation, the researcher also employed inductive reasoning.

Inductive reasoning is commonly linked to qualitative research, as stated by Brinkmann and Kvale (2018:118) and Brunt *et al.* (2017:23). This is due to the researchers' approach of engaging individuals with little prior notions for the purpose of testing or validating hypotheses. Consequently, the researcher employs a bottom-up methodology in research (Brunt *et al.*, 2017:23), wherein they progress from the particular to the broader (Venter & Van Zyl, 2017:9).

The initial step in the research process involves formulating research inquiries that aim to investigate the phenomenon being examined (Picardi & Masick, 2014:7). Consequently, Brinkmann and Kvale (2018:118) argue that individuals should defer to the empirical world in determining the significance of problems that warrant investigation. Inductive research methodology gives researchers greater flexibility in their exploration and prevents them from being constrained by preconceived notions. According to Bryman and Bell (2011:25), the researcher engages in the process of observing particular phenomena and subsequently conducts tests on multiple hypotheses to build a novel theory.

Developing themes and patterns from the data enables researchers to detect the various realities that may be present within the data (Maree, 2016:39; Saunders *et al.*, 2016:145). According to Yilmaz (2013:312), using inductive reasoning allows researchers to elucidate the descriptive aspects of the meanings that participants ascribe to their experiences of the world.

The current study is situated within the interpretivism research philosophy, which aligns with inductive reasoning. Because sustainable entrepreneurship is still in its infancy among SMMEs in developing countries, Spence *et al.* (2011:12) believe an inductive approach is the most appropriate. The interpretivism philosophy of this study is most likely to inform the inductive approach because of its relationship to the humanities and emphasis on the value of subjective interpretations (Saunders *et al.*, 2019:155).

4.4 METHODOLOGICAL APPROACH

Researchers have the option to employ two distinct methodological approaches in their studies: quantitative and qualitative approaches. The utilisation of a quantitative approach is commonly linked to research approaches that aim to elucidate phenomena through the analysis of numerical data (Yilmaz, 2013:311). The research methodology known as quantitative research is commonly linked to the positivist research paradigm (Saunders *et al.*, 2016:166; Bryman & Bell, 2014:31). In contrast, a qualitative approach is related to qualitative research, which aims to produce unstructured visual or textual data and investigate the phenomenon under study to

develop theory (Venter & Van Zyl, 2017:100). According to du Plooy-Cilliers, Davis, and Bezuidenhout (2014:35), qualitative research is commonly linked to the interpretivism paradigm.

The distinction between data obtained from qualitative studies and quantitative research lies in a collection of assumptions, rules, and values that regulate the concepts of truth and reality (Thorne, 2000:69). According to Thorne (2000:69), quantitative researchers argue that the objective of scientific inquiry is to uncover objective truths that exist in the world. They propose that the scientific method be employed to develop a comprehensive understanding of reality. According to qualitative researchers, the pertinent reality concerning human experience is situated inside subjective experiences within a social context (Thorne, 2000:69). These researchers aim to enhance their understanding of this reality (Botma *et al.*, 2016:182).

The primary objective of the qualitative researcher is to gain a comprehensive knowledge of the participants' lives based on their own perspectives. This approach contrasts the quantitative paradigm, which is more inclined to collect data from many individuals without directly communicating with them (Denzin & Lincoln, 1994:210).

According to Patton (2002:14), the utilisation of the quantitative technique enables the assessment of the responses of a substantial number of individuals to a restricted range of inquiries. This methodology facilitates the comparison and statistical consolidation of the gathered data.

This study presents a comprehensive and transferable compilation of results that are brief, succinct, and economical (Patton, 2002:14). In contrast, qualitative approaches yield in-depth and complete data about limited sample size (Patton, 2002:14). The phenomenon mentioned above enhances the level of comprehension about the examined cases and situations, but diminishing the extent to which the findings may be applied to a broader context (Patton, 2002:14).

Qualitative methodologies facilitate the comprehensive examination and meticulous analysis of many subjects (Patton, 2002:14; Botma *et al.*, 2016:182). Qualitative research approaches primarily emphasise the interpretation and comprehension of

phenomena. In contrast, quantitative methods mainly concentrate on explaining, hypothesis testing, and statistical data analysis (Eriksson & Kovalainen, 2016:4).

Qualitative research methodologies yield textual rather than numerical data, which serves as the basis for analysis (Henning, Van Rensburg & Smit, 2004:3; Rutberg & Bouikidis, 2018:209). The primary objective of qualitative research is to discern and interpret patterns within textual material, intending to create a comprehensive depiction that preserves the depth and complexity of the information (Zikmund *et al.*, 2012:132).

Quantitative approaches aim to quantify specific quantities accurately (Bricki & Green, 2007:3). Quantitative data pertains to numerical information and statistical analysis within a logical, reductionist, and objective framework. Qualitative research examines non-numerical data and its phenomenological depiction, wherein a complex interplay exists between human senses and subjectivity (Leung, 2015:324). Quantitative research is more inclined towards employing organised, standardised, and abstracted approaches in collecting and analysing empirical data. Qualitative methodologies prioritise the meticulous examination and interpretation of data within the social and cultural milieu framework, aiming to comprehensively comprehend the subjects under investigation (Eriksson & Kovalainen, 2016:5).

The presence of human opinions and emotions is often regarded as undesired biases that might compromise the integrity of quantitative analytic outcomes and findings. However, qualitative analysis continues to value the same features, considering them essential and unavoidable, if not highly valuable, as they contribute to the desired "depth" that enhances qualitative conclusions (Leung, 2015:324; Rutberg & Bouikidis, 2018:209).

Table 4.2 below summarises the characteristics of qualitative and quantitative research.

Table 4.2: Characteristics of qualitative and quantitative research

Point of comparison	Qualitative research	Quantitative research
Focus of research	Quality (nature, essence	Quantity (how much, how many)
Philosophical roots	Phenomenology, symbolic interactionism, constructivism	Positivism, logical empiricism, realism
Associated phrases	Fieldwork, naturalistic, constructivist, ethnographic, grounded,	Experimental, empirical, statistical
Goal of investigation	Understanding, description, discovery, meaning, hypothesis-generating	Prediction, control, explanation, confirmation, hypothesis testing
Design characteristics	Flexible, evolving, emergent	Predetermined, structured
Sample	Small, non-random, purposeful, theoretical	A prominent, random, representative
Data collection	Researcher as a primary instrument	Inanimate instruments (scales, tests, surveys, questionnaires, computers)
The primary mode of analysis	The inductive, constant comparative method	Deductive, statistical
Findings	Comprehensive, holistic, expansive, richly descriptive	Precise, numerical

Source: Merriam and Tisdell (2016:20)

Qualitative and quantitative methodologies possess unique attributes that encompass different approaches to study. However, they are not mutually exclusive strategies (Patton, 2002:14). The decision to utilise quantitative or qualitative research methods should be determined by the research inquiries rather than the researcher's personal preferences or inclinations (Marshall, 1996:522). The selection of a research methodology should be contingent upon the specific objectives the researcher intends to achieve. The chosen methodology must align with the research purposes (Eriksson & Kovalainen, 2016:5).

The researcher employed a qualitative methodological technique based on the philosophical paradigm and theoretical ideas informing this study. The researcher posits that small, medium, and micro enterprises (SMMEs) exhibit diverse features. However, the researcher has challenges in comprehending these distinctions through quantitative exploration. The objective of this study is to examine the subjective nature

of acceptable information on sustainability by exploring the lived experiences and emotions of individuals (Wahyuni, 2012:71). The notion of subjectivity regarding the definition of satisfactory knowledge introduces a reliance on how small and medium-sized enterprises (SMMES) construct their social reality, hence influencing the present study. Therefore, considering the main aim of this study is to establish a theoretical structure for elucidating the integration of sustainability inside small, medium, and micro enterprises (SMMEs) by examining their firsthand encounters, qualitative research is deemed more appropriate.

Qualitative research produces concepts that help to better understand social phenomena in natural contexts, focusing on all participants' meanings, experiences, and perspectives (Neergaard & Ulhøi, 2007:20). According to Ritchie and Lewis (2003:34), most qualitative research methods explore phenomena in their natural situation. This is critical for this study because the researcher wants to investigate motivation and obstacles in a unique setting and thoroughly examine the interviewees' responses to identify similarities and contrasts. Traditionally, qualitative research has been promoted and endorsed as the most effective method for discovering new information and formulating hypotheses. As Sekaran and Bougie (2016:7) proposed, sustainable entrepreneurship research is still in its early stages. More frameworks and a more profound knowledge of the underlying motivation and how SMMEs execute it are needed. At this level of growth, qualitative methods are the best methodological fit for this research field.

Moreover, a qualitative research methodology enables the researcher to obtain comprehensive and detailed information, generate novel insights, and foster a more profound comprehension of the topic under investigation. The present study uses qualitative research methods to theoretically extend the information generated from comparable small, medium, and micro enterprises (SMMEs) operating in the agriculture industry. This is achieved by examining and recording experiences and interactions within the sustainability framework. The qualitative research methodology within the novel entrepreneurial setting aims to mitigate potential misunderstandings and misinterpretations during the research process (Voldnes *et al.*, 2014:142). According to Brunt *et al.* (2017:29), the sustainability views of sustainable entrepreneurs can be better understood by examining their lived experiences. The

utilisation of qualitative research methods offers researchers the chance to delve deeper into the participants' comprehension of their lived experiences without relying solely on mathematical or statistical measurements (Zikmund, Babin, Carr & Gryphon, 2012:132; Abdullahi, Senekal, van Zyl-Schalekamp, Amzat & Saliman, 2012:23).

Given that the present study employs a qualitative methodological approach, the subsequent discussion will briefly address its methodological considerations. The present study is characterised by a methodological framework that falls under an exploratory, descriptive qualitative approach. Exploratory research can be defined as a deliberate and comprehensive approach to collecting data to maximise the identification of general patterns through the description and direct comprehension of a particular domain within the realms of social or psychological phenomena (Given, 2008:327).

Researchers engage in exploration when there is limited scientific knowledge regarding a phenomenon that researchers consider valuable elements worth investigating (Given, 2008:327). Frequently, exploratory and descriptive research methodologies yield qualitative data (Schieffer, 2006:2). One of the methods employed in exploratory research is engaging in dialogues between the researcher and the individuals who are the focus of the study (Schieffer, 2006:2). The researcher assumes the role of facilitating the discussion, with a particular emphasis on addressing specific vital topics. Typically, the questioning approach is semi-structured (Schieffer, 2006:2).

4.5 RESEARCH STRATEGIES

Researchers employ qualitative research methods to investigate the underlying mechanisms and rationales behind human conduct, subjective experiences, and perspectives. Various methodologies are used to conduct data search and exploration to attain a comprehensive comprehension (McMillan & Schumacher, 2014:31). Five distinct interactive qualitative designs exist, which can be classified into two overarching categories. The first category encompasses designs that focus on individual lived experiences: phenomenology, case study, grounded theory, and certain critical studies. The second category pertains to designs centring around culture and society, specifically ethnography and certain critical studies. These

categorizations are supported by McMillan and Schumacher (2014:31-32) and Merriam and Tisdell (2016:14,16).

4.5.1 Phenomenology

The authors (Quinlan *et al.*, 2015:128) argue that a philosophical perspective towards investigating human experiences involves recognising that human experience is intrinsically subjective and influenced by the surrounding circumstances. The primary objective of phenomenology is to transform subjective experiences into a comprehensive depiction of their fundamental nature, enabling rigorous analysis and thoughtful contemplation. Typically, researchers engage in extensive interviews with participants to gain insight into their subjective interpretations of their daily encounters with the phenomenon (McMillan & Schumacher, 2014:32; Merriam & Tisdell, 2016:25).

4.5.2 Grounded theory

According to Venter and Van Zyl (2017:105), an entirely inductive research design aims to create theory from study data. The process entails a systematic and thorough series of steps to generate comprehensive theoretical frameworks. The researcher is responsible for gathering predominantly interview data through many field visits. The primary objective of the initial data collection is to obtain a diverse range of opinions on the phenomenon (McMillan & Schumacher, 2014:32; Merriam & Tisdell, 2016:31). Additionally, the researcher uses the method of constant comparison to assess several types of information. The process of data collecting ceases when data saturation is attained, as indicated by McMillan and Schumacher (2014:32) and Merriam and Tisdell (2016:31). Finally, the researcher identifies the fundamental phenomena, constructs the narrative, and formulates a conditional matrix that delineates the historical and social circumstances and outcomes that impact the phenomenon (McMillan & Schumacher, 2014:32; Merriam & Tisdell, 2016:31).

4.5.3 Ethnography

The endeavour to comprehend and articulate the significance of societal existence (Maree, 2016:106) is pursued by acquiring comprehensive and intricate data (Besen-

Cassino & Cassino, 2018:131) about an entire cultural collective (Saunders *et al.*, 2016:188; Quinlan *et al.*, 2015:146; Creswell, 2014:187) within its authentic environment over an extended duration (Bloomberg & Volpe, 2016:47; Creswell, 2014:14). Ethnography is a research method that centres on the study of acquired patterns of language, behaviours, rituals, beliefs, and ways of life. This technique entails conducting extensive fieldwork, which involves observing and engaging in informal conversations with individuals participating in collective group activities and collecting and analysing group-related artefacts. The researcher takes a documentary approach that centres on the ordinary aspects of daily existence, employing the observational abilities of the investigator (McMillan & Schumacher, 2014:31; Merriam & Tisdell, 2016:28).

4.5.4 Critical studies

Critical studies refer to an academic field that examines and analyses various cultural, social, and political phenomena from a critical perspective. In this approach, as per the findings of scholars of essential studies, the community is fundamentally organised based on factors such as race, socioeconomic status, social class, ethnicity, sexual orientation, and gender. According to McMillan and Schumacher (2014:32) and Merriam and Tisdell (2016:59), the persistence of a patriarchal community results in the ongoing oppression of marginalised people.

Critical researchers exhibit scepticism towards study designs that fail to acknowledge the significance of relationships inherent in the employed data collection methodologies. Researchers who adopt a feminist and ethnic perspective prioritise the examination of race and gender as significant issues within their studies. Conversely, scholars influenced by postmodernism and critical theories focus on analysing social institutions and the broader community (McMillan & Schumacher, 2014:32).

4.5.5 Case study

A case refers to a specific occurrence, undertaking, initiative, or group of individuals limited inside a defined period and physical boundaries. The responsibility of determining the case and its borders is with the researcher. Researchers have the

option to choose a particular example based on its distinctiveness or employ it as a means to exemplify a specific matter (McMillan & Schumacher, 2014:32). According to McMillan and Schumacher (2014:371), the utilisation of a case study serves to enhance comprehension of a specific topic or practise, enabling individuals to make well-informed decisions.

4.5.6 Research design adopted

The present study investigates the lived experience of sustainable entrepreneurs operating in the agricultural sector to gain a comprehensive understanding of this phenomenon. To achieve this objective, the research has employed a case study technique. The subsequent sections provide a complete exposition of the case study approach and offer a rationale for its selection in the present study.

The case study research design, often known as case studies or case research, is well recognised as a prominent exploratory methodology within qualitative research (Venter & Van Zyl, 2017:106). According to Bloomberg and Volpe (2016:46), a case study is a comprehensive examination and evaluation of a specific social phenomenon limited to a particular social unit or system. This research design's distinguishing characteristic is its capacity to comprehensively investigate a subject or phenomenon within its authentic environment or context (Saunders *et al.*, 2016:185).

As Salkind (2010:1258) states, researchers cannot influence the phenomenon or people being studied in a real-life setting. On the contrary, it facilitates substantial engagement with the research participants, enabling a comprehensive understanding of the phenomenon being investigated (Bloomberg & Volpe, 2016:46). The outcomes of case studies possess both descriptive and theoretical qualities as they prompt inquiries into the underlying reasons for the occurrence of a particular instance, as well as inquiries into the aspects that merit further investigation in comparable situations (Corcoran, Walker & Wals, 2004:9).

According to Venter and Van Zyl (2017:106), it is agreed that a case study design should not solely focus on description. Still, it should also strive to answer the issue of

why. This inclusion of why questions is valuable as it explains the 'what' and 'how' aspects of the study.

As Flyvberg (2011:301) stated, selecting the case to be examined and establishing the research's parameters are crucial elements in defining a case study. The unit of analysis encompasses several entities such as individuals, programmes, institutions, groups, events, or concepts (Bloomberg & Volpe, 2016:46; Saunders *et al.*, 2016:184; Creswell, 2014:14; Siron-Peters, 2004:941).

The researcher examines the unit of analysis within a specific timeframe (Venter & Van Zyl, 2017:104). According to Creswell (2014:14), case studies are delimited by temporal and activity boundaries, and researchers gather data over an extended duration. Case study researchers collect comprehensive and extensive data from a variety of naturally occurring occurrences (Tsang, 2014:178), utilising several approaches to data collecting (Bloomberg & Volpe, 2016:46) and employing diverse methodologies (Van Zyl, 2014:217).

Case study researchers use several methods to gather data and gain insights into a particular phenomenon. These methods include document reviews, observations, interviews, focus groups, surveys, and critical incidents (Bloomberg & Volpe, 2016:46). The utilisation of several data-gathering methods in case study research facilitates the demonstration of triangulation, which is a valuable mechanism for evaluating the credibility and reliability of the data (Venter & Van Zyl, 2017:107).

The utilisation of case studies has been correlated with various benefits and drawbacks. One notable benefit of case study research is its ability to comprehend intricacies within specific situations (Simons, 1996:225). Case studies offer detailed and comprehensive descriptions (Tsang, 2014:178) and valuable insights into the characteristics of the occurrences (Easton, 2010:118). Although case study research has been acknowledged for its numerous benefits, it has faced criticism due to its tendency to focus on the unique conditions of individual practises, thereby limiting its potential contributions to theory. Nevertheless, the primary objective of the researcher is to broaden and extrapolate theories rather than simply listing frequency. The

researcher's objective is to explore further the concept of analytical generalisation rather than statistical generalisation, as stated by Easton (2010:126).

Given the little knowledge surrounding the adoption of sustainable entrepreneurship by small, medium, and micro enterprises (SMMEs) in Zimbabwe's agricultural sector, the primary objective of this study is to acquire a comprehensive grasp of this subject matter. To accomplish this objective, the present study used a methodology involving various descriptive case studies to gather data from accomplished entrepreneurs in sustainable farming. Yin (2003) posits that case studies are appropriate in situations where the primary objective is to address inquiries about the "how" and "why" aspects of a phenomenon. Additionally, Baxter and Jack (2008:545) suggest that case studies are instrumental when the researcher cannot manipulate participant behaviour and when there is a desire to comprehensively examine contextual factors pertinent to the phenomenon being investigated.

The chosen research methodology for this study was the case study approach, which was deemed appropriate for investigating the motivating factors, challenges, and strategies utilised by small, medium, and micro enterprises (SMMEs) in adopting sustainability practices in their business operations. It was imperative to ensure that the participant's responses were not manipulated. In addition, utilising a case study approach facilitated the researcher's examination of an authentic context in which the phenomenon and the persons being studied were outside the researcher's control (Salkind, 2010:1258). The utilisation of the case study approach facilitated the researcher in acquiring comprehensive and detailed descriptions of the contextual circumstances encompassing the participants. These circumstances are pivotal in shaping their realities and influencing their interpretations.

This study employed a multi-case study approach, which yielded many advantages for the researcher. This approach facilitated the researcher's enhanced comprehension of the hitherto unexamined intricacies surrounding the integration of sustainable entrepreneurship within the operational framework of small, medium, and micro enterprises (SMMEs) operating within the agricultural sector. The utilisation of the multiple case study approach facilitated the researcher in analysing the contextual factors inside each case, as well as making comparisons across the various case

settings (De Massis & Kotlar, 2014:18). In addition, the utilisation of many case studies facilitated the researcher in examining, comprehending, and interpreting the significance of the lived experiences, as well as the perspectives of individual participants (Eisenhardt & Graebner, 2007:25; Eisenhardt, 1989:532).

Researchers can establish a more robust foundation for theory development and explanation by employing various cases. Eisenhardt and Graebner (2007:25) and Eisenhardt (1989:532) claim that a theory-building study is a research approach that entails the utilisation of several examples to generate theoretical constructs and propositions, intending to elucidate the phenomenon through empirical evidence derived from case-based analysis.

4.6 RESEARCH METHODS

Research methods encompass a collection of distinct procedures, instruments, and strategies employed to acquire and analyse data (Saunders *et al.*, 2016:124; Wahyuni, 2012:72). This section provides an overview and analysis of the data collection methods employed in this study, specifically focusing on the acquisition of secondary data and primary data.

The study was conducted in two phases:

Phase 1: Critical literature review

Phase 2: Empirical research

4.6.1 Phase 1: Critical literature review

Secondary data was gathered through a comprehensive literature review to fulfil the main aim of this study. Quinlan *et al.* (2015:27) define secondary data as scholarly works disseminated through various channels, including journal articles, books, government documents and reports, theses, and conference proceedings. This literature review presents a comprehensive examination of the existing scholarly contributions (Besen-Cassino & Cassino, 2018:96) about a collection of published works on the particular subject matter (Trafford & Leshem, 2012:68). As stated by

Bloomberg and Volpe (2016:105), the primary aim of a literature review is to present a comprehensive and unbiased overview of prevailing concepts, theories, and data that are pertinent to a particular research investigation.

A critical literature review was undertaken in Chapters 2 and 3. Chapter 2 elaborated on the nature of sustainable entrepreneurship and theories underlining its adoption by SMMEs. It highlighted the determinants for adopting sustainable entrepreneurship, the benefits of sustainability inclusion, and challenges and strategies that can increase the adoption of sustainable entrepreneurship by SMMEs in Zimbabwe's agricultural sector. Chapter 3 discussed the SMME landscape in Zimbabwe's agricultural sector. It elaborated on the role of SMMEs in Zimbabwe's economic development and the importance of adopting sustainable practices in the agricultural industry.

This study examined a range of scholarly sources, including textbooks, journal articles, government reports, theses, and conference proceedings. The selected sources were explicitly chosen for their relevance to sustainable entrepreneurship, sustainable agriculture, and micro, small, and medium firms. The present study utilised vital phrases and ideas such as sustainable entrepreneurship, sustainable businesses, small, medium, and micro enterprises (SMMEs), sustainable agriculture, sustainable economy, circular economy, green business, and Zimbabwe agriculture to conduct data searches and establish a framework for the literature evaluation. The researchers employed search engines, specifically Google and Google Scholar, to identify literature materials pertinent to the study. Furthermore, a comprehensive range of databases, including Emerald, Sabinet, Elsevier Science Direct, Sage, Wiley, and Springer journals, were accessed for this study.

4.6.2 Phase 2: Empirical research

This section provides an overview of the planned empirical study, focusing on the target population, the sampling methodology, and the data collection procedures.

4.6.2.1 Population studied

According to Bryman (2012:714), a population is the complete set of individuals from which a sample will be chosen. Banerjee and Chaudhury (2010) define a population as a comprehensive group of individuals possessing distinct traits, such as geographic location. According to Carlson and Winqvist (2018:7), individuals within this demographic exhibit a standard set of features. According to Luck, Daily, and Ehrlich (2003:331), it is imperative for researchers to establish a precise definition of their target audience before engaging in empirical inquiry.

Therefore, the target population for this study comprises all small, medium, and micro enterprises (SMMEs) within the agricultural sector in Zimbabwe that are engaged in sustainable business practices.

4.6.2.2 Sampling process

According to Thompson, Schwartz, Davis, and Panacek (1996:75), researchers often encounter limitations that prevent them from examining the features of the entire population. Consequently, individuals may opt to investigate a subset or sample of the population (Carlson & Winqvist, 2018:7; Diamantopoulos & Schlegelmilch, 2000:10). According to Collis and Hussey (2014:197), a sample is defined as a subset segment that represents the entire population. According to Kuper, Lingard, and Levinson (2008:687), selecting participants for a qualitative study and determining whom to interview or watch are crucial decisions.

The sampling procedure encompassed the delineation of the sample units and the elucidation of the criteria for these units, alongside the identification of the sampling technique and the determination of the sample size.

4.6.2.2.1 Research sample

The researcher selected the participants using non-probabilistic sampling techniques, namely purposive and snowballing. Purposive sampling was relied upon first, where organisations supporting and rewarding sustainable entrepreneurs in Zimbabwe were

targeted. A comprehensive online search was conducted. After an extensive analysis of several business websites, the researcher selected Green Enterprize as the best fit since it supports and rewards sustainable entrepreneurs in all sectors nationwide. The researcher contacted Green Enterprize and asked for the names of their best and two runner-up winners under the category of the agricultural sector. The researcher emailed the research request to show that the study was authentic and approved by the NWU Business School Scientific Committee. The interview guide was also attached to inform them what their winners would be asked. Green Enterprize approved the request and gave the contacts to the researcher after getting the consent of the participants. The researcher then expanded the sample from the three sustainable entrepreneurs using Snowball until data saturation was met.

The researcher adhered to the POPI Act regarding the contact details of the prospective participants by complying with minimum requirements, which include taking accountability and ensuring that the contact details are used for legitimate and lawful purposes of the research only (POPIA, 2013). The researcher was guided by the inclusion and exclusion criteria below:

Table 4.3: Study sample inclusion and exclusion criteria

Criteria for this study sample	Inclusive	Exclusive
Registered SMME in the agricultural sector	✓	
Produce economic, social and environmental value concurrently.	✓	
Successful and operating SMME	✓	
Have been operational for at least two years	✓	
Business negatively affects the environment and society.		✓
Unregistered SMME in the agricultural sector		✓
SMMEs not in the agricultural sector		✓

4.6.2.2.2 Sampling technique adopted

Two primary sampling approaches can be employed: probability and non-probability. Probability sampling strategies are derived from the fundamental principles of randomness and probability theory. According to Maree (2016:192), probability sampling ensures that every element within the population has a discernible probability of being chosen, more significant than zero. In contrast to probability sampling approaches, non-probability sampling does not employ random selection processes. This statement suggests that some aspects of a population are more likely to be chosen than others (Bryman & Bell, 2014:171). Non-probability sampling is characterised by the absence of a sampling frame, which restricts the researcher from employing probability sampling methods. Saunders *et al.* (2016:295) assert that non-probability sampling is frequently used when the likelihood of selecting each example from the target population is unknown. Non-probability sampling is commonly employed in qualitative research because it relies on subjective evaluations (Venter & Van Zyl, 2017:113).

In light of the present study's utilisation of a qualitative methodological framework, the decision was made to employ the methodology of non-probability sampling. The research used the non-probability method known as purposive sampling. Purposive sampling is a research method researchers employ to select instances based on predetermined criteria derived from the target population's characteristics (Venter & Van Zyl, 2017:113).

In purposive sampling, researchers use their discretion to choose examples most suitable for addressing their research inquiries and accomplishing their research goals (Saunders *et al.*, 2016:301; Quinlan *et al.*, 2015:181). The study employed criterion and purposive sampling to locate the primary and secondary sample units based on specified criteria. The researchers used criterion sampling to address the limited sample size inherent in case study research (Venter & Van Zyl, 2017:136). The utilisation of criterion sampling in this particular study has facilitated the researcher in the identification and selection of cases that possess a substantial amount of information and are directly connected to the phenomenon being investigated (Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood, 2015:533).

Following the successful acquisition of interviews with accomplished sustainable entrepreneurs in the agricultural industry, the researcher employed a snowball sampling technique to facilitate access to other prosperous, sustainable businesses. The snowball approach is a research methodology that entails soliciting research participants for referrals and recommendations of colleagues who may meet the criteria for participation in the study, resulting in a cascading effect of more references (Robinson, 2013:37). According to Wahyuni (2012:73), the snowball strategy, despite its informal nature, seems to be more effective in negotiating access due to its reliance on pre-existing networks. In qualitative research, it is common for researchers to employ multiple sampling techniques. Typically, the deliberate selection of a sample is followed by using the snowball technique (Wahyuni, 2012:73).

The researcher sought the cooperation of the sustainable entrepreneurs she had established connections with to provide access to interviews with additional sustainable entrepreneurs within their social network. The researcher employed both the non-probability purposive sampling technique and the snowball sampling technique.

4.6.2.2.3 Sampling size

Although there is no predetermined sample size for qualitative investigations (Venter & Van Zyl, 2017:113; Saunders *et al.*, 2016:297; Kuper *et al.*, 2008:688), researchers often rely on the notion of theoretical saturation as a measure of sample size adequacy (Guest, Bunce & Johnson, 2006:59). The concept of theoretical saturation is observed when a qualitative researcher reaches a point where no additional information is found within the data about the codes, themes, or theory being examined (Guetterman, 2015:3; Marshall, Cardon, Poddar & Fontenot, 2013:11).

According to Malterud, Siersma, and Guassora (2015:1), researchers have a consensus that theoretical saturation is valid in qualitative studies. However, they contend that the actual saturation method frequently lacks clarity. Malterud *et al.* (2015:2) propose using information power, which asserts that the sample size should be inversely proportional to the sample's magnitude of information power. The concept

of information power is closely linked to the level of specificity exhibited by the model under investigation (Malterud *et al.*, 2015:3). According to Malterud *et al.* (2015:3), if the participants in a study possess highly specialised traits, it is anticipated that the sample size of the study will be small. In the present investigation, the investigator employed a limited sample size due to the necessity of adhering to specified inclusion criteria for the selected instances.

The concept of information power is also associated with the calibre of the interview discourse (Malterud *et al.*, 2015:3). According to Malterud *et al.* (2015:3), studies that exhibit effective and unambiguous communication between researchers and participants necessitate a smaller sample size to achieve adequate information power compared to studies characterised by vague or unfocused discussions.

During this study, the researcher and the participants engaged in robust and unambiguous exchanges throughout the interview sessions, which were conducted per the predetermined interview schedule. The researcher took measures to mitigate potential sources of bias, such as tensions or opposing perspectives, that could have impacted participants' confidence levels in their responses to the questions. The robust and transparent exchanges between participants and the researcher enhance the informational efficacy and provide a rationale for the selected sample size.

When adhering to the principles of qualitative research, it is generally recommended that researchers determine the sample size based on saturation. Saturation is widely recognised as the primary approach for calculating sample sizes in qualitative research (Namey, Guest, McKenna & Chen, 2016:426). According to Namey *et al.* (2016:426), thematic saturation is when minimal or no further information about the research topic is obtained, requiring a specific number of data-collecting events. Saturation refers to the stage in research where the accumulation of different data ceases to provide any additional insights into the matter being examined. The notion of saturation is commonly employed by researchers as a guiding framework for data collecting (Mason, 2010:1). Identifying the point at which theme saturation is of utmost importance to mitigate the risk of excessive data collection.

Based on the study's primary purpose, the sample's specificity, the quality of the interview discussion, and the chosen analysis approach, a smaller sample size was deemed to possess a high level of information power. The sample includes substantial information power, enabling the researcher to employ a sample size of 16 sustainable entrepreneurs operating in the agriculture sector in Zimbabwe. As stated by Charmaz (2006:14), it is recommended for researchers to conclude data collection after the categories (or themes) have reached saturation. In other words, the researcher should terminate data collection when new data acquisition ceases to generate fresh insights, enhance comprehension, or uncover novel attributes about the investigated phenomenon. According to Saunders *et al.* (2019:283), the importance is in effectively disseminating the theory to a substantial audience rather than solely focusing on attaining a specified percentage of the population.

The point of saturation was achieved with the inclusion of the 16th participant. Therefore, the research sample consists of 16 sustainable entrepreneurs operating in the agricultural sector in Zimbabwe, who were selected to engage in the qualitative study through semi-structured interviews.

4.7 DATA COLLECTION

A range of data collection techniques can be employed while employing a case study methodology. The research methods used in this study encompass focus groups, observations, document analysis, and interviews (Maree, 2016:83; Austin & Sutton, 2014:438). As previously indicated, this research employed the multiple case study methodology. The principal method used for data collecting was semi-structured interviews, supplemented with observations and document analysis to validate the gathered data. The following sections describe the abovementioned concepts utilised in this study.

4.7.1 Interviews

Interviews can be characterised as interactive exchanges where the interviewer gathers comprehensive descriptive information to gain insight into the experiences and social contexts of the participants (Packer, 2018:62; Maree, 2016:93). Interviews can

be categorised into three types: highly structured, semi-structured, or unstructured dialogues (Venter & Van Zyl, 2017:114; Saunders *et al.*, 2016:390). Structured interviews are a research method that uses a pre-established set of questions to aid the interviewer in conducting participant interviews (Saunders *et al.*, 2016:390; Austin & Sutton, 2014:438). Structured interviews are primarily employed in quantitative research investigations because of their inherent rigidity (Quinlan *et al.*, 2015:247). Semi-structured interviews typically commence with open-ended questions, after which the researcher inquires about specific areas of interest (Venter & Van Zyl, 2017:114). Unstructured interviews, often referred to as open-ended interviews, typically use a conversational approach wherein the researcher aims to delve into the participant's experiences (Maree, 2016:93). According to Quinlan *et al.* (2015:248), qualitative studies commonly employ both semi-structured and unstructured interviews.

The primary distinction among these interview formats is in the degree of strictness regarding the design of the presentation (Berg, 2007:92). According to Miller and Salkind (2002:309), interviews can vary in format, ranging from a meticulously planned set of questions to a more casual conversation with minimal organisation, except for specific topics wanted by the interviewer. Table 4.4 presents a comprehensive overview of several interview structures.

Table 4.4: Different types of interview structures

Standardised/highly structured	Informal/unstructured	Semi-structured
Predetermined wording of questions	Use open-ended questions	The interview guide contains a variety of structured and unstructured interview queries.
Predetermined order of questions	Exploratory, Flexible questions	Only use flexible questions.
An interview is a verbal form of a written survey	Conversation style	Used when specific data from all respondents are required
Usually used in qualitative studies to obtain demographic data (gender, age, education etc.).	It is a valuable instrument when the researcher knows little about the phenomenon being studied.	The interview's main components are guided by a list of issues or questions to be explored.
Mainly used for quantitative studies.	The goal is to gain knowledge from the interview to formulate questions for future discussions.	The goal is to gain knowledge from the interview to formulate questions for future discussions.
Examples: Census surveys, marketing surveys	Utilised primarily in participant observation, ethnography, and case studies	Case studies

Source: Merriam and Tisdell (2016:110)

The present study employed semi-structured interviews as the primary data collection method, utilising a combination of face-to-face, telephone, and internet interviews with participants. Brinkmann and Kvale (2018:52) assert that interviews are frequently used in case studies that centre on a particular issue, which aligns with the present study. The utilisation of semi-structured interviews facilitated the researcher in encompassing a diverse array of circumstances, employing a set of inquiries (Bryman & Bell, 2014:216), and modifying the order of queries as needed (Maree, 2016:93). The utilisation of semi-structured interviews facilitated the researcher in ensuring consistency during the process of questioning the interviewees (Bryman, 2012:472).

Semi-structured interviews afford the respondents a certain degree of autonomy in their responses. However, they diverge from unstructured interviews because the researcher guides the discourse through predetermined questions or subjects (Ghauri & Gronhaug, 2010:126). When collecting data, it is imperative to maintain flexibility to accommodate the diverse perspectives of participants while simultaneously remaining focused on the study questions and phenomenon at hand (Neergaard, 2007:83). The researcher employed in-depth interviews as a method of data collection to uncover the underlying theories, concepts, and practises. Semi-structured interviews facilitated open and honest dialogue from the interviewees, enabling the researcher to explore uncharted and unforeseen topics based on the respondents' cues (Wahyni, 2012:74; Neergaard, 2007:83).

4.7.1.1 Interview guide

Before conducting the interviews, the researcher developed an interview guide tailored explicitly for sustainable entrepreneurs (see Appendix A). The interview guide comprises a standardised set of questions that adhere to a predetermined sequence (Easterby-Smith *et al.*, 2015:140). A comprehensive interview guide includes a series of questions or themes the researcher plans to investigate during the interview process (Patton, 2002:343). It is customary to construct an interview guide to ensure that the critical lines of enquiry are consistently pursued with everyone interviewed (Patton, 2002:343).

This section provides an overview of the development of the interview guide, including the process of formulating questions and the significance of the interview guide in addressing the study's research questions.

Interviews typically commence by posing gentle and non-intimidating inquiries about demographic information (Berg, 2007:105). The initial step for the researcher is establishing rapport and creating a comfortable environment for both parties involved in the interview. This can be achieved by initiating the conversation with general and introductory questions, gradually transitioning towards more specific inquiries (Fontana & Frey, 1994:371). According to Berg (2007:105), demographic questions are straightforward for participants to respond to and facilitate the establishment of

rapport between interviewers and participants through nonverbal cues such as eye contact and overall demeanour. As the interview develops, more intricate and sensitive topics can be presented. The interview guide utilised in this study was designed to gather information regarding the personal and company profiles of the research participants. This approach aimed to provide a comprehensive and detailed description of the individual and business profiles of the 16 sustainable entrepreneurs. This analysis enhances comprehension of the sustainable entrepreneurship domain's research outcomes, fostering a more comprehensive understanding of the collected data.

According to Easterby-Smith *et al.* (2015:140), research questions need to be non-leading and avoid the likelihood of producing a predictable response. According to Ritchie and Lewis (2003:169) and Eriksson and Kovalainen (2016:96), leading questions are defined as ones that may imply a desired, anticipated, or socially acceptable answer. Therefore, it is advisable to refrain from using them. The questions posed by researchers during an in-depth interview are carefully crafted to elicit comprehensive responses without any intention of influencing the content of the answers (Ritchie & Lewis, 2003:154). Researchers should use caution when formulating questions that imply a potential response to the respondent (Ritchie & Lewis, 2003:154). The researcher deliberately avoided asking leading questions when developing the interview guide questions.

According to Ritchie and Lewis (2003:155), concise, specific, and unambiguous questions are considered the most efficient in eliciting the desired information from the respondent. According to Ritchie and Lewis (2003:155), the interviewer must formulate questions directly and uncomplicatedly. Clarifying questions is crucial in ensuring effective communication between the interviewer and the respondent. Questions need to be precise to clearly explain the expectations and requirements of the interviewee. The researcher should refrain from formulating questions that are very abstract or theoretical in nature. While the researcher's inquiries may be influenced by their comprehension of pertinent theory, it is vital to devise a method for transforming them into straightforward questions formulated in colloquial language (Ritchie & Lewis, 2003:155). The speech delivered by the interviewer must be clear and understandable to the individual being interviewed. According to Berg (2007:102), conducting

interviews at the respondents' level is preferable. In contrast to research inquiries, interview inquiries should avoid using abstract, theoretical concepts, specialised terminology, or scholarly discourse; instead, they should be formulated comprehensibly and straightforwardly (Easterby-Smith *et al.*, 2015:140). The researcher developed a set of well-defined and succinct inquiries that were comprehensible to the persons included in the study.

According to Berg (2007:104), the double-barrelled question refers to a type of topic in an interview when the interviewee must address two distinct subjects simultaneously within a single inquiry. It is advisable to refrain from using double questions as they tend to cause confusion among participants. This is because they must recall both questions and try to respond to both parts (Ritchie & Lewis, 2003:155). According to Berg (2007:104), a viable approach to addressing a double-barrelled inquiry is disentangling the two topics and posing them as distinct inquiries. If the two items are not adequately distinguished, it can lead to the generation of answers; nevertheless, examining the responses to double-barrelled questions can be challenging (Berg, 2007:104). The interview guide employed in this study did not include any questions that combined multiple inquiries into a single item.

According to Ritchie and Lewis (2003:169), open questions are characterised by their need for more than a single word or a few words to provide a response, while closed questions can be answered with a simple "yes" or "no." According to Eriksson and Kovalainen (2016:96), using open-ended inquiries has been found to promote increased verbal communication. Scholars argue that effective in-depth interviewing necessitates the use of open-ended questions, which differ from dichotomous closed questions that elicit confirmation rather than descriptive responses (Ritchie & Lewis, 2003:153; Easterby-Smith *et al.*, 2015:51). The aim of qualitative inquiry is to strategically, philosophically, and methodologically minimise the imposition of predefined replies during the data collection process (Patton, 2002:353). It might be argued that to elicit authentic responses, it is imperative to pose questions to allow individuals to express their thoughts and ideas freely, without any constraints (Patton, 2002:353). The interview guide employed in this study included open-ended inquiries designed to investigate the lived experience of sustainable entrepreneurs.

To elicit a comprehensive narrative from accomplished sustainable entrepreneurs, the researcher of this study employed semi-structured interviews, wherein pertinent inquiries were posed coherently and fluidly, following the guidance provided by the interview guide. The handbook ensured comprehensive coverage of all essential study areas, leaving no gaps.

4.7.1.2 Conducting interviews: Appearance

Selecting one's self-presentation is of utmost importance due to the enduring and significant impression it leaves on participants, ultimately influencing the study's outcome (Fontana & Frey, 1994:366). The interactional interview situation is influenced by various essential elements, including appearance, looks, dressing style, and body posture. Nonverbal communication plays a significant role in conveying information and establishing the overall tone of the interview (Fontana & Frey, 1994:371). The researcher consistently attended all interview sessions professionally, wearing innovative and conservative formal apparel that reflected a business-oriented aesthetic.

4.7.1.3 Conducting interviews: Rapport

Establishing understanding is a crucial objective in conducting interviews, thus necessitating the interviewer's active efforts in developing rapport (Fontana & Frey, 1994:371). The concept of rapport refers to establishing a connection between the interviewer and the interviewee, wherein the former endeavours to foster a relationship that motivates the latter to actively engage in the interview process (Bryman & Bell, 2011:211). The effectiveness of a conversation relies on the interviewer's skill in establishing rapport. A productive working connection is shown when the interviewer actively endeavours to create a comfortable atmosphere for the interviewee and cultivate a sense of trust (Ritchie & Lewis, 2003:143). Establishing trust and rapport during the early phases of the study enables the interviewer to effectively capture the intricacies and significance of each participant's life, as perceived by the participant (Janesick, 1994:211). The establishment of trust is crucial in interviews due to the intimate nature of these interactions (Marshall & Rossman, 2011:101). Additionally,

this practice guarantees that the participant will disclose all relevant information to the researcher (Janesick, 1994:211).

Establishing trust is essential in guaranteeing that the interviews will provide the researcher with the needed information (Easterby-Smith *et al.*, 2015:144). The interviewer's behaviour should embody qualities such as friendliness, courtesy, conversational skills, and impartiality. He must maintain a balanced demeanour, avoid excessive seriousness and enthusiasm, and strike a middle ground between being excessively verbose and excessively reserved. According to Janesick (1994:211), the objective should be to provide a comfortable environment for the respondents, encouraging them to express themselves openly and extensively. Establishing positive rapport involves demonstrating interest and respect, exhibiting flexibility in responding to the interviewee, and displaying understanding and empathy (Ritchie & Lewis, 2003:143).

The researcher established rapport by engaging in casual conversation with the subjects. Before commencing the interview, the interviewer briefly converses with the interviewee on informal topics unrelated to the study, such as weather conditions and familial matters. This interaction develops a rapport between the two parties (Berg, 2007:124). According to Ritchie and Lewis (2003:143), interviewees exhibit favourable responses when the interviewer demonstrates tranquillity, inner serenity, and confidence. These qualities convey a sense of interest and attentiveness, as well as a feeling of comfort within the interview setting.

4.7.1.4 Conducting the interview: The skills of the interviewer

The acquisition of interviewing skills is achieved through the process of engaging in interview practice, while the effectiveness of interviewing is assessed based on the extent and significance of the knowledge generated (Kvale & Brinkmann, 2009:17). The notion of interviewing as a skill that can be acquired via practical experience is apart from the approach of methodological positivism, which views research as according to prescribed norms and established procedures of particular methodologies (Kvale & Brinkmann, 2009:17). In contrast to quantitative analysis, qualitative inquiry involves the researcher serving as the primary instrument for data

collection. Consequently, there are certain essential expectations placed upon the researcher in this approach (Ritchie & Lewis, 2003:142; Patton, 2002:14). The efficacy of an interview is contingent upon the interviewer's practical aptitude and subjective assessments rather than adherence to prescriptive methodologies (Kvale & Brinkmann, 2009:17). The practice of conducting in-depth interviews places significant cognitive and intellectual demands on the interviewer (Ritchie & Lewis, 2003:142). According to Ritchie and Lewis (2003:142), the result of the interview is primarily influenced by the personal and professional attributes possessed by the interviewer.

According to Easterby-Smith *et al.* (2015:145), interviewers must demonstrate expertise, competence, humility, sensitivity, attentiveness, and non-judgmental behaviour. Conducting in-depth interviews necessitates a genuine curiosity and regard for individuals as unique entities, making it unsuitable for individuals who exhibit a propensity for excessive self-disclosure. According to Patton (2002:341) and Ritchie and Lewis (2003:142), effective in-depth interviewing necessitates a clear and logical mindset. According to Mason (2013:74), the interviewer needs to possess the ability to think quickly and make immediate decisions during the interview process. To effectively conduct an interview, individuals must be able to rapidly digest information, enabling them to extract the fundamental aspects of the participant's discourse while simultaneously ensuring the smooth progression of the interview (Ritchie & Lewis, 2003:142). Individuals need to apply discernment in determining what to explore while also formulating subsequent inquiries that may necessitate a shift in the direction of the debate (Mason, 2013:74). Hence, interviewers must possess exceptional auditory acuity, adeptness in interpersonal communication, proficiency in formulating questions, and the ability to effectively elicit further information (Marshall & Rossman, 2011:145). Interviewing is a complex activity that requires the simultaneous execution of multiple tasks. The interviewer engages in active listening and comprehension, analysing the content of the interview concerning the research inquiries while also maintaining vigilance for any inconsistencies that may arise. The interviewer is responsible for determining which aspects of the conversation to pursue further, selecting the appropriate wording for subsequent inquiries, and discerning non-verbal signals. According to Ritchie and Lewis (2003:143), the interviewer effectively manages the speed of the conversation and remains attentive to both the duration of the interaction and the presence of a recording device. According to Ritchie and Lewis

(2003:143), concentrating and maintaining stamina is crucial for concurrently managing several demands.

After the interview, the interviewer should allocate a period for the respondent to engage in introspection regarding the discourse and provide any further information that they deem pertinent. The interviewer must kindly express gratitude towards the participant, ensuring their time is acknowledged (Easterby-Smith *et al.*, 2015:145). The effectiveness of qualitative approaches is contingent upon the expertise, proficiency, and meticulousness of the individual conducting the fieldwork (Patton, 2002:14). According to Patton (2002:341), the interviewer plays a significant role in determining the quality of the information gathered during an interview. According to Bricki and Green (2007:11), the proficiency of the interviewer plays a crucial role in enhancing the levels of validity and reliability. According to Wegner (2010:28), interviews offer advantages in terms of data validity due to the spontaneous nature of responses, the opportunity to study non-verbal expressions and body language, and the assurance of enhanced data correctness. To maintain data integrity, the interviewer must refrain from engaging in behaviours that could potentially jeopardise the reliability and validity of the information collected. Such behaviours include providing the subject with suggestions for their responses, exhibiting any prejudice, engaging in irrelevant general conversation, or expressing judgment towards the subject (Wegner, 2010:28). According to Easterby-Smith *et al.* (2015:142), interviewers should possess the ability to actively listen and avoid imposing their personal beliefs and emotions into the issue.

According to Fontana and Frey (1994:371), it is recommended for researchers to adhere to standard interviewing approaches by refraining from engaging in a "real" conversation where they respond to questions posed by the respondent or express personal viewpoints on the topics being discussed. Nevertheless, Fontana and Frey (1994:371) advise that researchers should deviate from conventional methodologies and establish a rapport with the interviewee instead. This approach has the potential to foster a greater level of honesty and openness throughout the interview, consequently enriching the amount of information obtained. Qualitative interviewing can produce a more comprehensive portrayal of the interviewee's viewpoint when the interviewer suitably performs the interview. Conducting a high-quality qualitative

interview requires significant effort, excitement, creativity, and active engagement on the interviewer's part (Mason, 2013:74).

4.7.1.5 Conducting the interview: Probes

The researcher's capacity to actively listen is paramount in conducting interviews (Ritchie & Lewis, 2003:142). According to Ritchie and Lewis (2003:142), it is imperative for the researcher to actively engage in the process of listening, comprehending, and assimilating the responses provided by the participant to choose the appropriate course of further inquiry. Probes refer to interrogative inquiries employed to investigate a raised topic further, intending to improve clarity, specificity, and profundity in comprehension and understanding (Ritchie & Lewis, 2003:168). The essential characteristic of probes is their ability to establish a direct connection with the statements made by study participants, frequently by referencing the exact wording or terminology employed by them. Investigations hold significant importance within the context of in-depth interviews, as emphasised by Ritchie and Lewis (2003:168). According to Easterby-Smith *et al.* (2015:145), using probes can elucidate and uncover potential interpretations and comprehensions of the interviewee. According to Marshall and Rossman (2011:145), the effectiveness of the interview is greatly influenced by the researcher's ability to ask insightful and in-depth questions. An interviewer must employ a specific approach to generate a refined dialogue during the interview process. The interviewer should enhance their listening abilities instead of regular conversations where individuals tend to sputter and pay little attention to listening. In an interview, the interviewer must actively listen to the interviewee's responses and correctly inquire more when necessary (Saunders *et al.*, 2009:336).

The researcher in this study appropriately elicited responses from the research participants, augmenting the depth and richness of the empirical data gathered.

4.7.1.6 Conducting the interview: Recording the interview

The methods employed for documenting and afterwards analysing interviews include audio recording, video recording, note keeping, and relying on memory (Eriksson & Kovalainen, 2016:97; Kvale & Brinkmann, 2009:178). The predominant approach for

documenting interviews has been through audio recording devices. This strategy enables the interviewer to maintain their attention on the subject matter and the interactive nature of the conversation (Kvale & Brinkmann, 2009:179). The act of simultaneously recording notes during an interview has the potential to disrupt the interviewing process. In contrast, notes transcribed later may inadvertently exclude important details (Eriksson & Kovalainen, 2016:97).

According to Ritchie and Lewis (2003:166), the interviewer should utilise audio recording during the interview process. This practice ensures that the researcher can fully concentrate on attentively listening and effectively probing the interviewee. One of the main advantages of utilising a voice recorder is its facilitation of the listening process and its ability to provide impartial conversation documentation (Easterby-Smith *et al.*, 2015:146). According to Saunders *et al.* (2009:338), it is recommended that an interview be recorded using a recording device with the interviewee's consent. Specific interviewed individuals express apprehension regarding preserving anonymity and using the disclosed information (Easterby-Smith *et al.*, 2015:146). Following the provision of information to the participants regarding the objective of the recording and obtaining their explicit consent, the researcher aspires for the participant to disregard the presence of the tape recorder and engage in a dialogue that unfolds organically (Flick, 2002:167).

Currently, individuals have access to digital voice recorders that can record for extended periods without interruption while also delivering superior sound quality (Kvale & Brinkmann, 2009:179). According to Kvale and Brinkmann (2009:179), the recorded data can be transferred to a computer for storage, analysis, and transcription. According to Kvale and Brinkmann (2009:179), the utterances, their intonation, and the pauses in dialogue can be documented as lasting, enabling repeated playback for further examination. In recording conversations, the researcher must employ high-quality equipment that is thoroughly examined and evaluated by the researcher (Eriksson & Kovalainen, 2016:98; Easterby-Smith *et al.*, 2015:146).

Sound audio recordings are crucial because they facilitate precise transcription, as researchers can repeatedly listen to the interview (Easterby-Smith *et al.*, 2015:146). One essential prerequisite for conducting a transcription of an interview is that it has

been duly documented. Regrettably, certain interviewers may recall distressing experiences of completing a highly effective interview to realise that no content was captured due to technical malfunctions or, more commonly, human error (Kvale & Brinkmann, 2009:179). According to Kvale and Brinkmann (2009:179), the second prerequisite for transcription is that the recorded interview is perceptible to the transcriber. The interviewer can ensure this by implementing strategies to mitigate background noise. According to Kvale and Brinkmann (2009:179), the interviewer must assertively request a mumbling respondent to articulate their responses more audibly.

It is crucial to possess a proficient understanding of the functioning of the recording equipment, ensuring its proper operation both before and immediately following the interview or meeting. Additionally, it is essential to have extra tapes and batteries readily available (Ritchie & Lewis, 2003:166). Following the conclusion of each interview, it is imperative to document the interview in written form to mitigate potential errors, such as the inadvertent interchange of interview details. Additionally, it is necessary to report specific information such as the date, time, location, and context (Saunders *et al.*, 2009:336).

In this study, the researcher sought consent from participants to systematically and digitally document the interview process to ensure a precise representation of the conversations and mitigate the risk of data loss due to limitations in the interviewer's ability to transcribe everything in real-time (Noor, 2008:1604). The audio recordings exhibited a high level of clarity and audibility. Every recording was assigned a numerical designation. The sustainable enterprises' names, identifying information, and opinions were kept anonymous to protect confidentiality.

4.7.1.7 Conducting the interview: Duration of the interview

The duration of interviews may differ between various research and among participants (Ritchie & Lewis, 2003:165). According to Berg (2007:106), the research questions influence the duration of an interview. If the research questions can be answered with a limited number of questions, the discussions will be shorter. However,

the interviews will likely be extended when the study topics are complex and comprehensive (Berg, 2007:106).

The researcher must refrain from altering the interview duration, as doing so would compromise the integrity of the interviewee's desired time commitment throughout the interview (Ritchie & Lewis, 2003:165). Typically, interviews should adhere to a time limit of 45 minutes (Berg, 2007:107; Miller & Salkind, 2002:310). According to Ritchie and Lewis (2003:165), it is recommended that interviews have a duration of around one hour. According to Miller and Salkind (2002:310), interviewers have observed that most interviewees tend to experience fatigue and exhibit reduced engagement throughout this stage of the conversation.

According to Berg (2007:107), when the interviewer effectively conducts the interview, maintaining the interviewee's interest throughout the interaction, the interviewee frequently expresses surprise at the passage of time, indicating their deep engagement and enjoyment of the interview. This phenomenon can be compared to the experience of engaging with a captivating literary work when the reader becomes so engrossed that they continue reading for extended periods without perceiving the passage of time (Berg, 2007:107). According to Berg (2007:107), a skillfully conducted interview might create the perception that just a short duration has elapsed, even when a significant amount of time has gone. It is essential to acknowledge that the length of an interview does not necessarily determine its usefulness. In fact, concise interviews that elicit suitable responses can sometimes be more advantageous than lengthy interviews that veer off-topic (Berg, 2007:107).

Table 4.5 presents the duration, interview date, and interview style for all sixteen interviews in this study, indicating that each interview was recorded.

Table 4.5: Interview Summary

Participant	Date of interview	Length of interview	Mode	Recorded
P1	20.12.2022	52mins	Physical	Yes
P2	26.12.2022	64mins	Physical	Yes
P3	20.01.2023	42mins	Online	Yes
P4	25.01.2023	56mins	Physical	Yes
P5	31.01.2023	64mins	Physical	Yes
P6	06.02.2023	97mins	Physical	Yes
P7	07.02.2023	90mins	Physical	Yes
P8	09.02.2023	44mins	Online	Yes
P9	10.02.2023	51mins	Physical	Yes
P10	10.02.2023	68mins	Physical	Yes
P11	11.02.2023	50mins	Physical	Yes
P12	14.02.2023	80mins	Physical	Yes
P13	15.02.2023	55mins	Online	Yes
P14	20.02.2023	40mins	Physical	Yes
P15	22.02.2023	54mins	Physical	Yes
P16	24.02.2023	59mins	Physical	Yes

The interviews were scheduled to last a maximum of 90 minutes. Most interviews adhered to this duration, as shown in Table 4.5 above; only one interview exceeded the ceiling by seven minutes. Three interviews lasted less than half the allotted time, most of which were conducted online because of an attempt to reduce costs. The individuals who preferred online interviews were extremely busy, so the interviewer did not want to take up too much of their time. However, all of the required information was collected in those few minutes. Similarly, throughout the process, the researcher gained more experience and understanding of the interview structure, enabling the researcher to conduct interviews in 50-70 minutes more efficiently. However, some respondents, such as P6 and P7, provided more extensive responses, resulting in a more extended discussion.

4.7.1.8 Conducting the interview: Telephonic interviews

Researchers increasingly use the telephone to conduct social investigations (Miller & Salkind, 2002:313). The expenses associated with conducting personal interviews have experienced a notable increase. In contrast, the utilisation of telephonic interviews has the potential to drastically reduce costs (Miller & Salkind, 2002:313). According to Berg (2007:108), researchers have identified telephonic interviews as a potentially successful method for data collection. In certain situations, such interviews may be the sole feasible option due to geographical constraints.

The researcher telephonically conducted three of the sixteen interviews because the three research participants (P3, P8 and P13) were busy and mobile, making face-to-face interviewing unviable.

Regrettably, telephone interviews rely solely on oral interaction, necessitating the interviewer to establish a connection with the interviewee through an exchange in which visual contact is absent (Miller & Salkind, 2002:313). In contrast to face-to-face interviews, telephone interviews do not provide researchers with the advantage of non-verbal cues, which are typically utilised to regulate the pace of the interview and ascertain the appropriate course of action (Berg, 2007:108). According to Miller and Salkind (2002:313), the telephonic interviewer is unable to utilise visual aids as a means of clarifying questions and is also unable to rely on facial expressions of responses to detect potential misunderstandings.

4.7.1.9 Conducting the interview: Interviewing elites

Elite interviews involve individuals holding leadership positions or expertise within a particular group (Kvale & Brinkmann, 2009:147). According to Marshall and Rossman (2011:155), elite individuals are essential, prominent, and well-informed members of an organisation or community. They are chosen to participate in interviews due to their competence in areas pertinent to the research and their unique perspectives on specialised disciplines.

The utilisation of elite interviewing has numerous benefits, as it allows for the acquisition of significant insights from persons who occupy influential positions within social, political, financial, and organisational domains (Marshall & Rossman, 2011:155). The process of elite interviewing is not without its difficulties (Marshall & Rossman, 2011:156). One of the main obstacles encountered in studying elites is difficulty obtaining access to the individuals being interviewed. This is primarily because elites typically lead busy lives and operate within strict time limitations (Kvale & Brinkmann, 2009:147). To secure appointments, researchers may rely on references, recommendations, and introductions for assistance (Marshall & Rossman, 2011:156; Berg, 2007:184).

The study's researcher employed a snowball sampling technique to establish contact with additional affluent sustainable businesses, specifically focusing on those in the elite category. The researcher acquired recommendations and means of introduction from the initial research participants she interviewed. These early participants connected the researcher with additional notable sustainable businesses within their networks.

To conduct an effective interview, the interviewer must comprehensively understand the interviewee's social context and personal background (Kvale & Brinkmann, 2009:147). The elites are accustomed to being queried regarding their viewpoints and ideas. Consequently, the interviewer must comprehensively understand the subject matter under discussion and master its technical terminology (Kvale & Brinkmann, 2009:147). According to Marshall and Rossman (2011:156), interviewers who interact with individuals of high social status are expected to demonstrate their expertise and credibility by comprehensively understanding the subject matter. Individuals with increased confidence and assertiveness are adept at engaging with the public and assuming control in various situations, such as interviews (Marshall & Rossman, 2011:156). The diligent efforts of the interviewer frequently yield positive results regarding the quality of the acquired material. Esteemed individuals significantly contribute to the subject of investigation by offering their unique viewpoints (Marshall & Rossman, 2011:156).

The present study centred on sustainable entrepreneurs of high status in Zimbabwe's agriculture industry, necessitating the researcher to exhibit astute behaviour during the interview process. The researcher diligently familiarised themselves with the background of the research participant before engaging in the interview, demonstrating substantial preparation for the interaction. Before the interview, the researcher searched online to gather information on the research participant and their firm. The researcher ensured that she comprehensively understood the research participants before commencing the meeting. The researcher also highly respected the participants, acknowledging their worth and value.

4.7.2 Observations

To validate the interview findings in the present study, the researcher employed additional methods of data collecting, namely observations and document analysis (Venter & Van Zyl, 2017:119). As stated by Saunders *et al.* (2016:354), the process of observations entails the methodical act of observing, documenting, describing, analysing, and interpreting individuals' behaviours. By engaging in the activities of the individuals under observation, the researcher investigates the participants' experiences and assumes a role within the workgroup or community (Saunders *et al.*, 2016:356; Austin & Sutton, 2014:438). According to Austin and Sutton (2014:438), qualitative researchers can utilise observations in both focus groups and interviews to establish coherence between verbal and non-verbal data obtained from participants.

During site visits, the researcher conducted observations of the physical environments and material objects present, encompassing the office spaces, posters, and brochures associated with the family companies that were part of the study. The researcher was able to obtain an insider perspective on group dynamics and behaviours in the distinct contexts through the observations conducted at these businesses (Maree, 2016:90). The researcher employed the utilisation of field notes as a means of documenting his observations, furnishing supplementary insights to address the study inquiry.

4.7.3 Document analysis

Furthermore, the researcher supplemented their data collection efforts by conducting a comprehensive document analysis. The process of document analysis involves examining various forms of written communications that have the potential to provide insights into the phenomenon being studied (Maree, 2016:88). The researcher obtains data through the implementation of a methodical examination of information in the form of documents (Quinlan *et al.*, 2015:158). As stated by McGregor (2018:245), researchers can utilise various documents and artefacts discovered within the field environment. These resources encompass public records, official documents, old research data, and media artefacts such as newspapers, podcasts, and social media.

Various sources were consulted in this study, including corporate policy documents, goal and mission statements, values statements, code of ethics and conduct, annual reports, press stories, and websites of the sustainable entrepreneurs involved, when accessible. The utilisation of document analysis facilitated the researcher in obtaining personal insights that would otherwise be unattainable through alternative methods (Maree, 2016:89).

4.7.4 Field notes

Field notes refer to the written observations made by a researcher while conducting a study in the field. These notes are typically kept in a field notebook, as described by Ritchie and Lewis (2003:137). The field notes engage in self-reflection, contemplate the effectiveness or ineffectiveness of strategies to get and sustain access, adhere to ethical considerations, and collect data (Marshall & Rossman, 2011:97).

In contrast to quantitative research, qualitative approaches acknowledge the researcher's interaction with the field and its members as an integral component of knowledge generation rather than attempting to minimise it as an intervening variable (Flick, 2002:6). The inclusion of the researcher's and participants' subjectivities is an integral aspect of the research process (Flick, 2002:6). The researchers' reflective analysis of their actions and observations in the field, including their subjective impressions, frustrations, emotions, and other relevant factors, are considered

valuable data in their own regard. These reflections contribute to the overall interpretation of the research and are, therefore, meticulously recorded in the research field diary (Flick, 2002:6). Hence, the researcher's emotions become intertwined with the research process (Marshall & Rossman, 2011:97).

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In conjunction with audio recording, the researcher should engage in notetaking during the interview process. This practice captures non-verbal cues, perceptions regarding the dynamics of data collection, and potential insights for analysis or supplementary purposes (Saunders *et al.*, 2009:336; Ritchie & Lewis, 2003:137). According to Easterby-Smith *et al.* (2015:146), it is recommended for researchers to make notes during an interview, even if the interviewer is already recording the conversation using a voice recorder. According to Easterby-Smith *et al.* (2015:146), implementing this approach might enhance the interviewee's sense of appreciation, facilitate the interviewer's formulation of probing and follow-up questions, and mitigate potential discomfort caused by prolonged direct eye contact. Field notes offer researchers conducting qualitative interviews the chance to document observations and auditory information that occur beyond the confines of the interview itself. Additionally, researchers can record their reflections on the interaction dynamics and any pertinent concerns that may arise during the subsequent analysis phase (Ritchie & Lewis, 2003:137).

Phillippi and Lauderdale (2018:381) assert that using field notes to record essential contextual details is highly advocated in qualitative research. In the present investigation, the researcher employed field notes to document their observations on the social contexts and dynamics of interactions between sustainable entrepreneurs and their employees during on-site visits. Field notes facilitated the researcher's opportunity for introspection regarding the site visits, interviews conducted, participants' reactions to the study inquiries, and, in certain instances, the engagements with employees and customers. The utilisation of field notes held significance due to the inclusion of comments and observations, which contributed to the comprehension of how sustainability is integrated into their routine business practices. The field diary observations were incorporated into the transcribed interviews to enhance the empirical data's depth and quality.

4.7.5 Pilot testing

Conducting preliminary questioning before commencing the primary investigation is a prudent approach. "piloting" is a common practice in various research methodologies, including qualitative and quantitative approaches (Silverman, 2013:207). Before embarking on a qualitative study, it is prudent to undertake a pilot study, as suggested by Denzin and Lincoln (1994:213). According to Maxwell (2005:65), a pilot study refers to a preliminary investigation undertaken before a larger research project. Its purpose is to evaluate various components of the research design and make necessary revisions before fully committing to the final design. According to Maxwell (2005:65), conducting a preliminary pilot study is essential before finalising a research design to test ideas and methodologies and gain insights into their potential consequences. This practice acknowledges that no research design is flawless and allows for refinement and improvement. The initial data collection stage is pilot testing, revealing research design deficiencies (Saunders *et al.*, 2009:396).

After formulating the interview question guide, the researcher must conduct a pre-test of the schedule (Berg, 2007:105). According to Berg (2007:105), it is imperative for professionals who are well-versed in the subject matter to conduct a thorough critical analysis of the schedule. Additionally, to assess its effectiveness, it is recommended to administer interviews to a pilot sample of participants. Before conducting interviews

with the sixteen research participants, the researcher of this study showed a pre-test of the interview guide on two sustainable businesses in Bulawayo. Consultation was conducted with experts in the respective research domains to obtain their valuable insights and recommendations for enhancing the timetable.

One potential advantage of pilot testing is the opportunity for individuals to enhance their interviewing skills via additional practice and refinement. Additionally, pilot testing provides a chance to reassess and reconsider the questions in the interview discussion guide (Silverman, 2013:208). Berg (2007:106) recommends using five questions to evaluate the instrument during the preliminary testing phase.

- Does the research instrument encompass all the inquiries essential for addressing the research inquiries?
- Do the questions elicit the expected responses?
- Can the study participants comprehend the inquiries presented in the research instrument?
- Does the study instrument include questions combining multiple concepts or ideas, often double-barreled?
- Ultimately, does the research instrument, in its developed form, effectively encourage people to actively participate in the study?

Conducting a thorough pre-test of the instrument may first seem time-consuming; however, it typically results in significant time and cost savings in the future (Berg, 2007:105).

4.7.6 Primary data collection process

To facilitate the data-gathering process and conduct the interviews, the researcher implemented the subsequent procedures:

The initial stage of the main data collection procedure encompasses a preparatory phase. The researcher devised an interview guide to facilitate the conduct of semi-structured interviews and maintain consistency throughout the interview process. The

interview guide comprised semi-structured questions developed by the researcher, drawing upon the relevant literature review conducted. The interview schedule underwent a thorough evaluation process by specialists in sustainable entrepreneurship and small business domains and the research supervisors overseeing the current study. The interview guide, as presented in Annexure A, consisted of five distinct portions.

In the initial phase, the researcher commenced selecting prospective sustainable entrepreneurs operating within the agriculture sector who would participate in the research study. The researcher conducted a comprehensive internet investigation to identify institutions that provide help and recognition to sustainable entrepreneurs in Zimbabwe. A comprehensive online search was conducted. After an extensive analysis of several business websites, the researcher has determined that Green Enterprize is the most suitable choice due to its comprehensive support and incentivization of sustainable entrepreneurs across all industries nationwide. The researcher initiated communication with Green Enterprize, requesting the identification of their most outstanding and two subsequent highest-performing recipients within the agricultural sector. The researcher sent an email containing the research request to demonstrate the study's authenticity and approval by the NWU Business School Scientific Committee. The interview guide was furthermore included to apprise participants of the inquiries they would be asked. Upon obtaining consent from the participants, Green Enterprize approved the request and provided the researcher with the necessary contact information. The researcher subsequently augmented the sample size by employing a snowball sampling technique until data saturation was achieved, encompassing three sustainable enterprises.

After identifying numerous individuals who showed potential as sustainable entrepreneurs, they were invited to participate in the study. To facilitate this process, the researcher personally delivered an introductory letter to the possible interview participants and, in certain instances, sent the letter by email. The informed permission form for participation in the interview was provided on the official letterhead of the NorthWest University Business School division to bolster the research's perceived legitimacy. The correspondence's primary objective was to introduce the researcher,

elucidate the nature and objectives of the study, and seek consent from the prospective interviewee to partake in the research endeavour.

Upon accepting the study offer, participants were instructed to affix their signature on the informed consent form and submit it to the researcher afterwards. Once the participants had consented to partake in the study, initial communication was established over the telephone, wherein interview schedules, preferred locations, and timings were mutually agreed upon and confirmed.

The subsequent phase of the data collection procedure entailed the execution of interviews. The interviews were primarily conducted in the English language. The researchers utilised an interview schedule to facilitate the semi-structured individual interviews, which were recorded using an audio recording device.

During the interview sessions, the participants were also prompted to reflect, elaborate, and extend rather than simply offering concise, direct, and closed-ended responses. The researcher produced novel ideas and discoveries through these reflections, which are not already in the existing literature. The researcher conducted observations throughout the interview procedure, carefully monitoring the participant's responses to the provided questions. Following the conclusion of each interview, the researcher proceeded to make observations regarding the dynamics of interaction between sustainable entrepreneurs and employees. The observations mentioned above were documented in the field notes. The researcher also sought corporate records, including the company's policy documents, goals, mission, values statements, code of ethics and conduct, and annual reports.

The third stage of the data-gathering process encompassed the preliminary data analysis. The researcher transcribed the interview material verbatim using Microsoft Office Word. Reflections were conducted during each interview session, along with the study of observations and field notes taken.

During the concluding phase of the data collection procedure, the researcher performed the coding process. The researcher engaged in a process of reflection on the data, as well as the codes and themes that were produced. This reflection

recognised gaps in the data, which prompted more study. This iterative approach ensured the integrity of the qualitative data-gathering process. Venter and Van Zyl (2017:108) posit that in qualitative research, the process of data collection frequently occurs concurrently with data analysis and is regarded as a continuous and cumulative undertaking (du Plooy-Cilliers *et al.*, 2014:174; Vaismoradi, Turunen & Bondas, 2013:401). Follow-up interviews were conducted with the participants to ensure clarity and further explore the themes that emerged in subsequent interviews.

After data collection, it is imperative to conduct analysis using suitable analytical methodologies (du Plooy-Cilliers *et al.*, 2014:234). This section describes the data analysing methodologies employed in the present investigation.

4.8 DATA ANALYSIS

The phase of data analysis is widely regarded as the most intricate among all the stages of a qualitative study (Venter & Van Zyl, 2017:120; Sally, 2000:68). The concurrent gathering and analysis of data in qualitative research is a characteristic feature (Moser & Korstjens, 2018:15; Vaismoradi *et al.*, 2013:401), wherein the process follows an iterative and non-linear trajectory, commonly referred to as analytic circles (Lewis, 2015:2). Maree (2016:109) posits that qualitative data analysis is grounded in an interpretive philosophy, which seeks to explore the meaningful and symbolic aspects of qualitative data. According to Quinlan *et al.* (2015:331), the primary objective of data analysis is to provide a comprehensive and detailed understanding of the phenomenon being studied.

According to Elo and Kyngäs (2008:109), selecting an appropriate approach to data analysis should be guided by the specific goal of the study. Two distinct techniques exist for qualitative data analysis, specifically deductive and inductive methodologies. A deductive analysis is employed when the analytical framework is constructed based on existing knowledge (Elo & Kyngäs, 2008:109). Consequently, it represents a theory-testing strategy that follows a top-down methodology (Venter & Van Zyl, 2017:120; du Plooy-Cilliers *et al.*, 2014:234). In contrast, an inductive approach to data analysis involves collecting data and then exploring the data to identify relevant themes and determine focus areas (Saunders *et al.*, 2016:570). The methodology

employed in this study is a bottom-up approach to data analysis, as described by Venter and Van Zyl (2017:120). The researcher initiates the analysis process by working with the unprocessed data collected to explore connections and associations among various themes (Venter & Van Zyl, 2017:121). Consistent with the deductive and inductive reasoning methodologies employed in theory construction for this study, both deductive and inductive analyses were utilised during the qualitative data analysis process. The first coding system was developed by applying deductive research and inductive study. According to Saunders *et al.* (2016:582), using a solely deductive or inductive strategy may provide challenges, prompting the authors to propose a synthesis of both deductive and inductive approaches for data analysis.

Various methodologies exist for analysing qualitative data, such as hermeneutics, narrative analysis, conversation analysis, discourse analysis, qualitative content analysis, constant comparative analysis, and thematic analysis. Hermeneutic analysis is a specialised method employed in phenomenological research, wherein the primary objective is for the analyst to uncover the underlying meanings of a given text as perceived by the participant (Bryman & Bell, 2014:356). The use of narrative analysis involves the examination of textual material, encompassing both written and told stories (Quinlan *et al.*, 2015:147). Its purpose is to identify the connections, associations, and socially constructed interpretations present within narrative accounts (Venter & Van Zyl, 2017:122). According to Rendle-Short (2018:1) and Bryman and Bell (2014:363), conversation analysis is characterised as a meticulous examination of discourse within interpersonal communication, specifically in unscripted scenarios.

Discourse analysis examines and interprets written texts and spoken language to uncover the underlying origins of power, dominance, inequality, and bias (Maree, 2016:113). Qualitative content analysis is employed to scrutinise the significance of textual material, encompassing both the overt and covert substance within the texts (Quinlan *et al.*, 2015:148). Constant comparative analysis is a method of data analysis in which each interpretation is systematically compared to prior findings to detect similarities and differences across various incidences that emerge from the data analysis process (Chen, 2015:152; Fram, 2013:3; Parry, 2011). Thematic analysis is a research approach that involves the identification, analysis, and description of

patterns or themes found within a dataset, both within individual data points and across many data points (Bryman & Bell, 2014:350; Braun & Clarke, 2006:79). In the present study, the acquired data underwent analysis through the utilisation of theme analysis, which will be illustrated in the subsequent section.

4.8.1 Thematic analysis

Thematic analysis has been extensively utilised across various academic fields (Braun & Clarke, 2006:77), predominantly within qualitative research (Bryman & Bell, 2014:350). Thematic analysis is regarded as a method rather than a methodology (Braun & Clarke, 2006:82), as it is a versatile approach to data analysis that is not constrained by a particular philosophical orientation or theoretical perspective (Maguire & Delahunt, 2017:3352; Crowe, Inder & Porter, 2015:617; Bryman & Bell, 2014:350). There has been scholarly discourse surrounding the categorization of thematic analysis as a distinct method, as evidenced by the works of Willig (2013:22), Attride-Stirling (2001:387), and Boyatzis (1998:84). However, Braun and Clarke (2020:128) argue that thematic analysis presents a unique approach to qualitative data analysis despite its shared characteristics with other methods such as grounded theory, qualitative content analysis, and interpretative phenomenological analysis.

Various methodologies exist for conducting thematic analysis, including thematic decomposition analysis, thematic discourse analysis, and interpretative phenomenological analysis (Javadi & Zarea, 2016:34; Braun & Clarke, 2006:8). However, thematic analysis has been criticised for its lack of clear distinction and differentiation from other qualitative data analysis methods. Various scholars (Neuendorf, 2019:211; Bryman & Bell, 2014:350; Vaismoradi *et al.*, 2013:400) have emphasised the resemblance between thematic and content analysis. This similarity arises from their shared utilisation of codes, coding techniques, and the generation of themes. According to Vaismoradi *et al.* (2013:400), thematic analysis is frequently perceived as an approach with weak branding. To rectify this deficiency, Braun and Clarke (2020:6), along with Braun, Clarke, and Hayfield (2019a:6), emphasise three regularly employed techniques (variations) in theme analysis, which are briefly outlined in Table 4.6.

Table 4.6: Thematic analysis variations

Thematic analysis variation	Brief description
Coding reliability thematic analysis	Captures the fundamental concerns regarding objective and impartial coding. Typically, it employs a deductive approach in which themes are developed before data analysis.
Codebook thematic analysis	Emphasises using a structured coding framework for developing and documenting the analysis and a collection of methods that broadly fall within a qualitative paradigm. Typically, themes are developed early in the data coding process.
Reflexive thematic analysis	Captures methods that thoroughly embrace the values of qualitative research and the subjective skills the researcher brings to the process. Deductive and inductive analysis are situated within the interpretive reflexive procedure.

Source: Adapted from Braun and Clarke (2020:6)

The main aim of this study is to establish a conceptual framework that elucidates the adoption of sustainable entrepreneurship by small, medium, and micro enterprises (SMMEs) in Zimbabwe's agricultural sector. To achieve this objective, a reflective thematic analysis was conducted.

Braun and Clarke (2013) assert that reflexive theme analysis applies to several research orientations, including critical realist, relativist, and constructionist perspectives. Moreover, this analytical approach can be deductive, inductive, or both. The thematic analysis provides researchers with a comprehensive means of interpreting data during the analytical phase, which aligns with the objective of the present study (Braun & Clarke, 2020:12). According to Braun and Clarke (2020:4), it is essential for researchers employing reflexive thematic analysis to clearly clarify the theoretical assumptions that underpin their research in their reporting.

The thematic analysis approach proposed by Braun and Clarke (2019) embodies a reflexive qualitative research methodology wherein the researcher(s) engage in questioning beyond superficial observations or mere descriptions of experiences. The technique mentioned above is situated within a qualitative paradigm that places emphasis on researcher reflexivity (Braun *et al.*, 2019a:6). Nevertheless, Braun *et al.* (2019a:3) caution researchers against regarding thematic analysis as a rigid set of instructions that must be strictly adhered to during the qualitative data analysis process. Braun *et al.* (2019a:4) contend that the process of conducting a theme analysis should be approached within the study's specific context. It is crucial for researchers to actively consider their approach to these processes rather than perceiving them as a fixed and inflexible procedure.

The concept of reflexivity in theme analysis is based on the researcher's commitment to thoroughly and consistently engage with the data (Ho, Chiang & Leung, 2017:1760). Reflexive theme analysis is characterised by an ongoing and iterative examination of data and the researcher's emotions, rendering it a flexible and dynamic analytical approach (Braun & Clarke, 2020:5). The coding process plays a crucial role in the formation of themes and sub-themes within reflective thematic analysis. Themes, together with their corresponding sub-themes, are regarded as a product of the data coding procedure, which includes thorough engagement with the data, extensive reading, deep reflection, critical questioning, the act of composing memos, temporarily withdrawing from the analysis, and afterwards resuming it (Braun & Clarke, 2020:5).

4.8.1.1 Reflexive thematic analysis process

According to Ziebland and McPherson (2006:405), qualitative data analysis should be initiated within the early phases of data collecting and carried out methodically and systematically. Qualitative researchers must contemplate the data analysis at the outset of data collection. According to Ziebland and McPherson (2006:406), initial interviews can provide insights into unanticipated difficulties not identified in the literature review. Furthermore, these interviews may also provide supplementary questions and serve as a catalyst for subsequent interviews.

The subsequent discourse elucidates the sequential procedures adhered to by the researcher during the data analysis process, as outlined by Creswell and Poth (2018). Nevertheless, the techniques mentioned above were executed manually without computerised assistance. The following six steps are:

1. Organise, manage and prepare the data
2. Read and memo the data
3. Code the data
4. Describe and identify codes into themes
5. Develop and assess interpretations
6. Represent and visualise data

4.8.1.2 Step 1: Organise, manage and prepare the data

The initial phase of data analysis involves the organisation, management, and preparation of the data. When the interviewer is fortunate enough to have study participants comfortable using tape recordings, the interviewer concludes the interview session with oral statements (Marshall & Rossman, 2011:164). The first stage the researcher must undertake is the interview transcription (Ziebland & McPherson, 2006:407). The interview is a dynamic interpersonal dialogue between two individuals, which is afterwards transcribed into a written format, thereby transforming the interactive nature of the conversation into a more concrete and permanent form (Kvale & Brinkmann, 2009:178; Zikmund *et al.*, 2012:68). According to Kvale and Brinkmann (2009:178), a transcript refers to the process of converting oral discourse, which is one narrative style, into written address, which is another narrative mode. According to Berg (2007:46), it is necessary to transcribe recorded interviews, which involves the conversion of the audio data into written text.

The audio recording of the interview entails an initial separation from the immediate physical presence of the individuals engaged in conversation. According to Kvale and Brinkmann (2009:178), the absence of body language, including elements such as posture and gestures, is a notable aspect of this phenomenon. Transcribing an interview dialogue into written form entails a secondary level of abstraction, resulting in the omission of the vocal tone, intonation, and respiratory patterns (Kvale &

Brinkmann, 2009:178). In summary, transcripts are limited and detached representations of the original interview dialogue (Kvale & Brinkmann, 2009:178).

Undoubtedly, transcribing is not devoid of challenges since the oral expression does not align perfectly with its written counterpart. The transcriber must conscientiously exercise judgment about punctuation, as individuals do not naturally communicate in paragraphs or indicate punctuation while speaking. According to Marshall and Rossman (2011:164), the transcriber is responsible for accurately capturing the intended meaning of spoken words and converting them into written form.

Numerous academics opt to transcribe their data due to the potential benefits of regular exposure to audiotapes, which can strengthen their familiarity with the material (Ziebland & McPherson, 2006:407). Nevertheless, due to its demanding and laborious nature, most researchers opt to enlist the services of a professional transcriber (Ziebland & McPherson, 2006:407). The transcription of all research interviews was performed by the researcher conducting this study. The process of transcribing tape-recorded interviews is time-consuming. However, it serves as an effective method for researchers to familiarise themselves with the content of the interviews (Eriksson & Kovalainen, 2016:98). The researcher transcribed the sixteen interviews by converting the collected data into textual format. The interviews were meticulously transcribed verbatim into Microsoft Office Word documents and systematically organised, with each interview being assigned its own file name for storage purposes. The cumulative number of pages for the transcribed interview amounted to 169 pages.

4.8.1.3 Step 2: Read and memo the data

After transcription, the subsequent phase entails the researcher acquainting themselves with the data by engaging in a process of re-listening to the interviews, as well as arranging and revisiting the textual or raw data that was gathered from the participants (Braun *et al.*, 2019b:852). This procedure allows the researcher to understand the information contained within the data (Bengtsson, 2016:11) by thoroughly engaging with its intricacies. This methodology facilitated the cultivation of reflexive cognition, empowering the researcher to comprehensively understand the

collected data. The researcher documented memos in the margins of the transcriptions.

4.8.1.4 Step 3: Code the data

The coding of the data was performed as the third phase. The initial step involved establishing coding units for the researcher, which were subsequently subjected to analysis during the data coding procedures. According to Saunders *et al.* (2016:580), a coding unit refers to a discrete segment of data that can encompass many words, a line from a transcript, a sentence, or even a paragraph, all of which encapsulate the essence of the code. The researcher categorised the data into manageable segments by establishing coding units (du Plooy-Cilliers *et al.*, 2014:234) and determined the portion of the data to be examined (Saunders *et al.*, 2016:611).

The researcher thoroughly scrutinised the data and proceeded to deconstruct it into smaller pieces or components (Bengtsson, 2016:11). Zhang and Wildemuth (2009:309-311) assert that qualitative analysis employs smaller units of meaning as the fundamental unit for analysis. The researcher allocated a code to a text segment, regardless of size, as long as the element conveyed a singular meaning following the study's research questions (Zhang & Wildemuth, 2009:309-311).

After establishing the coding units, the researcher conducted text coding for each sustainable entrepreneur (Zhang & Wildemuth, 2009:309-311). Maree (2016:116) defines coding as the systematic examination of transcribed data, wherein each line is meticulously scrutinised and segmented into coherent analytical units. The researcher coded and condensed the data to simplify and narrow its emphasis (Bryman & Bell, 2014:336). As previously stated, the present study employed deductive and inductive analysis methods. Consequently, the codes utilised in this investigation were established through deductive and inductive approaches. The present study used a deductive process by drawing on existing literature on sustainable entrepreneurship by small, medium, and micro enterprises (SMMEs) during the initial coding of the data. The present study employed an inductive approach, as it involved the development of novel codes and topics about adopting sustainable entrepreneurship by small, medium, and micro enterprises (SMMEs)

operating in Zimbabwe's agricultural sector. The codes utilised in this study were produced from the data, either through direct quotations of the participants' words (referred to as *in vivo*) or paraphrasing the participants' statements (referred to as *non-in vivo*).

The present work employed a three-step approach for the coding procedure, incorporating distinct coding methods in each phase. The initial stage of the coding process encompassed pre-coding, during which the researcher identified and acknowledged the salient aspects that have significance before proceeding with data interpretation. The researcher commenced by identifying salient features that captured his interest and held significance for the study. During the pre-coding phase, the researcher employed a combination of line-by-line coding and both *in vivo* and *non-in vivo* coding techniques. Line-by-line coding is a method of microanalysis in which the researcher systematically examines the text, scrutinising each line and identifying specific words and phrases pertinent to the study (du Plooy-Cilliers *et al.*, 2014:240). The researcher employed *in vivo* coding to analyse the textual data based on the participant's own words, whereas *non-in vivo* coding was utilised to analyse the textual data that did not consist of the participants' words (Theron, 2015:5).

The subsequent stage of the coding procedure encompassed the implementation of second-level coding. During this step, the researcher employed a range of coding techniques to facilitate the comparison, reorganisation, concentration, prioritisation, and synthesis of the codes derived from the initial level of coding. The methodologies employed encompassed pattern, focused, and axial coding. Using pattern coding, the researcher endeavoured to construct a meta-code accompanied by a category label to effectively identify data coded comparably (Saldaña, 2009:150). Pattern coding was employed to ascertain probable patterns within the data and categorise the resulting codes. In the present investigation, the process of focused coding entailed the classification of coded data according to thematic or conceptual resemblances. The researcher searched to identify the codes that appeared most frequently to establish the most popular categories within the dataset (Saldaña, 2009:155). In the present study, the researcher employed focused coding as a methodological approach to develop a clearly delineated border within the standard codes that emerged from the collected data. This measure was implemented to ensure that the codes within a

specific category were not characterised by varying degrees of membership (Theron, 2015:5). The researchers employed axial coding as a method to analyse and compare several types of codes to identify the interconnections and linkages that exist within these categories (du Plooy-Cilliers *et al.*, 2014:241). Axial coding was employed in the present investigation as it facilitated the researcher in consolidating the multitude of codes derived from the preceding levels of coding phases (Onwuegbuzie *et al.*, 2016:134). Furthermore, the utilisation of axial coding facilitated the researcher in discerning interconnections and associations among the codes generated.

According to Merriam and Tisdell (2016:201), qualitative researchers can manually organise their data, utilise computer programs, or employ both methods. Several computer-assisted qualitative data analysis software (CAQDAS) programs can be used for research. These include ATLAS.ti, NVivo, N6, and HyperResearch (Ziebland & McPherson, 2006:407; Marshall & Rossman, 2011:182). "CAQDAS" refers to a broad range of software programs to facilitate the management and analysis of qualitative data (Easterby-Smith *et al.*, 2015:211). According to Bazaley (2013:328), computer software programs can be employed to generate, implement, and enhance categories, as well as to trace links and draw comparisons among various groupings.

In this study, the researcher organised and analysed the data manually. For each interviewee script, the researcher read the scripts more than twice, then went line by line, highlighting and indicating the codes in the scripts. These codes were dragged into a code bible, which amounted to 844. The researcher reviewed the codes and discovered that different interviewees repeated some codes, so the codes were merged and reduced to 208. The number of frequencies was indicated in the form of dots on the code paper (for example, if three participants mentioned a code, two dots were put on the code to show that two more participants said that code). If more than ten, it was written as a digit. All the merged codes were put on coloured pieces of paper, cut, and put on the wall. Since there were too many, the researcher used the wall to accommodate the codes with their respective colour themes. Furthermore, the researcher developed a matrix indicating the total codes per participant for different themes. The familiarisation and coding steps prepared the researcher to conceptualise initial themes, as discussed in the following.

4.8.1.5 Step 4: Describe and identify codes into themes

Upon completing the coding process for each sustainable entrepreneur's data, the researcher discerned trends and extracted pertinent insights from the compiled list of codes (Terry, Hayfield, Clarke & Braun, 2017:23), thus initiating the theme creation phase. According to Braun and Clarke (2012:64), a theme can be defined as a component that effectively encapsulates significant aspects of the data about the research question and signifies a degree of structured response or significance within the dataset. Braun and Clarke (2019:593) argue that themes can be defined as recurring patterns of collective value bound together by a fundamental organising concept or notion. The research issues in a study are addressed by utilising these themes (Javadi & Zarea, 2016:35). Based on Braun and Clarke's (2020:15) conceptualization of themes and their assertion that reflexive thematic analysis is an active process (Braun & Clarke, 2006:80), the researcher actively engaged in the development of themes rather than relying on the notion of themes emerging from the data.

The researcher organised a collection of coded pieces of paper by affixing them on a wall according to their themes, using different colours for each subject. The researcher attached the codes to the wall to accommodate all seven themes and their corresponding codes, as depicted in Figure 5.1. The research questions were employed to generate the primary themes. This section encompasses the signages and attributes shared among interview participants. The various topics were assigned distinct themes, as illustrated in Table 4.7.

Table 4.7: Themes and differentiating colours

Theme number	Theme name	Theme colour
Theme 1	Determinants of sustainable entrepreneurship	Red
Theme 2	Sustainable opportunities	Green
Theme 3	SMME's sustainable balance	Turquoise
Theme 4	Benefits of sustainable entrepreneurship	Pink
Theme 5	Strategies that encourage sustainable entrepreneurship	Bright green
Theme 6	Challenges	Grey
Theme 7	Recommendations	Yellow

Thematic analysis of the data entails examining the entirety of the data to uncover recurring common issues and extract the primary themes that encapsulate the collected viewpoints. The thematic analysis involves identifying themes relevant to the depiction of the event under investigation (Fereday & Muir-Cochrane, 2006). The research yielded seven distinct themes as specified by the researcher.

4.8.1.6 Step 5: Develop and assess interpretations

In the fifth phase, the researcher had the task of consolidating and conducting a more comprehensive analysis of the initial themes that emerged from each sustainable entrepreneur. This was accomplished by generating and thoroughly evaluating the dataset. Terry *et al.* (2017:26) emphasise the significance of topic formulation and evaluation within the thematic analysis method, allowing researchers to refine and enhance the clarity of identified themes. According to Vaismoradi and Snelgrove (2019), the theme-generation process in this study involved a constant analytical assessment of the data, including the codes and themes produced and the social phenomena. Consequently, the researcher engaged in ongoing reflection and examination of the data, posing inquiries about the potential correlation between the created codes and the identified themes. Do the designed themes exhibit separate characteristics, or are they similar? Are there instances of thematic duplications, code

duplications, and ambiguities in interpreting the established themes? If so, what strategies might mitigate these duplications and ambiguities? Do the themes that have been generated enable the researcher to construct a narrative about the sustainable entrepreneurs who participated in the study in connection to the research questions? The researcher in this study employed these reflexive questions to evaluate and enhance the developed themes. According to Terry *et al.* (2017:28), the researcher examined the themes created to determine if they addressed the study questions effectively.

After analysing themes and codes on the wall, they were pulled down and regrouped into different sub-themes on a tabletop. The codes in one theme were tossed around to find their best fit in the sub-themes. The moving around of the codes made the researcher fully understand the data. The researcher established the semantic relationships among the codes through code linking. These semantic interactions indicate instances of contradiction and association between the codes.

4.8.1.7 Step 6: Represent and visualise data

In the sixth step, the researcher proceeded to conduct a thorough examination of the identified themes, with a focus on enhancing their clarity and establishing precise definitions (Terry *et al.*, 2017:29). During this stage, the researcher endeavoured to transition from perceiving themes as a mere compilation of codes and collected data to adopting an interpretive approach (Terry *et al.*, 2017:29). According to Braun and Clarke (2020:15), the present study employed a conceptualization of themes as encompassing both "shared-meaning" and "shared-topics" that serve as the foundational elements of the data's fundamental notion. The present study employed the "shared-meaning" and "shared-topics" themes; deductive and inductive coding analyses were utilised, incorporating both deductive and inductive codes. This methodology enabled the researcher to combine the established themes from the existing body of literature on sustainable business with the novel insights and data obtained within the agricultural domain, constituting the primary focus of the present investigation. The researchers in Terry *et al.*'s (2017) study presented descriptors or concise summaries of the significant ideas and range of interpretations for each

subject and sub-theme. These descriptors were created from a combination of existing literature and statements from the study participants. (Terry *et al.*, 2017:29)

Following the reorganisation of the codes to optimise their arrangement, the researcher generated distinct network diagrams for each theme. Therefore, a total of seven different network diagrams were generated. The concepts in question are presented and comprehensively elucidated in the fifth chapter.

4.8.2 The write-up

The documentation of a qualitative study entails the narrative that can be constructed based on the data collected and assessed. Qualitative interview studies differ from quantitative studies in their purpose, as they aim to investigate many meanings, experiences, and priorities rather than focusing on a single core study issue. According to Ziebland and McPherson (2006:410), the data obtained from the study is extensive and offers numerous possibilities for various analyses. The researcher took measures to ensure the themes were logically interconnected, resulting in a coherent and relevant representation of the subject matter addressed in the present study. The documentation of this research is offered in the subsequent chapter, specifically chapter five.

Researchers have a crucial responsibility to clearly articulate the procedures they employ to uphold the highest quality standards and preserve the integrity of their research design (McGregor, 2018:246). Additionally, researchers must establish the credibility of their data (Maree, 2016:123). The subsequent section delineates the measures taken to assure trustworthiness and rigour in the present study.

4.9 TRUSTWORTHINESS AND RIGOUR OF QUALITATIVE RESEARCH

Saunders *et al.* (2016:204) argue that researchers must prioritise considering research quality to establish credibility and get acceptance from the academic community. Neglecting to evaluate the value of a research study and the soundness of underlying assumptions or derived findings may result in significant consequences (Long & Johnson, 2000:30). It is imperative to carefully consider the research design to

ascertain the veracity and precision of the study's findings and conclusions. In the realm of qualitative research, numerous scholars have employed the notions of reliability and validity in manners akin to those used by quantitative researchers, intending to establish criteria for evaluating the excellence of their research (Bryman & Bell, 2014:43). However, the evaluation of reliability and validity is frequently deemed philosophically and technically unsuitable for qualitative research (Saunders *et al.*, 2016:205).

According to Creswell and Miller (2000:125), qualitative researchers approach the ideas of dependability and validity from a distinct perspective compared to their quantitative counterparts. The utilisation of this lens, in conjunction with the interpretive presuppositions that reality is socially constructed, multifaceted, and subjective (Bryman & Bell, 2014:44; Wahyuni, 2012:77), poses challenges for qualitative researchers in establishing the credibility and high quality of their research (Saunders *et al.*, 2016:205). As such, scholars in the field of qualitative research have proposed new frameworks to address reliability and validity issues more attuned to the unique characteristics of qualitative inquiry (Wahyuni, 2012:77).

The idea of trustworthiness is frequently employed in qualitative research to evaluate research rigour, in contrast to the concepts of validity and reliability. Multiple indicators of trustworthiness are available, encompassing credibility, dependability, transferability, and confirmability (Murphy & Yelder, 2010:64; Guba, 1981:80). Table 4.8 displays the notions related to trustworthiness, juxtaposed with the terms generally linked to quantitative research.

Table 4.8: The four criteria of trustworthiness

Qualitative or naturalistic inquiry	Quantitative or conventional inquiry	Explanation	Issues addressed
Credibility	Internal validity	The study aims to assess and quantify the intended variables.	Truth-value
Transferability	External validity	The generalizability of research findings across different contexts	Generalisability or applicability
Dependability	Reliability/consistency (reproducibility)	If the work were reproduced with the same environment, techniques, and participants, comparable results would be reached.	Consistency or replicability
Confirmability	Objectivity/ neutrality	The findings of this study are based on the respondents' experiences, not the researcher's preferences.	Neutrality

Sources: Shenton (2003:24); Korstjens and Moser (2018:121); Lincoln and Guba (1994)

The subsequent section delves into a comprehensive examination of the many reliability indicators, including a detailed account of the methodologies employed in the present investigation.

4.9.1 Credibility

Credibility pertains to the precision of the data in accurately representing the observed social phenomena, as stated by Wahyuni (2012:77). Credibility, in the context of quantitative research, can be considered analogous to internal validity. It pertains to the matter of truth value (Korstjens & Moser, 2018:121; Wahyuni, 2012:77) and determines whether the research findings accurately reflect plausible information derived from the original data provided by the participants (Korstjens & Moser, 2018:121; Welch & Piekkari, 2017:719). According to Maree (2016:123), credibility

pertains to the extent to which the findings align with reality. How can researchers establish credibility and foster belief in their findings among readers? Furthermore, according to McLeod (2015:201), the credibility of qualitative research is shown when the researcher furnishes comprehensive details regarding the participants.

In the present study, the researcher employed reflections as a methodological approach to enhance the credibility of the data and research findings. This was achieved by seeking the guidance and expertise of the researcher's supervisors, who possess extensive knowledge of the topic under investigation. Furthermore, the researcher employed a persistent observation method to enhance the collected data's reliability. This involved dedicated attention to the ongoing refinement of codes and themes pertinent to the study. The researcher employed the triangulation method to enhance the credibility of the data and research findings, augmenting the depth, breadth, richness, and resulting conclusions of the collected data (Saunders *et al.*, 2016:207). The researcher employed data collection techniques encompassing one-to-one semi-structured interviews, observations, and document analysis. The researcher used various sources of data to enhance the study's reliability.

The researcher further enhanced the reliability of the data by engaging in an extensive and diverse field experience. The researcher was actively involved in an extended study and conducted several interviews with essential participants. This approach facilitated the researcher's ability to generate robust and thorough observations inside the field and in the natural surroundings of the participants. Following the collection and transcription of the data, the researcher proceeded to solicit the participants' input regarding the correctness, comprehensiveness, and interpretation of the data.

4.9.2 Dependability

Bitsch (2005:86) asserts that dependability addresses whether the outcomes of a research endeavour would remain consistent if the study were duplicated with the same or comparable individuals in a similar setting. The goal of dependability is to ensure the consistency and stability of the findings over time (Bitsch, 2005:86; Tobin & Begley, 2004:392). According to Wahyuni (2012:77), the concept of dependability, which refers to the measure of trustworthiness, plays a crucial role in enhancing the

replicability or repeatability of a study. The idea of dependability in quantitative research has been equated to that of reliability by several academics (Hammarberg *et al.*, 2016:500; Maree, 2016:124; Wahyuni, 2012:77; Bitsch, 2005:86; Tobin & Begley, 2004:392).

The present study demonstrates the reliability of the data through a comprehensive elucidation of the research design and methodology employed, as well as a thorough description of the data collection process (Anney, 2014:278; Elo, Kääriäinen, Kanste, Pölkki, Utriainen & Kyngäs, 2014:3, 7; Wahyuni, 2012:77). Furthermore, pertinent details regarding the present investigation, such as the interview schedule, the transcripts of the interviews, and other supplementary data gathered, were duly recorded and are readily available for future consultation.

By meticulously recording the research methodologies, individuals external to the study can comprehend, evaluate, and provide critical analysis of the research processes (Noble & Smith, 2015:35; Anney, 2014:278). Furthermore, the establishment of dependability has been achieved by offering a thoughtful assessment of the research (Maree, 2016:124) and by scrutinising the process via which the study's findings, interpretation, and recommendations were formulated (Korstjens & Moser, 2018:121; Elo *et al.*, 2014:7). The researcher further improved the reliability of the results, conclusions, and interpretations by providing a comprehensive description of the data coding procedure, outlining each step in detail (McGregor, 2018:248).

4.9.3 Confirmability

Confirmability, as defined by Connelly (2016:435), pertains to the level of objectivity or the degree to which the participants influence the results rather than the researcher's personal bias. As Pandey and Patnaik (2014:5751) and Wahyuni (2012:77) discussed, confirmability is analogous to objectivity in quantitative research. Confirmability aims to ensure that both the data and the interpretations of the findings are not subjective creations of the researcher's imagination but are clearly derived from the collected data (Tobin & Begley, 2004:392).

In the present investigation, the researcher bolstered the confirmability of the data and interpretations of the results by meticulously documenting all the decisions made throughout the study and the ongoing analyses (Connelly, 2016:435). The researcher furnished an audit trail of the investigation and methodology by providing a conceptual framework, research design and methodology, and the research methodologies, alongside an elaborate exposition of the findings and discussions (Chapter 5). The researcher implemented a strategy to maintain objectivity in the data analysis by incorporating verbatim statements from the participants as evidence to corroborate the investigation outcomes (Maree, 2016:125). Furthermore, the researcher transcribed all interviews verbatim to minimise bias.

4.9.4 Transferability

The concept of transferability pertains to the degree to which research findings can be effectively and appropriately utilised in different contexts (Connelly, 2016:435-436). It is a subset of external validity, which refers to how universal or valuable a phenomenon or set of findings from one study is to theory, practice, future research, or other contexts. Transferability can be crucial to the application of research findings because policy and management can rely on information, results, and recommendations from a single or small number of research projects, frequently relying on evidence made from various contexts that differ from the one in which applications. As a result, researchers must make it apparent whether or not their findings apply to other situations (Moon, 2016:2).

Data gathering and analysis transparency is ensured by comprehensively depicting the context, places, and individuals involved. A comprehensive description of the analysis was provided to ensure the transferability of the interview findings with sustainable entrepreneurs.

Consequently, researchers must convey their findings in a manner that allows the reader to quickly comprehend the logical progression they followed. Additionally, it is crucial for researchers to explicitly establish the connection between the empirical data and the conclusions drawn from it (Thorne, 2000:69).

4.10 ETHICAL CONSIDERATIONS

Brinkmann and Kvale (2018:28) state that qualitative research is a moral endeavour. Therefore, it is crucial to emphasise the ethical aspects of the research being examined (Maree, 2016:44). Since the subjects of investigation in the process of conducting interviews are individuals of the human species, it is of utmost importance to exercise great caution to prevent any potential injury to them (Fontana & Frey, 1994:372). One prominent aspect of the interviewing process is its categorization as an intervention (Marshall & Rossman, 2011:159). According to Patton (2002:405), a successful interview involves candidly expressing thoughts, emotions, knowledge, and personal experiences. The discussion of ethical concerns in qualitative interviews includes the consideration of potential suffering and distress experienced by interviewees while recounting difficult situations (Marshall & Rossman, 2011:160). To uphold ethical standards, researchers must proactively devise strategies to effectively navigate such conditions in advance (Marshall & Rossman, 2011:160).

To engage in research, scholars must establish and address a comprehensive framework of ethical guidelines and principles, which should be clearly specified and documented before commencing their investigations (Tucker & Govender, 2017:1147). The primary objective of research is to acquire additional knowledge and comprehension regarding a particular topic being investigated. However, it is crucial to approach the underlying process of this inquiry rationally, considering what actions are ethically appropriate (Quinlan *et al.*, 2015:39). According to Shirmohammadi, Kohan, Shamsi-Gooshki, and Shahriari (2018:157), ethical considerations in research encompass a collection of regulations and principles that must be considered to prevent potential harm to both the participants and researchers involved in the study.

Ethical dilemmas may emerge when researchers assume their inquiries are innocuous, only to establish procedures that participants may see as unpleasant or discomforting (Brinkmann & Kvale, 2018:28). Shirmohammadi *et al.* (2018:164) assert that conducting research involving human subjects necessitates adherence to scientific and widely acknowledged ethical guidelines. To conduct research involving human subjects, researchers must obtain approval from the ethics review board(s) associated with their connected institutions (Trafford & Leshem, 2012:100).

The subsequent sections present an analysis of the ethical aspects duly considered in the present investigation. The ethical considerations encompassed in this study comprise the fundamental entitlement to privacy, the imperative for anonymity and confidentiality, the principle of voluntary involvement, and the researcher's commitment to integrity. Furthermore, the present study elucidates obtaining consent or ethical clearance from the researcher's connected institution.

4.10.1 Right to privacy

Collis and Hussey (2014:310) argue that safeguarding participants' privacy is crucial. According to Boeije (2010:46), privacy can be defined as the desire of individuals to regulate and manage the extent to which others can access information about them. According to Bryman and Bell (2014:127), the concept of privacy is closely connected to the idea of informed consent, as individuals participating in research relinquish their privacy rights to the extent that they possess a comprehensive understanding of the nature and scope of their involvement in the study (Bryman & Bell, 2014:127).

The present study protected participants' privacy by granting them autonomy over determining who might access their personal information. Exclusive access to the participants was given solely to the researcher, who diligently ensured that their privacy was not compromised. Before consenting to participate, participants were presented with comprehensive information regarding the nature and extent of their involvement in the study. After obtaining agreement, the participants were supplied with informed consent before the commencement of the interviews.

4.10.2 Right to anonymity and confidentiality

Beckmann (2017:18) asserts that study participants, as information suppliers, are entitled to maintain anonymity. According to Collis and Hussey (2014:33), anonymity assures study participants that their identities will not be disclosed during the research. Confidentiality entails that the researcher will refrain from disclosing any private information that could identify the participants (Brinkmann & Kvale, 2018:33).

The study intentionally omitted their identities to preserve the sustainable business and its participants' anonymity and confidentiality. To ensure the confidentiality of participants, pseudonyms were employed instead of their actual names (Bryman & Bell, 2014:123), both for individuals and locations. The utilisation of pseudonyms by the researcher served to safeguard participants from potential victimisation (Maree, 2016:44; Bryman & Bell, 2014:123), hence facilitating their willingness to openly express their thoughts (Collis & Hussey, 2014:32).

4.10.3 Right to voluntary participation

Collis and Hussey (2014:32) assert that it is imperative to ensure that research participants are not subjected to any form of coercion in their involvement. Informed consent is a crucial component of the research process (Connelly, 2014:54), denoting participants' voluntary expression of consent to engage in a research project (Manti & Licari, 2018:145).

According to Silverman (2013:162), individuals participating in research must be provided with comprehensive information regarding the research's objectives, methodologies, potential applications, the nature of their involvement and any associated dangers. According to Berg (2007:78), informed consent refers to a person's voluntary and knowledgeable agreement to participate in a particular activity without being subjected to fraudulent, deceptive, coercive, or unfair influence or manipulation. According to Eriksson and Kovalainen (2016:71), individuals should be encouraged to engage in research activities voluntarily without perceiving obligation.

According to Silverman (2013:162), researchers must maintain independence and impartiality. This necessitates being precise in their approach and ensuring that any conflicts of interest or partiality are clearly acknowledged. Individuals who partake in the research must do so voluntarily and without coercion. The researchers must ensure that participants are fully aware of their right to decline participation or withdraw from the study at any given time and for any reason they deem fit (Silverman, 2013:162).

The concept of informed consent is based on the premise that research participants should be presented with comprehensive written information and be required to sign it, as outlined by Silverman (2013:162). According to Eriksson and Kovalainen (2016:72), participants must be provided with essential details about the study. This information should encompass the research's objectives, the methodologies employed, the identities and responsibilities of the researchers involved, and the intended utilisation of the gathered data.

To secure voluntary involvement in the present study, the researcher sought informed consent from all participants before commencing the research (Bryman & Bell, 2014:124). The participants were provided with an explanation of the study by the researcher (Roulston & Choi, 2018:7). The participants were provided with information regarding their involvement in the research (Besen-Cassino & Cassino, 2018:52). They were also given the option to refuse participation in the study if they so desired (Quinlan, 2011:79), or to withdraw from the study at any point. This measure was implemented to guarantee that the volunteers possessed comprehensive knowledge regarding the potential hazards and advantages associated with the research being conducted (Quinlan, 2011:79; Boeije, 2010:45). The participants were instructed to provide their signature on the informed consent form as an indication of their voluntary agreement to take part in the research.

4.10.4 Researcher integrity

Qualitative research involves the complete engagement and immersion of the researcher in the conducted study (McCusker & Gunaydin, 2015:541). Recognizing the researcher's participation in the co-construction of knowledge holds significant prominence within qualitative research (McLeod, 2015:199). Given the substantial impact and pronounced subjectivity associated with this phenomenon, the researcher must take all necessary measures to uphold integrity during the study (Venter & Van Zyl, 2017:111). According to Lazenby (2015:73), integrity pertains to a researcher's capacity to demonstrate honesty and integrity in their conduct. Integrity is regarded as a fundamental ethical principle that necessitates individuals to show moral courage in advocating for what is morally justifiable (Van Aardt & Bezuidenhout, 2019:204). Brinkmann and Kvale (2018:34) assert that the researcher plays a crucial role in

upholding the integrity of scientific knowledge and making ethical judgements during an investigation. The researchers' commitment to maintaining integrity is apparent in all aspects of their study (Quinlan *et al.*, 2015:43). To uphold the integrity of an investigation, it is crucial for a researcher to cultivate trust (Venter & Van Zyl, 2017:111). Additionally, it is imperative to implement measures that promote openness and transparency in the chosen research design (Daniel, 2016:98; Quinlan *et al.*, 2015:43).

In the present investigation, the researcher exhibited integrity by adhering to principles of honesty and truthfulness in both the construction of the research design and the disclosure of methodological choices employed in the study. The researcher also ensured that the dissemination of the findings was characterised by honesty and conducted openly and transparently. Following the recommendation by du Plooy-Cilliers *et al.* (2014:269), the researcher refrained from engaging in data falsification, fabrication, or manipulation while collecting empirical evidence. Furthermore, the researcher addressed ethical considerations such as the right to privacy, anonymity, confidentiality, and voluntary involvement to exemplify a commendable level of integrity in the execution of this study.

4.10.5 Ethical approval

As Maree (2016:44) asserts, researchers must comprehensively understand the ethical guidelines established by the pertinent entity responsible for overseeing their research endeavours. In light of this assertion, the current study was approved by the General Management Scientific Committee of the NWU Business School. Furthermore, the researcher got ethics approval from the Faculty of Economic and Management Sciences Ethics Committee (EMS-REC), and an ethical clearance number was allocated [NWU-01897-22-A4].

4.11 SUMMARY

Chapter 4 of this study introduced the numerous research methodologies linked with a qualitative approach, guided by research paradigms, approaches to theory formation, methodological approaches, and research methodology. This chapter

comprehensively describes the sampling process and data-gathering methods employed in the study. The chapter additionally elucidated the data analysis methodologies and techniques used for the investigation. Subsequently, the researcher implemented a series of strategies to uphold the credibility and rigour of the research. The chapter was completed with a discussion of the ethical considerations of the study and an examination of the measures taken by the researcher to assure their adherence to the current research. The discussion and interpretation of the findings are presented in the next chapter.

CHAPTER 5

DISCUSSION AND INTERPRETATION OF THE FINDINGS

5.1 INTRODUCTION

This chapter presents the key findings obtained from the empirical study. The results are shown in four parts. The first part covers the interview process, and the second part covers the demographic data of the participating SMMEs. The third part presents the structure and overview of themes, showing the themes and their respective codes. The fourth part presents seven detailed themes based on the lived experiences of the interviewed sustainable entrepreneurs.

The empirical data is further elaborated with the help of direct quotes from the interviewees. However, as indicated in the ethical considerations, pseudonyms will be used to maintain the anonymity of the participants.

The discussion and interpretation of the findings focus on answering the qualitative empirical study-based objectives below:

- To get insight and describe the lived experiences of SMMEs as sustainable entrepreneurs in the agricultural sector.
- To explore the motivational factors that lead to sustainable entrepreneurship from the perspective of selected SMMEs and the key informants.
- To explore sustainable entrepreneurs' opportunities and challenges in the agricultural sector.

These secondary objectives assist in accomplishing the study's primary goal: to explore the strategies, motivation, challenges, and opportunities for sustainable entrepreneurship in Zimbabwe's agricultural sector and to develop a framework for SMMEs.

5.2 INTERVIEW PROCESS

There were 16 entrepreneurs interviewed in total. They were named from P1 to P16 according to the order in which they were interviewed. Consequently, the findings are presented according to the code names. The coding safeguards the anonymity of the interviewees, which is consistent with the study's methodological approach. Interviews were conducted between 20 December 2022 and 24 February 2023. All interviews were conducted between the interviewer and a single interviewee. Personal interviews were deemed the most beneficial and appropriate method for the research since the researcher wanted the participants to be accessible to express their lived sustainable entrepreneurship experience.

All participants granted permission to record the interviews electronically, allowing the interviewer to focus on nonverbal communication and take notes. Participants also knew their right to terminate the interview at any time. Thankfully, no stoppages were experienced during all the interviews. The interviews were conducted mainly in a friendly and open atmosphere. Many entrepreneurs appreciated the discussions and inquired about the research's future. The described procedure aligned well with the study's philosophical stance and data collection methodology, supporting a less structured and more flexible approach.

The interviews were scheduled to last a maximum of 90 minutes. Most interviews adhered to this duration; only one exceeded the ceiling by seven minutes. Three interviews lasted less than half the allotted time, primarily online, because we were attempting to reduce costs. The individuals who preferred online interviews were extremely busy, so the interviewer did not want to take up too much of their time. However, all of the required information was collected in those few minutes. Similarly, throughout the process, the researcher gained more experience and understanding of the interview structure, enabling the researcher to conduct interviews in 50-70 minutes more efficiently. However, some respondents, such as P6 and P7, provided more extensive responses, resulting in a more extended discussion.

The collected data were transcribed, coded and analysed using manual qualitative analysis, as stated in the previous chapter. The repeated reading of the transcribed

data to identify the codes and patterns familiarised the researcher with the data. Moreover, the researcher had total control of the whole process by analysing the data manually. Seven themes were identified and will be well elaborated on in this chapter.

5.3 DEMOGRAPHICS

Entrepreneurs' lived experiences form the basis of the study; therefore, it is essential to comprehend their backgrounds and demographics. The gender composition was made up of participants of 10 men and six women. According to Table 5.1, 87% of the participants are 40, 13% are older than 40, and none are older than 60. Most are in the creative, innovative age, full of energy to experiment and explore. In addition, most respondents (81%) indicated that they founded a new company to pursue their sustainable business idea. In contrast, only 19% transformed pre-existing businesses to create sustainable value.

Table 5.1: Interviewee demographics

Participant	Age	Gender	Company Status	Education	Province
P1	33years	Male	New	O level	Bulawayo
P2	39years	Male	Old	O level	Harare
P3	36years	Male	New	O level	Mashonaland East
P4	40years	Male	New	PhD	Mashonaland East
P5	40years	Male	New	Degree	Harare
P6	58years	Male	Old	PhD	Manicaland
P7	32years	Male	Old	Diploma	Bulawayo
P8	35years	Female	New	Masters	Masvingo
P9	38years	Male	New	Degree	Mashonaland Central
P10	32years	Male	New	Degree	Mashonaland Central
P11	29years	Male	New	Degree	Midlands
P12	38years	Female	New	Degree	Manicaland
P13	40years	Female	New	Degree	Harare
P14	46years	Male	New	Degree	Midlands

P15	27years	Female	New	Degree	Matabeleland South
P16	33years	Female	New	Diploma	Manicaland

The education level of the participating SMMEs was high, with the majority (80%) having completed higher tertiary levels. Most entrepreneurs interviewed held degrees in business, agriculture-related fields, and other fields pertinent to their primary businesses. The lowest level of education (20%) consists of the 'O' level.

In response to the question "What business are you into?" all the participants were free to describe their sustainable business ventures except one who gave a one-word answer '*regenerative farming*' and was not willing to provide a complete description of his business even after some probing questions. The demographic table did not indicate the type of business conducted by the interviewees, as identification can be readily accomplished by combining the information, as most participants received awards for their sustainable ventures in their respective provinces. Even though some interviewees wanted their real names and businesses to be included in the study because they viewed it as a marketing opportunity for their innovation, it was indicated that this was not possible due to the researcher's ethical constraints.

The research covered 80% of the study's geographical boundary. Except for Matabeleland North and Mashonaland West, eight of Zimbabwe's ten provinces were represented in the study.

5.4 STRUCTURE AND OVERVIEW OF THEMES

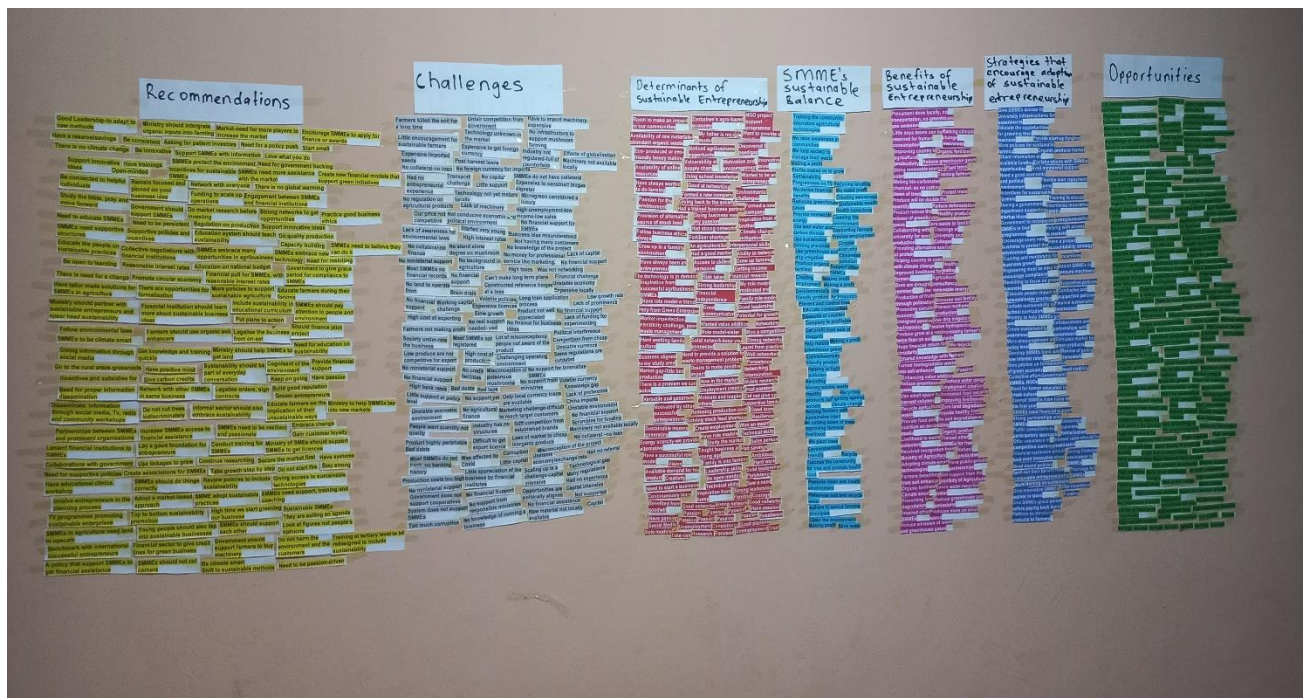
The transcribed data were analysed, and 844 codes were identified, as shown in Table 5.2 below. The codes were grouped under the seven relevant themes from the study. The sustainable opportunities in agriculture had the highest codes, indicating that SMEs see great business potential and vast sustainable options in the agricultural sector. The lowest codes were on sustainable balance and the proposed strategies to increase SMEs' adoption of sustainable entrepreneurship.

Table 5.2: Total codes per participant for different themes

Participants	Determinants	Sustainable Balance	Opportunities	Strategies	Benefits	Challenges	Recommendations	Totals
P1	13	3	12	1	14	7	15	65
P2	12	5	10	4	2	10	16	59
P3	2	2	6	3	1	6	8	28
P4	9	4	16	6	6	13	13	67
P5	18	1	16	3	8	11	8	65
P6	21	4	21	5	4	1	7	63
P7	11	5	12	3	5	14	13	63
P8	7	1	4	0	0	3	12	27
P9	9	6	19	8	4	13	11	70
P10	11	3	9	2	2	10	5	42
P11	14	6	8	4	3	6	5	46
P12	9	3	8	2	9	15	5	51
P13	8	3	11	6	1	11	6	46
P14	9	4	8	2	4	5	6	38
P15	9	4	5	4	4	11	6	43
P16	13	3	13	4	5	17	16	71
Totals	175	57	178	57	72	153	152	844

The codes were written on coloured paper to differentiate them. They were cut into small individual pieces of paper. They were put on the wall to depict all seven themes and their respective codes, as shown in Figure 5.1. After some analysis, the coloured codes were pulled down and regrouped into different sub-themes on a tabletop. Various networks were formed within a theme, showing the connections between codes, sub-themes, categories and main themes. The codes were tossed around to find their best fit in the sub-themes.

Figure 5.1: Photographic image of themes and codes on the wall



However, not all the 844 were put on the wall. Participants were duplicating some codes, so they were merged into 208 codes, and these are the ones which were put on the wall. The number of frequencies was indicated as dots on the code paper, and if more than ten were revealed, they were placed as digits. All the themes had different colours-theme 1: determinants of sustainable entrepreneurship (red), theme 2: sustainable opportunities (green), theme 3: SMME's sustainable balance (turquoise), theme 4: benefits of sustainable entrepreneurship (pink), theme 5: strategies that encourage sustainable entrepreneurship (bright green), theme 6: challenges (grey) and theme 7: recommendations (yellow). These were analysed below.

5.5 THEME 1: DETERMINANTS OF SUSTAINABLE ENTREPRENEURSHIP

The research findings indicated the factors that compelled SMMEs to engage in sustainable enterprises. A total of 175 codes were identified in this theme, with P6 giving the highest code words. These were later categorised into seven sub-themes below:

- Motivation

- Intrinsic motivation with 11 codes, mentioned 32 times
- Extrinsic motivation with six codes, stated 16 times
- Gains in productivity and competitiveness with four codes, said nine times
- Culture /values with five codes mentioned nine times
- Focus on innovation with three codes, mentioned four times
- Expertise in the field with two codes, mentioned seven times
- Organisational setting with two codes said three times
- Stakeholders with seven codes mentioned 22 times

The results show that most SMMEs were motivated to adopt sustainable entrepreneurship, and passion emerged as the highest motivating factor. This contrasts with the study by Yadav *et al.* (2018), in which they concluded that government is a significant determinant that influences the sustainable behaviour of SMMEs primarily through regulation, legislation, economic and structural support, and knowledge dissemination. In this study, none of the SMMEs mentioned that the government influenced them to adopt sustainable entrepreneurship despite looking to the government to take the lead on environmental issues. That explains the highest frequency being intrinsic motivation; the push is from within the individual SMMEs.

This theme aims to answer one of the secondary research objectives:

To establish the determinants that compel SMMEs to adopt sustainable entrepreneurship

The individual themes are explained in detail below with the help of quotations from the interviewees. Table 5.3 below shows some of the quotes from the participants for different sub-themes and codes. Figure 5.2 is a matrix which indicates the participants who mentioned a specific code. Figure 5.3 is a network diagram showing the sub-themes and codes joined with their central theme.

Table 5.3: Determinants of sustainable entrepreneurship

Theme	Sub-themes	Codes and Quotations from participants
Determinants of sustainable entrepreneurship	Intrinsic Motivation	Passion: P1: <i>"I had a passion for farming. I breathe, eat, and sleep hydroponics, so you find on my phone pictures it's all hydroponics... I am continuously researching, looking for how to improve on this."</i> P5: <i>"The idea was based on being passionate about the industry we entered... We had a lot of ups and downs and losses; all that drives us can only be passion."</i> P16: <i>"The idea of doing business was always in me. There is depression because of the ups and downs, but the risk does not stop us from doing business, especially when we have passion."</i> Good communicator: P5: I am good at networking. I am good at sales, convincing people, and communicating. Those skills were beneficial. Courage: P2: <i>"It takes a lot of courage to run a successful enterprise because if you are going in a direction, no one has gone before, it requires you to be very courageous."</i> Provision of solution: P9: <i>"I was trying to solve problems faced by smallholder farmers, especially in stock feed, because most of their production cost lies in the stock feed, so this is an alternative source of stock feed for SMMEs in agribusiness."</i> Desire to make an impact: P14: <i>"The desire to make a positive impact on the community."</i> Employment creation: P16: <i>"The idea also came when I saw a lot of vendors in high-density areas, so I wanted to create employment for the marginalised groups, especially women and do value addition."</i>
	Extrinsic motivation	
	Stakeholders	Suppliers: P2: <i>"Vulnerability of supply chain that at least you need to produce your food sustainably like during COVID 19 I saw the importance of producing your food and also issues to do with climate change."</i>

		Employees: P5: <i>“At one point, we thought this would never work, so it was more of having a good partnership with the colleagues we started with, having unity of purpose and being able to work with each other and learn from each other.”</i> Role models: P12: <i>“My father used to do farming. He is a good planner; I usually consult him on many farming-related things. I am also inspired by other entrepreneurs making it in farming who started from nowhere without capital from financiers.”</i>
	Organisational setting	Strong networks: P4: <i>“Strong networks are also essential. We need networks to help us with fundraising, marketing, and accessing other countries' equipment and raw materials.”</i> Learn from practice: P7: <i>“My friend is the one who got the training, so I tapped from him, and then we learnt more from doing.”</i>
	Gains in productivity and competitiveness	Availability of raw materials: P4: <i>“Zimbabwe is an agri-economy, and we have realised that unutilised organic waste is abundant, which is what we need for biogas.”</i> Sustainable income generation: P9: <i>“Income generating is a sustainable way of generating income.”</i> Recognised agribusiness opportunity: P14: <i>“I noticed the opportunity I could look into and use.”</i>
	Culture/Values	Grew up farming: P8: <i>“I have always wanted to do farming. I am an agriculturalist. It is something which I grew up doing already.”</i> Farming family: P14: <i>“I grew up in a farming environment.”</i> Taught business at a young age: P16: <i>“For students who were doing Business Studies, we got involved in Junior Achievement in Zimbabwe; we were taught how to run our businesses at a young age.”</i>
	A focus on innovation	Technology in demand: P10: <i>“I got the idea after attending some farmers' functions to provide farming solutions and through interaction with them when one said you could make a machine that bales grass.”</i> Open-minded: P10: <i>“You also have to have a clear vision of where you want to go, and you also have to be openminded.”</i>

		Research and development: P14: <i>"We looked at the environmental challenges and how we could provide solutions to address them. We saw a fertiliser challenge in our country's agricultural sector, so we took the opportunity to research to see how best we could solve this."</i>
	Expertise in the field	Technical skills: P10: <i>"Because of the engineering study, my engineering came in handy."</i> Availability of online resources: P7: <i>"Green Enterprise came later and trained us then a lot of online material through ebooks and videos."</i>

Figure 5.2: Matrix for determinants of sustainable entrepreneurship

Theme 1: Determinants of sustainable entrepreneurship		Participants															
Sub-themes	Codes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16
Motivational Factors-Intrinsic	Risk taker						x									x	
	Flexible									x							
	Good communicator																x
	Hard work												x				
	Networking	x	x		x		x			x							
	Determination	x															
	Persistence				x		x						x				
	Passion	x	x		x						x	x		x	x	x	x
	Leadership skills	x	x		x	x	x						x		x		
	Ambitious					x											
Motivational Factors-Extrinsic	Had savings							x									
	Climate change mitigation		x														
	Employment creation											x					x
	Financial Independence	x								x		x	x				
	Passion for the environment					x											
	Desire to make positive impact					x						x			x	x	
Stakeholders	Providing environmental & social solutions				x	x									x	x	
	Role models	x	x			x	x	x				x				x	x
	Vulnerability of supply chain		x														
	Access to skilled personnel					x					x						
	Social Media	x						x									
	NGO project support programme	x															
Organisational setting	Strong networks				x	x		x						x	x	x	
	Motivated by other successful SMMEs												x			x	
	Networking	x				x											
	Learnt from practice							x									
	Availability of raw materials				x												
	Reducing production cost									x							
Gains in productivity and competitiveness	Market imperfection				x					x		x			x		
	Noticed agribusiness opportunity						x	x			x						
	Grew up farming								x						x		
	Want to provide a solution				x												
	Hard working family culture						x		x								
	Taught business at young age																x
Culture/values	Inspiration from home								x						x	x	
	Innovative mind			x							x						
	Creativity		x														
	The technology is in demand				x												
Expertise in the field	Technical skills				x		x		x			x					
	Widely research	x				x											x

```

graph LR
    Central[Determinants of sustainable entrepreneurship] --- Stakeholders
    Central --- Expertise[Expertise in the field]
    Central --- Organisational[Organisational setting]
    Central --- Culture[Culture/values]
    Central --- Innovation[A focus on innovation]
    Central --- Motivation
    Stakeholders --- StakeholdersList[Stakeholders]
    StakeholdersList --- Vulnerability[Vulnerability of supply chain]
    StakeholdersList --- NGO[NGO project support programme]
    StakeholdersList --- SocialMedia[Social media]
    StakeholdersList --- Successful[Successful entrepreneurs]
    StakeholdersList --- RoleModels[Have role models]
    StakeholdersList --- Empty1[ ]
    StakeholdersList --- Empty2[ ]
    Expertise --- ExpertiseList[Expertise in the field]
    ExpertiseList --- Technical[Technical skills]
    ExpertiseList --- Research[Widely research]
    ExpertiseList --- Award[Won art award]
    Organisational --- OrganisationalList[Organisational setting]
    OrganisationalList --- Learnt[Learnt from practice]
    OrganisationalList --- Networking[Networking]
    Culture --- CultureList[Culture/values]
    CultureList --- HardWorking[Hard working family culture]
    CultureList --- GrewUp[Grew up in a farming environment]
    CultureList --- Want[Want to provide a solution]
    CultureList --- Taught[Taught business at a young age]
    CultureList --- Inspiration[Inspiration from home]
    Innovation --- InnovationList[A focus on innovation]
    InnovationList --- Availability[Availability of online resources]
    InnovationList --- Demand[The technology is in demand]
    InnovationList --- Mind[Innovative mind]
    InnovationList --- Creativity[Creativity]
    Motivation --- MotivationList[Motivation]
    MotivationList --- Gains[Gains in productivity and competitiveness]
    MotivationList --- AvailabilityRaw[Availability of raw materials]
    MotivationList --- Zimbabwe[Zimbabwe's agro-based economy]
    MotivationList --- Noticed[Noticed agribusiness opportunity]
    MotivationList --- Market[Market imperfection]
    MotivationList --- Benefited[Benefited from goodwill]
    MotivationList --- Reducing[Reducing production cost]
    MotivationList --- Sustainable[Sustainable income creation]
    MotivationList --- Extrinsic[Motivational Factors Extrinsic]
    MotivationList --- Intrinsic[Motivational Factors Intrinsic]
    Extrinsic --- ExtrinsicList[Motivational Factors Extrinsic]
    ExtrinsicList --- Financial[Financial independence]
    ExtrinsicList --- Employment[Employment creation]
    ExtrinsicList --- Impact[Desire to make positive impact]
    ExtrinsicList --- Passion[Passion for the environment]
    Intrinsic --- IntrinsicList[Motivational Factors Intrinsic]
    IntrinsicList --- HardWork[Hard work]
    IntrinsicList --- Savings[Had savings]
    IntrinsicList --- Ambitious[Ambitious]
    IntrinsicList --- Persistence[Persistence]
    IntrinsicList --- Risk[Risk taker]
    IntrinsicList --- Determination1[Determination]
    IntrinsicList --- Leadership[Leadership skills]
    IntrinsicList --- Passion[Have passion]
    IntrinsicList --- Communication[Good communication]
    IntrinsicList --- Networking[Networking]
    IntrinsicList --- Flexible[Flexible]
    IntrinsicList --- Determination2[Determination]
  
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Determinants of sustainable entrepreneurship

- Stakeholders**
 - Vulnerability of supply chain
 - NGO project support programme
 - Social media
 - Successful entrepreneurs
 - Have role models
 -
 -
- Expertise in the field**
 - Technical skills
 - Widely research
 - Won art award
- Organisational setting**
 - Learnt from practice
 - Networking
- Culture/values**
 - Hard working family culture
 - Grew up in a farming environment
 - Want to provide a solution
 - Taught business at a young age
 - Inspiration from home
- A focus on innovation**
 - Availability of online resources
 - The technology is in demand
 - Innovative mind
 - Creativity
- Motivation**
 - Gains in productivity and competitiveness
 - Availability of raw materials
 - Zimbabwe's agro-based economy
 - Noticed agribusiness opportunity
 - Market imperfection
 - Benefited from goodwill
 - Reducing production cost
 - Sustainable income creation
 - Motivational Factors Extrinsic**
 - Financial independence
 - Employment creation
 - Desire to make positive impact
 - Passion for the environment
 - Motivational Factors Intrinsic**
 - Hard work
 - Had savings
 - Ambitious
 - Persistence
 - Risk taker
 - Determination
 - Leadership skills
 - Have passion
 - Good communication
 - Networking
 - Flexible
 - Determination

5.5.1 Motivation

All interview participants presented different motivations and influencing factors that caused them to pursue their sustainable idea into a business. Some suggested factors showed that it was coming from within, that is, intrinsic motivation, and some were influenced by external forces, which fall under extrinsic motivation. However, most indicated that intrinsic motivation influenced them to adopt sustainable entrepreneurship. Kirkwood & Walton (2010) also found that intrinsic motivation is more critical than extrinsic motivation because sustainable entrepreneurs may take a long before making profits in their complex social and environmental problem-solving entities.

Passion was the most mentioned motivator, with 88% of the participants showing that they started a sustainable business because they had passion, as indicated by the participants' quotes below: characterised by the participants' quotes below:

P2: *"Passion has been my primary drive. I have passion for what I am doing even if I am not making too much profit."*

P4: *"Agriculture has always been my passion."*

P11: *"Passion for what you will be doing."*

Amongst all the interviewed SMMEs, P16 emphasized the importance of passion as a determinant factor for SMMEs to engage in sustainable business. She stated, *"Passion takes the lead; if you are passionate, you go out of your way. I do not have a degree but I run an agribusiness; I also widely research to increase my knowledge and skills."*

Besides passion, other intrinsic motivational factors came from the interviews with sustainable entrepreneurs. Some entrepreneurs indicated that it takes time to realise a profit in a sustainable enterprise; hence, they were influenced to continue pursuing their ideas because of their determination, persistence, hard work and good leadership skills. His courage influenced P2 as he said, *"It takes a lot of courage to run a*

successful enterprise because if you are going in a direction no one has gone before, it requires you to be very courageous.” Being persistent helped many SMMEs to see their sustainable business grow from an idea to a successful company; like what P12 said, *“You have to be persistent, resilient, focused, determined, and have focus and willpower. The downs are usually more than the ups, so you need to be resilient, and the failures should help create momentum and success.”* Many participants alluded that to have a sustainable business, one has to be a hard worker, one of them being P13, who said, *“If the business is yours, you are forced to go out of your way. There is a need for hard work, like for the two years I worked hard. I started from scratch.”*

The interviewee also indicated that an entrepreneur needs to be a risk taker, flexible, a good communicator, ambitious, and have some savings and network with others to be a sustainable entrepreneur. P13 pointed out that his communication skills helped her to adopt sustainable entrepreneurship; *“I am good at networking. I am good at sales, convincing people, and communicating. Those skills were beneficial.”* Creating a solid network also emerged as a strong determinant for sustainable entrepreneurship; P15 indicated the importance of it, *“Networking, you can have a degree, but with no network, you go nowhere; having a solid network keeps you connected everywhere. Networks help you know what is happening in the market, and for the products we sell, sometimes the prices go down, and customers' preferences change.”* P4 further added that *“Strong networks are also essential. We need networks to help us with fundraising, marketing, and accessing other countries' equipment and raw materials.”*

The interviewee highlighted that they are also motivated by external influences, including the desire to make a positive impact, provide solutions to environmental and societal challenges, have a passion for the environment, have financial independence, mitigate climate change, and create employment. Seeing Zimbabwe's high unemployment rate, many SMMEs were pushed to bridge the gap by generating work. This was a two-sided factor; some were motivated to create jobs for themselves, for they would not be in the unemployed bracket, like P1, who stated, *“First and foremost, I wanted financial independence; I was running away from the idea of being unemployed. I am getting the money that I thought I would get and more. So far, so good. I am progressing well.”* P11 also added, *“The Zimbabwean situation. After*

college, jobs are not easy to come by. In the search for opportunities, I thought of starting a business.” On the other hand, some SMMEs were concerned about creating employment opportunities for others, like P16, who stated that the idea of starting a business came to her when she saw many unemployed youths and women in high-density suburbs. She felt obliged to support the marginalised. P16: *“I wanted to create employment for the marginalised groups, especially women and do value addition.”*

Some SMMEs pointed out that they were motivated by their determination to impact the community positively. This was elaborated by P5, who stated, *“If we look at how big the industry is, we foresee ourselves making an impact in our communities, not only in Zimbabwe but in the region. With this business, as far as our scoping is concerned, we envisage expanding it in the coming years; that's what keeps us going.”* The impact can also be in the form of providing a solution to societal or environmental problems, as indicated by P4 and P14. P4 pointed out, *“We know they have problems with waste management, especially biodegradable, and we also know that there is energy scarcity; those opportunities give significant reasons to go into this particular business.”* P14 added, *“We looked at the environmental challenges and how we could provide solutions to address them. We saw a fertiliser challenge in our country's agricultural sector, so we took the opportunity to research to see how best we could solve this.”*

The interviews show that SMMEs can be motivated to venture into sustainable entrepreneurship by their willingness to curb the effects of climate change. P2 said he genuinely desired to mitigate climate change as he saw a need for change in agriculture, a major contributor to greenhouse gases. *“Agriculture is a significant contributor to greenhouse gas emission because about 25% comes from agriculture. Therefore, I want to do something that can also help sequester those emissions like carbon, so when we are farming in a regenerative way, we are capturing carbon.”* It is not just his passion to mitigate climate change and protect the environment, but he has made this a dominant aspect of his company culture; his motto is: *“we are stewards of creation.”*

5.5.2 Gains in productivity and competitiveness

SMMEs can engage in sustainable business if they benefit their bottom line through cost reduction, sustainably generate income and if the raw materials are readily available. P4 pointed out that the availability of raw materials motivated him to start his business. It has done well since he is not affected by the unavailability of raw materials, *“Zimbabwe is an agri-economy, and we have realised that unutilised organic waste is abundant, which is what we need for biogas.”* P9 also highlighted that he ventured into a sustainable business to try and help farmers reduce production costs; *“I was trying to solve problems faced by smallholder farmers, especially in stock feed, because most of their production cost lies in the stock feed, so this is an alternative source of stock feed for SMMEs in agribusiness.”* Despite helping farmers, P9 rightfully said that his business is a sustainable source of income.

The interviews also highlighted that SMMEs adopt sustainable entrepreneurship if business opportunities exist, even in market imperfections. P10 stated, *“We did research and found no commercial product of this type available in Zimbabwe. We consulted people from the agricultural mechanisation sector who confirmed that there was manual hay baler and saw we could produce them.”* SMMEs are motivated to provide a solution when there is market imperfection.

5.4.3 Stakeholders

Stakeholders are groups or individuals who can influence or be influenced by the achievement of the firm's objective and who can influence the firm's conduct, processes, or outcomes. Given that the propensity of SMMEs to engage in sustainable practices is contingent on the extent to which sustainable decisions are enforced by pressure from internal or external stakeholders, this pressure is likely to influence the adoption of sustainable entrepreneurship. However, little is known about which stakeholder groups have the most compelling influence from the perspective of SMMEs. SMMEs are surrounded by various stakeholders who exert increasing pressure on them; if disregarded, the stakeholder relationship may be harmed and negatively impact firm performance (Ernst *et al.*, 2022:7). This study found many stakeholders that influenced SMMEs to venture into sustainable entrepreneurship,

these include customers, suppliers, social media, role models, intermediary organisations, community, competitors and even employees.

The most recurring code in this category was the influence of role models, which was mentioned by 63% of the research interviewees. The role models had the power to influence SMMEs in the same business and those in different fields. Due to their respect for their role model and mentors, they were compelled to venture into sustainable and successful ventures. To preserve their relationship, they strive to do their best. Some of the responses are below:

P5: "Yes, I have role models, though they may not be specifically in this industry, but there are people we saw succeeding, and we want to follow suit."

P6: "Not necessarily, but I have been motivated by Nigel Chanakira, who would say I did well in the first place and then would fall, then rise again and fall and rise again. That model teaches very well."

P11: "My big brother is my role model. He started small, selling under a tree, now that he owns two CBD shops performing exceptionally well."

The responses show that SMMEs were being challenged by successful role models with the connotation that if others have done it, they too can do it. It gave them the strength and willpower to succeed. P9 elaborated on his appreciation for his mentor, who distinctively helped him to set up his company: *"If I had to start again, I think the project would fail because I began very well. The way I started my business model was the best I could. Being given a chance to begin again, I will leave the business astray because the mentorship I got was outstanding. I got mentorship from Dr. Nigel Chanakira from scratch. I had a chance to start with a more robust backing of business gurus who were coaching me."*

While others shun social media, some interviewees revealed that social media influenced them to start a sustainable business. P1 gave an account of how he began his start-up with the help of the internet, *"Firstly, it was through social media; I was following the guys from Indonesia and China; that's how I came to know about*

hydroponics. The interest started from there.” Suppliers and customers are also stakeholders, which can determine the adoption of sustainable entrepreneurship by SMMEs. P2 stated, “Vulnerability of supply chain that at least you need to produce your food sustainably like during COVID 19 I saw the importance of producing your food and also issues to do with climate change.” He could not reach the supplies due to COVID-19 and decided to start his own business, “I intensified during the COVID-19 times; we could not go out to buy food, so I started to think about sustainable farming and integrated, thus the circular economy. It is a complete ecosystem.”

In business and economics, change is a cyclical occurrence. Several periodic changes, such as a technological shift, lead to product design and characteristics modifications. In addition, consumers are altering their purchasing habits for ecological, economic, and health reasons. Numerous consumers now favour eco-friendly products and services with minimal environmental impact. Changing consumer behaviour towards sustainable products generates demand for sustainable products and fosters an enabling environment for the sustainable market. P2 was influenced to increase his sustainable product supply after analysing the shift in consumer preference. He said, *“Many people demand my product because I am organically growing these things. So, whenever I advertise on Facebook, people start putting in orders. People are now shifting to organic products because they are healthy. I am looking at increasing my supply to meet the demand.”* This is supported by Pacheco et al. (2010), who state that sustainable entrepreneurs should concentrate on their consumers' evolving sustainable behaviour. In the context of behaviour, it is also true that sustainability-oriented individuals who possess sustainable characteristics are more likely to take actions such as founding a business that promotes sustainable development (Kuckertz & Wagner, 2010).

P1 indicated that his innovative idea was brought to reality with the help of intermediary organisations: *“Luckily, there was an NGO which was supporting youth projects, so when I mentioned hydroponics, they took me into their wings.”* Having skilled employees or business partners makes it easy to adopt sustainable entrepreneurship; P7 said, *“My friend, who is my business partner, is the one who got the training, so I tapped from him, then we learnt more from doing.”* P5 also expressed the importance of teamwork to the success of a sustainable business: *“At one point, we thought this*

would never work, so it was more of having a good partnership with the colleagues we started with, having unity of purpose and being able to work with each other and learn from each other.” This is in line with the conclusion of Ernst et al. (2022:7) that the more salient a stakeholder's influence, the more likely it is that the firm will respond positively to the stakeholder's influence. Stakeholder salience is the importance that entrepreneurs place on a particular stakeholder group.

SMMEs are influenced by sentiments of social proximity with their surrounding community. In contrast, large corporations prioritise influential stakeholders such as the government. Community members and their employees are essential stakeholders in SMMEs. P4 indicated that he was influenced by his will to make a better life for the community he saves, *“We are trying to modernise the kind of appliances our customers can use. Traditionally, what has been happening is people build a biogas digester, and they put together a very fun stove. Biogas was mainly for cooking and lighting, but now we are saying it is possible to use biogas with modern LP gas cookers. We want our customers to enjoy the same comfort level as LP gas users.”* P16 also indicated the benefit to her community, which pushes her to continue with her sustainable business venture; *“The support for the out-growers who can send their children to school has improved people's livelihoods, especially in the rural areas and employment creation. I have also offered agriculture consultancy for people wanting to do the same business.”*

5.4.4 Culture

As reflected by the interview participants' responses, culture is also a determinant of sustainable entrepreneurship by SMMEs. P6 indicated that his family is hardworking, so he adopted the culture that helped him pursue a sustainable business: *“Also, my family's hard work culture, my mother was a hard worker, and she was focused.”* P14 had almost a similar cultural environment; he grew up in a family of farmers. Ever since, P14 has been passionate about growing his food. *“I grew up in a farming environment, and I noticed the opportunity I could look into and use it.”* P16 appreciates her parents, who instilled a business-conscious mindset in her at a tender age, and she did not depart from that; *“For students who were doing Business Studies,*

we got involved in Junior Achievement in Zimbabwe; we were taught how to run our businesses at a young age, and it helped us.”

P4 was exposed to a need for a waste management change during his time as a regulatory inspector, *“Before I decided to move into the business, I had worked in the related environmental sector for about 12 years on the policy, and I saw that people are having challenged and from my side, I could regulate them but could not give the advice to say this is how you intend to solve the problems. I decided that these institutions would welcome it if someone came in with a solution to the waste management problems. So, with the biogas we now come in, we can help you with waste issues with the added advantage that you can recover biogas and other products from the process. That scenario allowed me to venture into this business.”*

This was P4's eye-opening exposure, supplying biogas to better people's lives. P4 was exposed to the need for women's empowerment, with the solution being, access to clean, renewable energy. The combination of empowerment and sustainable energy led him to pursue an innovative business model - a market-based approach.

5.4.5 Organisational setting

The size of the business, sector, and ownership contribute significantly to the adoption of sustainable entrepreneurship by SMMEs. All the interviewees are into tangible products; hence, their business sector also influenced them. SMMEs are flexible and can easily network on an individual or corporate level. P5 indicated the importance of networks to his business, *“Networks are essential, and these are built for your business to grow.”* P1 added by giving a detailed narration of how networking helped him to grow his business, *“First and foremost-character, the way that you present yourself says a lot about yourself and most definitely networking, for me to appear in the newspaper, I had a session with church youths giving teaching and one of the ladies came over for an interview just like what you are doing for an assignment then the lecture was interested in it and had connections at Chronicle newspaper-that is how I got to appear in the Newspaper. The interview was more of networking, and it put me in the spotlight and exposure.”* Literature shows that businesses that start as a family adopt sustainable entrepreneurship more often. This was supported by P2, who highlighted that *“I started fish farming because we have always been a family with*

a fishing background. My father was a fisherman. The outdoors, that's where it caught up with me... and from there, I began to develop a passion for other agricultural ventures like poultry, rabbits and innovative agrarian technics."

5.4.6 A focus on innovation

Innovation is an essential element in sustainable entrepreneurship. Most sustainable businesses start from an innovative idea. P2 and P3 pointed out, *"It was not a skill but just an innovative mind"* and *"The ability to network and creativity contributed a lot to what we are at the moment."* After implementing the technology, the SMMEs will pursue the business if the technology is in demand, just like what P4 experienced, *"So our thinking was that despite the challenges, we have scores of individuals and institutions discharging waste, which is the raw material for biogas."* More so, the technology is now easily accessible; P7 confirmed his benefit: *"...then a lot of online material through e-books and videos helped me in my business."*

Becoming increasingly dissatisfied with the energy industry, P11 set out to challenge the conventional mentality and make industry-leading innovations that would reduce the cutting down of trees for firewood. *"Biogas offers the client a waste management system and deals with the waste problem. They also get biogas as a renewable resource; trees are not cut down, and the effluent produced is an excellent organic fertiliser for their crops."* Furthermore, he determined that as the price of power continues to increase and more power cuts, people are becoming more motivated to look to renewable energy sources and produce their own electricity.

P9 saw a need to change how the stockfeed was being priced; he wanted people to produce their feed sustainably and avoid relying on expensive stockfeed that increased their production costs and reduced their profits. *P9 stated, "I was trying to solve problems faced by smallholder farmers, especially in stock feed, because most of their production cost lies in the stock feed, so this is an alternative source of stock feed for SMMEs in agribusiness."* Here, we note that P9 was heavily motivated by a challenge to introduce an innovative product and allow customers to take greater ownership of their stockfeed production and consumption - great self-sustainability.

P14 was motivated as he saw he could empower people to produce their fertiliser and move away from synthetic fertilisers. *"We looked at the environmental challenges and how we could provide solutions to address them. We saw a fertiliser challenge in our country's agricultural sector, so we took the opportunity to research to see how best we could solve this...Opportunities are there: a steady supply of fertilisers to small-scale farmers and the rising cost of traditional synthetic fertilisers; our product is an alternative that is cheaper but effective for yields."* P14 conducted various surveys and market research before he started his company. This led him to see his motivations could be realised from an environmental and a business perspective through his startup.

5.4.7 Expertise in the field

Evident from the 16 interviews is that all entrepreneurs have had prior exposure to an environmental concern, leading to the belief that prior exposure to a sustainability-related issue (either environmentally or socially) has motivated these entrepreneurs to pursue business initiatives that solve sustainability-related problems.

Entrepreneurs who are experts in their field can quickly adopt new technologies and run sustainable businesses. His profession influenced P10, an engineer, as he says, *"Because of the engineering study, my engineering came in handy... technical skills of operating machines such as grinders."* P5 and P7 utilised the expertise of their co-partners. They noted that their co-partners were experts in their respective disciplines and that they would support one another and maintain concentration in times of difficulty. P7 stated, " My friend is the one who got the training, so I tapped from him, and then we learnt more from doing. We were just peers, so entrepreneurship was a viable cause." P5 added, "At one point, we thought this would never work, so it was more of having a good partnership with the colleagues we started with, having unity of purpose and being able to work with each other and learn from each other." Their social capital and desire to create a sustainable business bolstered their exposure to the need for change.

P4 observed that the outlook for environmental management was bleak. An environmental regulatory agency formerly employed P4. This period exposed him to

the need for increased sustainability and self-sufficiency concerning environmental protection, waste management, and renewable energy, and he considers it formative. Throughout the interview, it was evident that his time at the regulatory company exposed him to sustainable energy production, which sparked his interest in creating his remote renewable energy system. His college education also contributed to his successful business venture. *"I got an opportunity to travel to Thailand, where I started pursuing sustainable energy...In 2016, I did my Master's, and my research was on waste to energy; that's when I developed the idea that when I got home, I need to pursue waste energy systems and start with the less complicated ones like biogas."*

This sub-theme analysis concludes that a sustainable entrepreneur's prior exposure to a sustainability-related issue will likely have a substantial positive effect on their entrepreneurial initiative. These exposures can manifest in numerous ways. Some entrepreneurs in this analysis were raised in an environment where genuine environmental concerns were highly valued. Others gained prior knowledge of issues about sustainability through their professional experiences. This result is consistent with numerous previous research findings. First, Shepherd and Patzelt (2011:152) state, "A person's attention is frequently drawn to aspects of the environment based on his or her prior knowledge and motivation." Shepherd and Patzelt (2011:152) refer to this as "focused attention." This comprehension is consistent with the findings of Shane (2000:452), who discovered that entrepreneurs identify opportunities based on the information they already possess.

5.5 SUSTAINABLE ENTREPRENEURSHIP OPPORTUNITIES RECOGNITION

This theme is very critical since it is the backbone of sustainable entrepreneurship. Without opportunity recognition and exploitation, there is no sustainable entrepreneurship. A total of 178 codes were identified as sources of opportunities. These were amalgamated into 25 codes and were grouped into two sub-themes according to the theories of opportunity recognition:

- Discovery theory with ten codes cited 44 times.
- Creation theory with 15 codes, cited 53 times.

Some fall under discovery theory, where entrepreneurs discover existing opportunities. Under this sub-theme, the majority indicated that they recognise and exploit a sustainable prospect depending on the demand for the product or service. If needed, they venture into that business, and society will support the project. The second sub-theme fall under creation theory, which states that opportunities come from entrepreneurs' effort. Most interviewees indicated that they created a sustainable opportunity through their innovativeness and used their resources to finance the exploitation of the innovative idea into a sustainable product or service.

Although some interviewees emphasised the principles of opportunity creation theory, their interpretations emphasised the existence of exogenous disruptions when the nature of opportunities was considered. These results suggest that the central assumptions of both approaches (Alvarez & Barney, 2007:13) overlap more in the context of sustainable entrepreneurship than in conventional entrepreneurship research. Moreover, empirical evidence supported Pacheco *et al.*'s (2010:470) contention that sustainable entrepreneurship cannot be studied solely through the opportunity discovery theory. The nature of overlapping assumptions and the nearly equal frequency distribution in both theoretical sub-themes indicate that both ideas are required if the objective is to create a more accurate view of sustainable entrepreneurship.

Figure 5.4: Matrix for theme 2-sustainable entrepreneurship opportunities recognition

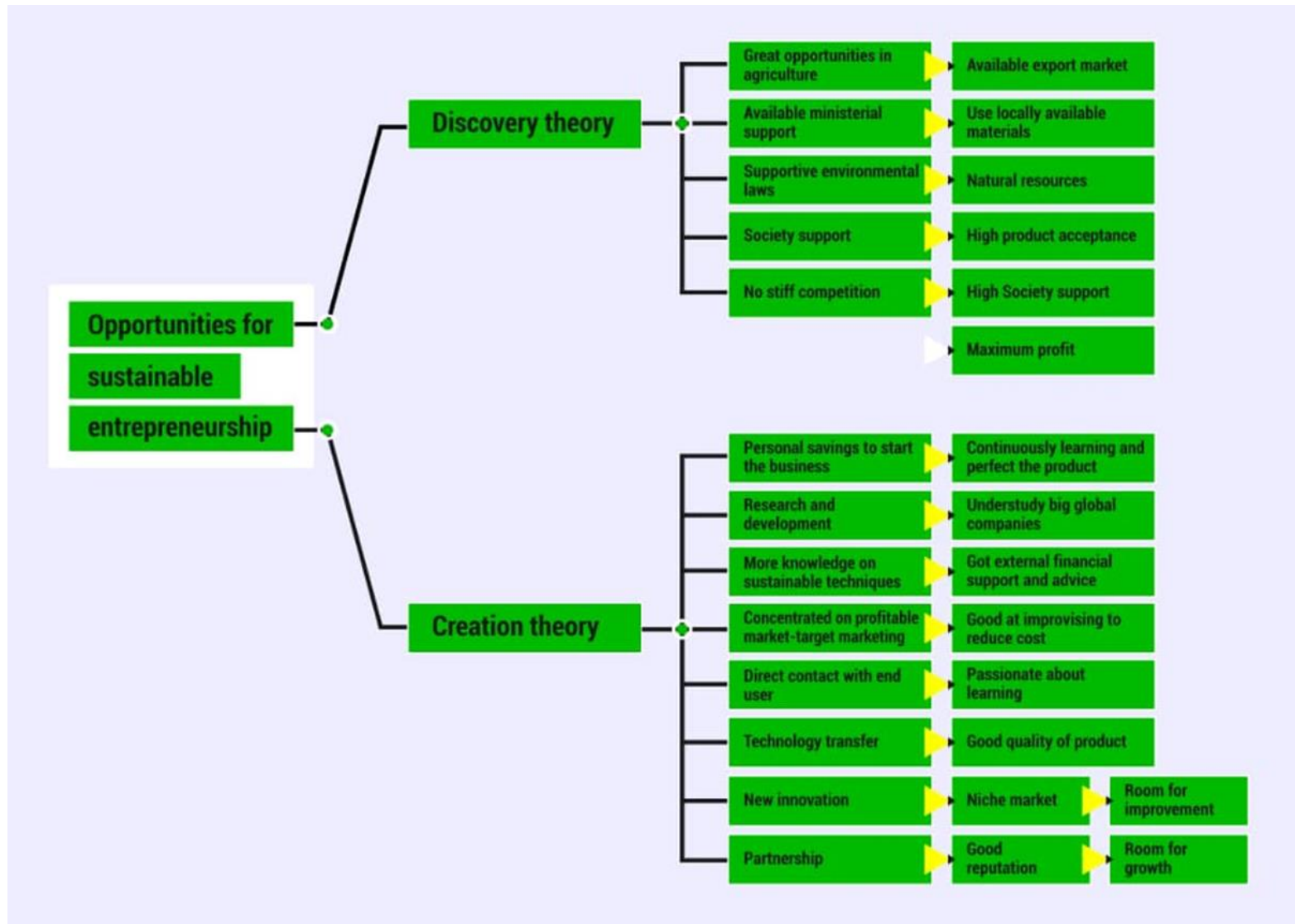
Theme 2: Sustainable Entrepreneurship Opportunities		Participants															
Sub-theme	Codes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16
Discovery theory	No stiff competition	x		x	x			x	x	x	x	x					
	Natural Resources	x															
	Great opportunities in agriculture				x									x			
	Society support	x	x	x	x	x	x			x	x	x		x			
	Supportive environmental laws			x													
	High market demand		x		x		x	x	x		x	x	x			x	x
	Maximum profits	x															
	Available ministerial support						x										
	Available export market		x							x			x				x
	High product acceptance			x		x		x		x				x	x		
Creation Theory	New Innovation	x	x			x	x						x			x	x
	Got external financial support and advice					x	x			x			x			x	x
	Technology transfer				x		x									x	
	Research and development	x	x			x											
	Personal savings to start the business						x	x		x	x	x	x		x		x
	Continuously learning and perfect the product			x		x	x	x			x						x
	Niche market	x	x				x			x							
	Direct contact with end user						x										
	Good reputation						x							x			
	Partnerships						x										
	Concentrated on profitable market-target marketing						x										
	Room for growth		x		x	x		x						x	x	x	
	Understudy big global companies										x						
	More knowledge on sustainable techniques		x			x											
	Good quality of products	x															

Table 5.4: Sustainable entrepreneurship opportunities recognition

Theme	Sub-themes	Code and Quotations from participants
Sustainable entrepreneurship opportunities recognition	Discovery theory	Natural Resources: P1: <i>"In Zimbabwe, we are blessed with natural resources like sunlight, so instead of UV lights, we have natural light; we do not use cooling systems. We bury drums underground."</i> Society Support: P5: <i>"People are beginning to support and to realise the impact. They are beginning to appreciate that they should pay for the services, and we believe there will be massive growth if we keep on being efficient."</i> High product acceptance: P13: <i>"Since last season, the business has been quite fair; the acceptance is now good and multi-referrals and positive feedback from the farmer."</i> Great opportunity in agriculture: P13: <i>"Farming or agriculture is a big business in Zimbabwe. There's an opportunity for everyone. It still lacks competition for products like now."</i> Available market: P14: <i>"Opportunities are there, that is, a steady supply of fertilisers to small-scale farmers and the rising cost of traditional synthetic fertilisers; our product is an alternative that is cheaper but effective for yields."</i>
	Creation theory	Innovation: P1: <i>"There wasn't any because people were not familiar with hydroponics; I had to introduce it to the people and tell them the difference between produce grown on the soil and the one from hydroponics."</i> Knowledge of sustainable technologies: P2: <i>"After the recent Corp 27, many people are starting to appreciate what I have been preaching for the past three years. NGOs invite me to set up sustainable techniques like vermicompost and hydroponic."</i> Room for growth: P4: <i>"There is room for improving access to the technology because as the technology has been in the country, there are still many people who are not yet aware of the actual value of biogas. That's a significant opportunity for us. Especially when it comes to appliances, we can supply modern appliances."</i>

		Niche market: P9: <i>"I first brought a radical new idea in Mashonaland and Zimbabwe. We had to develop the innovation. We started by sensitising the government officials on the importance of maggot farming, from the higher level till we got to the local authority. We are still pushing."</i> Funding: P12: <i>"I used to save the little money from family and friends and the little money I would get from selling small things. After winning in the Green Enterprise Innovation Challenge, I received a grant from the ILO and loans from my part-time work."</i>

Figure 5.5 Network diagram for sustainable entrepreneurship opportunities recognition



5.5.1 Discovery theory

Entrepreneurs may also differ in their entrepreneurial human capital, levels of alertness, and cognitive abilities to notice and evaluate opportunities given identical information. The discovery perspective thus encompasses active and passive inquiry and accidental discovery, as all three view opportunities as existing "out there" (Villar, 2019:105). Once an opportunity has been identified and regarded valuable, the entrepreneur engages in various exploitation activities. These include acquiring financial and other resources, protecting the opportunity's information from competitors, and developing suitable organisational structures and business models (Shane *et al.*, 2003:263).

Even if opportunities exist independently, not everyone has equal access to them. People have varied access to information about available options. This is partly because some information is complex and can only be comprehended by specialists. Typically, information about opportunities is of a mundane nature, such as observing price differences between commodities. P9 observed that farmers paid lots of money for stock feed and introduced a cheaper alternative. He stated, "I was trying to solve problems faced by smallholder farmers, especially in stock feed, because most of their production cost lies in the stock feed, so this is an alternative source of stock feed for SMMEs in agribusiness." Shane (2000:451) states that noticing such opportunities does not require expertise. Instead, it depends on the spatiotemporal location, relevant prior knowledge and position within and between the individual's social networks.

The world is unpredictable in terms of technology, markets, and rivals. Consequently, the entrepreneur will frequently devise strategies to address these uncertainties by introducing gaps, identifying niche markets and forming strategic alliances (Shane *et al.*, 2003:260). P12 studied the change in people's preferences and identified a shift to organic foods; hence, she pursued the microgreens niche market, "*The growing demand for organic foods is an opportunity we are exploiting. Also, people suffering from chronic diseases are reverting from meat to vegetables.*" P6 also took advantage of the shift from GMO to organic products for health reasons and started his organic honey production. He said, "*After finding out there was little production of honey and bee products and little of it in the market and the shops in Zimbabwe through research,*

even at ZIMSTATS, I thought it would help us if I could capitalise on this business and that be better off. In addition, pure honey is challenging to produce. I went through lots of quality training in its production and management. I knew we would be the best in making quality honey that is eco-produced or eco-friendly produced. I wanted to catch the market.” However, careful planning is essential for successfully exploiting an opportunity, particularly under high uncertainty.

The interviewees showed that when an opportunity exists, they can deduce and implement it into a sustainable business. All the interview participants indicated that they check if their product or service is in demand and if the project is viable. Below are quotes from the interviewee regarding the customer demand for their product and services:

P11: *“Yes, there was high customer demand; when we did some marketing, the response was quite motivating.”*

P10: *“Yes, there was general curiosity where we would showcase people would gather around; we were interviewed on a segment on national TV.”*

P9: *“Yes, there is high customer demand, but initially, the customer demand was not from within Zimbabwe but from abroad. The local market started to rise in 2022. Now, those domestic clients are people living in the diaspora who are investing back home.”*

Critical to sustainable entrepreneurship is the capacity to manage and exploit available resources and implement a solution related to sustainability. P4 utilised the obtainable biodegradable waste to produce renewable energy, *“Zimbabwe is an agri-economy, and we have realised that unutilised organic waste is abundant, which is what we need for biogas. We know they have problems with waste management, and we also know that the energy scarcity and those opportunities give significant reasons to go into this particular business.”* P7 mentioned that they recycle the waste from cotton processing, *“Everything exists in a context in an environment. It's a way of understanding what I do matters. If you dump something somewhere, it becomes someone's problem; instead of thinking of waste as waste, think of who can use it, e.g. we used to buy*

cotton husk, which is useful in mushroom farming.” He identified the available resource and made use of it in his project. Thus, opportunities exist objectively in the form of underutilised resources, various forms of structural change, and uneven knowledge distribution, all resulting in unobserved market inefficiencies.

Social capital significantly influences the discovery of a sustainable business opportunity and the company's capacity for internationalisation. P13's extensive family ties allowed her to enter the folia fertiliser business, which began in Lithuania. She said, *“I was looking for something from the development sector, and I was looking for something to do on my own, and some friends from Lithuania asked if I did not want to start selling these products.”* She leveraged her unique opportunity to open many branches in Zimbabwe.

Entrepreneurs can use their knowledge to leverage their business strategy towards an international objective, to sell their products internationally. P2 revealed that his first transactions were international. *“A couple of individuals appreciate such enterprise, especially those in the diaspora (overseas). That is where most of my customers are. These people are from Zimbabwe, so they will buy them online, and I will supply them to their relatives in Zimbabwe. They appreciate the way I farm...”*

I look forward to exporting both produce and skills to other nations.” Recognising that customers around the globe were purchasing P2 products and preferring them to those of competitors, P2 realised that this was crucial for the company's growth and a central market strategy.

Entrepreneurs check if society supports their projects. In the interview, 80% highlighted that their business is being supported by the community, as indicated by the responses below:

P5:” They are beginning to support and to realise the impact...they are beginning to appreciate that they should pay for the services, and we believe there is going to be massive growth if we keep on being efficient.”

P11: *"Yes, the society supports sustainable entrepreneurs, but when you are still starting, they are a bit sceptical towards new players. There are reservations about new technology; when you are new, you have to be more innovative, but once you get the projects going and can refer to them, it becomes easier to penetrate the market."*

P13: *"It is partly because it is sustainable. It has more to do with the farmers seeing the results. Zimbabwe still has a long way to go in using organic products."*

P1: *"I would love to believe yes, people support such, especially like a project like mine, everyone is amazed, and I would love to think I am arousing their curiosity, so I am no longer sure if it is curiosity or they are supporting it."*

Some interviews highlighted that they discovered their sustainable opportunity from abundant natural resources like P1, who stated, *"Weather is not a challenge; it is a huge advantage- it is an opportunity. In Zimbabwe, we are blessed with natural resources like sunlight, so instead of UV lights, we have natural light; we do not use cooling systems; we bury drums underground. Some interviewed SMMEs pointed out that they discover and pursue opportunities because they will be the innovation pioneers. Hence, there will be no stiff competition. P9 states that he was the first to do maggot farming in Zimbabwe: "When we started, no SMMEs were doing the same in Zimbabwe; there were none; I wasn't aware of any." P10 also gave the same sentiments regarding his manual hay baler, "To our knowledge, no, there were not. We got the impression that we were the only ones trying to pursue this idea and develop such a product." P11 further added that his market research revealed that some individuals were doing his biogas construction projects. Still, they were not registered and were not advertising on social media, so he saw a gap and pushed his sustainable business idea, "Yes, but when we did our market research, most were individuals and not registered companies. Mostly, their online presence was hard to find."*

As Zimbabwe is an agro-economy, many interviewees pointed out that vast agribusiness opportunities must be discovered. P13 said, *"Farming or agriculture is a*

big business in Zimbabwe. There's an opportunity for everyone."P4 added, *"We still have opportunities that have not yet been exploited...those are untapped opportunities in the market."* The SMMEs also see the potential to grow their business and even explore export markets. P2 highlighted, *"I see myself leading one of the big enterprises in regenerative agriculture, a kind of farming that is friendly to the environment, produces healthy food, and penetrates the export market. I look forward to exporting both produce and skills to other nations."* That growth potential gives them the power to pursue their businesses. Some entrepreneurs revealed that they have been exporting for some time now, P9: *"I was exporting for the more significant part of 2020, and in 2021, I was concentrating on exporting."* P7 's business is not as popular as other agribusinesses, but he sees potential in it; hence, he is pursuing it; he stated that *"Mushroom farming has potential. The propping up of mushroom farming compared to chickens where Irvines holds the market then becomes an opportunity for us to leverage the market."*

5.5.2 Creation theory

The most persuasive proponent of the creation perspective is Sarasvathy and Dew (2005:534), who see entrepreneurial chances as creatively emerging from people's and organisations' everyday activities. This corresponds to what was said by P5 during the interview, *"When we graduated, we used to do clean-up campaigns at college, so we thought, what can we do to make something meaningful to the cleaning that we do not as a business it was a social thing. So, we then said, let's do something meaningful. It was now more of adding value to waste and selling it to recyclers. It was more of our passion for the environment"*. Hence, he created sustainable opportunities through his daily activities. Knowledge and experience are inputs to the imagination but do not entirely limit or determine it. P8 used her educational qualification, a Master's in Agriculture, to start a sustainable agribusiness and offer consultancy services. She stated, *"I have always wanted to do farming. I am an agriculturalist. It is something which I grew up doing already."*

Starting with personal goals, limited resources, and an open view of the future, the opportunity's content, identity, and direction can emerge through implicit 'negotiations' with various stakeholders, such as suppliers, partners, and customers. The

opportunity then arises as a by-product of this social process, significantly reducing the need for prediction (Sarasvathy & Dew, 2005:535). This concurs with how P10 started his business; he researched the customers to see if they wanted the product before he developed it. P10 mentioned, "I got the idea after attending some farmers' functions to provide farming solutions and through interaction with them when one said you could make a machine that bales grass." Hence, he did not venture into his business unthinkingly without knowing if demand for his product would exist.

The creation view has been compared to the resource-based view of a company because it focuses on what can be accomplished with what is currently available. P1 indicated that his project did not yet need technology in Zimbabwe, so he used the available resources to cover the gap. He stated, *"Weather is not a challenge; it is a huge advantage- it is an opportunity. In Zimbabwe, we are blessed with natural resources like sunlight, so instead of UV lights, we have natural light; we do not use cooling systems; we bury drums underground."*

Entrepreneurs view fortuitous events and contingencies as opportunities to adapt and reconstruct their objectives as they progress. P2 used the lockdown period of the COVID-19 pandemic to create his sustainable venture. He stated, *"I began to develop a passion for other agricultural ventures like poultry, rabbits, and innovative agrarian techniques. But I intensified during COVID-19; we could not go out to buy food, so I started to think about sustainable farming and integrated, thus the circular economy. It is a complete ecosystem."* He managed to grow his sustainable agribusiness after COVID-19 after mastering the skills during lockdown.

Interactions with customers, collaborators, and financiers can significantly alter the created opportunity. P10 interacted with the customers and identified an opportunity. He stated, "I got the idea after attending some farmers' functions to provide farming solutions and through interaction with them when one said you could make a machine that bales grass." P1 interacted with financiers and made collaboration. He stated, *"Luckily, there was an NGO which was supporting youth projects, so when I mentioned hydroponics, they took me into their wings, and that is when I met guys like Hydro160 and Shift Organics, and I got some knowledge from them, and I had to add my things I had learnt from social media."* Entrepreneurship is not an individual endeavour but

an essential aspect of opportunity creation. When entrepreneurs leverage contingencies and act on their local environment, they enlist the support and contributions of various stakeholders.

Being the first to undertake something opens prospects for prospective successors, markets, standards, and business models (Sarasvathy & Dew, 2005:535). P2, P3, P9 and P10 indicated that they were pioneers of their projects in their area. P9 stated that he was the pioneer of maggot farming in Zimbabwe. He said, *“At first, it was a radical new idea that I brought in Mashonaland and Zimbabwe. We had to develop the innovation. We started by sensitising the government officials on the importance of maggot farming, from the higher level till we got to the local authority.”* P2 mentioned that he was the sole player in aquaponics, *“Yes, I have seen one or two doing what I am doing like the black soldier flies farming and hydroponics, but I have not yet found a competitor in aquaponics. Aquaponics is the integration of fish farming and horticulture in the same system. I am a sole player.”* P10 did market research and discovered no manual hay bailers in the market, and he decided to fill the gap. He said, *“We did research and found there was no sort of a commercial product of this type available in Zimbabwe. We consulted people from the agricultural mechanisation sector who confirmed that there was nothing like this and saw we could produce something like this.”* P3 also mentioned that he was the first to introduce hydroponics in his area, *“There were no other SMMEs who were doing the same. I was the first in Marondera.”*

In this sub-theme, entrepreneurs revealed that sustainable businesses came from their creativity, as the theory states. Nine interviewees emphasised that sustainable opportunity was recognised through their innovativeness.

P2: Some of the model's components were not new, but I had to change certain things to be a position to be different from the rest. Everyone was doing fish farming, but then I went further to do integrated fish farming and horticulture, with the fish waste being the fertiliser for the plants.

P1: I have innovated a hydroponics system that does not use electricity, which can also be used in a rural setup.

Being an innovator involves groundbreaking, and many challenges will be experienced along the way. Interviewees expressed the challenge they got from society and misunderstood their innovation. An extreme situation described by P2 is that it took him three years for people to start to appreciate his project. *“After the recent Corp 27, many people appreciate what I have been preaching for the past three years. NGOs invite me to set up sustainable techniques like vermicompost and hydroponic.”* P12 expressed the misconception about her two products, *“Microgreens are considered a luxury, and edible weeds are viewed as poverty-related, so getting clients is difficult.”*

During the interviews, it was highlighted that SMMEs are transferring technology from other countries and bringing it to Zimbabwe. P4 elaborated it by saying, *“We took advantage of technology transfer. Most of the things we are trying to do in Zimbabwe were being done in other countries, hence the idea of trying to see how we can implement those innovative ideas here in our country...but we must be creative to stay afloat.”* P5 also supported the technology transfer, *“We have some components of incremental and new innovation. Some from Europe we have adopted into our workspace through research and development and discoveries along the way from simple things we see daily.”* P3 added that they do not totally rely on imported technology; they continuously improve it, *“We use the Japanese Kaizen concept, continuous improvement.”*

Recognising and implementing a sustainable business idea requires capital. 75% of the interviewees mentioned that they started their business using savings.

P5: “Self-sweat capital that we used, then we also got a grant from some competition that we won and seeded into the business.”

P6: “Savings, we did not borrow from anywhere, then the profits from the business and the grant we got from a competition.”

P9: "First, it was through personal savings, using my bonus as a civil servant. I also got several grants. 75-80% of our finances came from grants. The funding helped us to finance the company."

P12: "I used to save the little money from family and friends and the little money I would get from selling small things. I also received a grant from the ILO after winning the Green Enterprise Innovation Challenge."

The quotes above show that family, friends, competition prizes and NGO grants significantly financed their businesses. They were also taught how to look for assistance, as stated by P6: *"Yes, we have been taught by Green Enterprise how to convince the financier...have you written an idea which is compelling?"* However, none of the participants mentioned that they were funded by government or financial institutions.

Some interview participants started and successfully ran their sustainable businesses because of their passion for learning new ideas, partnering with experts and finding business mentors. P16 emphasised her learning interests, *"I am also passionate about learning new ideas like solar dryers and making a greenhouse. Sometimes, you improvise to reduce costs."* P9 credited his mentor, *"What helped me a lot is to pay attention to mentorship and advice from seasoned entrepreneurs. The way I started my business model was the best I could... because the mentorship I got was outstanding."*

The interviewees also mentioned that their sustainability knowledge helped them identify business opportunities. P5 elaborated it by saying, *"There is plenty of opportunity for growth since this type of business is not yet so common to many, and if you look at global trends and the sustainability reports, few people understand these, so it is our added advantage to understand these sustainability issues."* The interviews also showed that SMMEs study the market and make their best products. P7 pointed out, *"I researched how best to present the product, so I had a product that sells itself. I also relinquished the other markets and kept only the most profitable ones."*

Since sustainable entrepreneurship concerns society, the interviews with SMMEs emphasised the importance of contacting the end user in the opportunity recognition and implementation process. P13 explained, *"Since last season, the business has been quite fair; the acceptance is now good and multi-referrals and positive feedback from the farmer."* The interviewees also highlighted that they managed to pursue their sustainable businesses because they were operating legally and abiding by the laws.

5.6 SMME'S SUSTAINABLE ENTREPRENEURSHIP BALANCE

This theme aimed to find how the interviewees embed economic, social and environmental sustainability dimensions. The various theories and definitions of sustainable entrepreneurship have incorporated the triple bottom line (TBL) as a crucial component, arguing that sustainable entrepreneurship seeks to implement a balanced TBL. This theme will examine the extent to which a TBL balance is prevalent in the SMMEs of this research, focusing on both internal practises and market impact. This is the critical distinction between sustainable entrepreneurs and conventional entrepreneurs. The traditional entrepreneurs' objective is to profit without paying attention to the environment and society. The interviewees were asked, "How would you describe the company's sustainable entrepreneurship balance?" Most participants gave a three-dimensional answer to cover the three facets of sustainability. The responses were categorised into three sub-themes:

- Profit with two codes, mentioned 11 times.
- People with six codes are mentioned 18 times.
- Planet with seven codes, said 29 times.

The analysis of the frequency of the codes for the respective sub-themes shows that the planet and people had almost equal codes. Still, the participants indicated that their environmental balance was almost twice people's. The irregular distribution of frequencies suggests that a sustainable entrepreneur will concentrate their sustainability efforts on one area. This view is consistent with Hockerts and Wüstenhagen's (2010:485) assertion that such entrepreneurs will devote all their resources and focus to optimising a single environmental or social issue. This is due to the limited resources SMMEs encounter in their early stages of business. Even

though most interviewees could not achieve a balance between people, planet, and profit, the researcher contends that as SMMEs develop, progress, and become more stable, they shift their focus to achieving a more excellent sustainability balance.

Figure 5.6: Matrix for theme 3-SMME's sustainable entrepreneurship balance

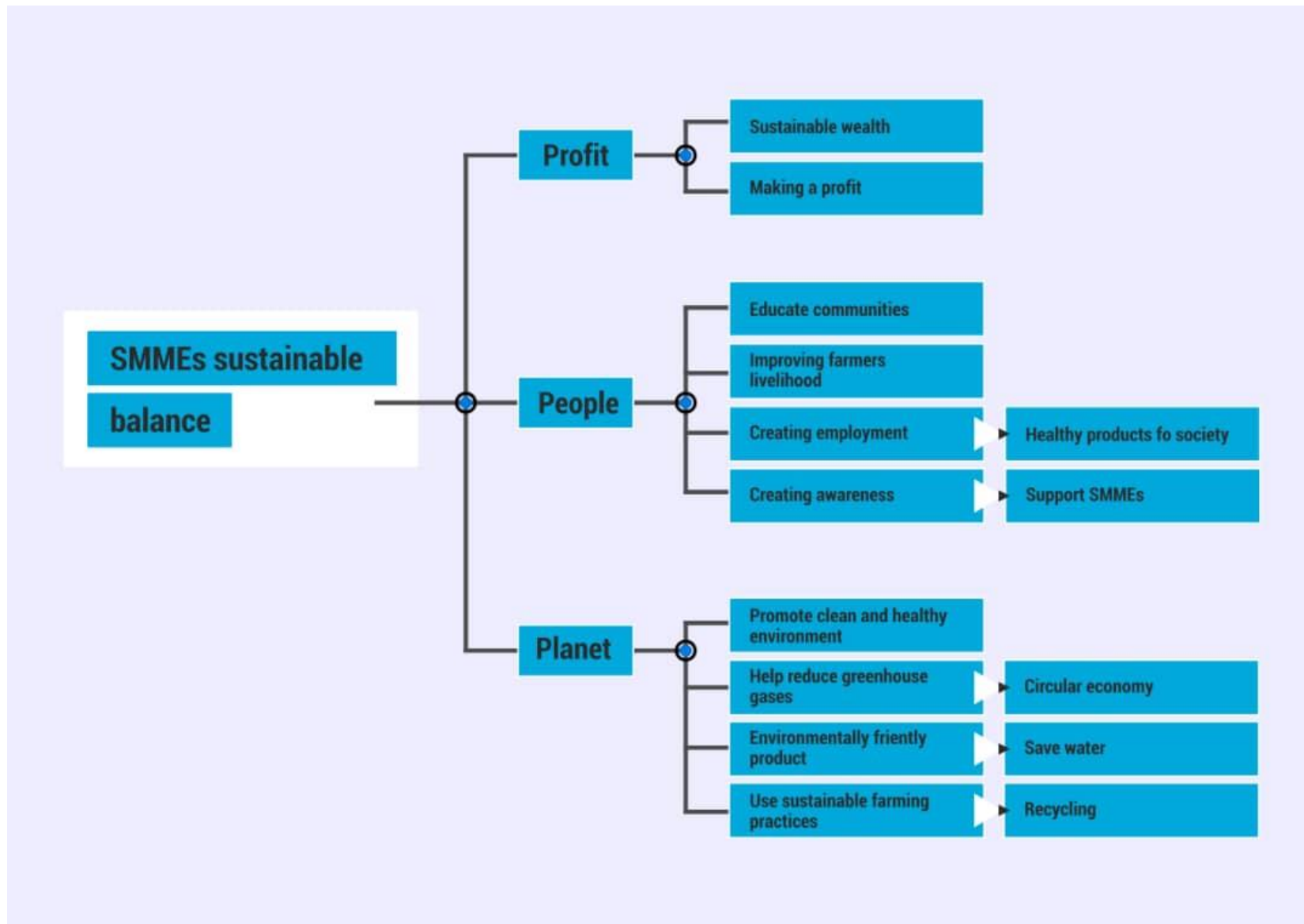
Theme 3: SMME's sustainable entrepreneurship balance								Participants									
Sub-theme	Codes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16
Profit	Making a profit	x	x		x				x	x		x	x	x		x	
	Sustainable wealth							x							x		
People	Educate communities	x		x			x										
	Creating awareness		x				x					x					
	Creating employment							x				x					x
	Support other SMMEs							x			x		x				
	Improving farmers' livelihood											x			x		x
	Healthy products for society	x	x										x				
Planet	Use sustainable farming practices			x								x					x
	Environmentally friendly product		x							x		x		x			
	Recycling	x			x			x		x	x					x	x
	Save water	x						x					x				x
	Help reduce greenhouse gases				x		x			x	x						
	Promote clean and health environment				x	x				x		x				x	
	Circular economy											x				x	

Table 5.5: SMME's sustainable entrepreneurship balance

Theme	Sub-theme	Codes and Quotations from participants
SMME's sustainable entrepreneurship balance	Economic	Economically sustainable: P14: <i>"The product is an economically sustainable product for ordinary small-scale farmers making a positive contribution to improving their livelihoods as they can produce at a relatively low cost."</i> Profitable: P12: <i>"We are making a profit from our business."</i> Bulk purchase: P10: <i>"We try to source most of our stuff from entrepreneurs like us, such as Magaba in Highfields. We procure or order in bulk, which lowers the cost."</i> Profitable: P9: <i>"We are not only targeting cash from selling maggots for stock feed. We are environmentally friendly."</i> Financial benefits: P4: <i>"Apart from aiming at deriving financial benefits, we are also doing a lot in helping the environment."</i>
	Social	Provide healthy food: P12: <i>"Providing healthy products for the society."</i> Renewable energy and employment creation: P11: <i>"After the system is installed, it offers the client the waste management system and deals with the waste problem. They also get biogas as a renewable resource. We employ unskilled labour, thereby providing employment."</i> Reduce pollution: P9: <i>"We keep our environment clean and safe for generations. When we recycle this organic waste, we do away with filthy flies and odorous smells, dealing away with landfills. Our company can recycle 500kg of degradable waste daily, which is a significant impact."</i> Sustainable livelihood: P7: <i>"I am working with six farmers producing 6 tonnes of mushrooms a month. They will also employ 2 or 3 people and cascade like that."</i> Creating awareness: P6: <i>"We raise awareness in the various communities at different platforms and gatherings."</i>
	Environmental	Use sustainable farming practice: P16: <i>"We use modern sustainable farming practices that reduce negative environmental effects. We use greenhouse and drip irrigation, meaning we are using less water, therefore, taking care of the environment."</i>

		Fight climate change: P14: <i>"The product is environmentally friendly, contributing to the fight against climate change."</i> Saves water: P12: <i>"We use hydroponics, which saves water and the environment."</i> No deforestation: P11: <i>"There is no cutting down of trees, and the effluent produced is an excellent organic fertiliser for their crops."</i> Recycling: P10: <i>"Regarding disposal, where our workshop is located, someone runs carpentry. The baler structure is made out of wood from there."</i> Fight Climate change: P9: <i>"We are environmentally friendly in the sense that we are reducing the number of greenhouse gases that are emitted into the environment. As far as we feed our larvae, we recycle biodegradable waste, which produces many greenhouse gases that affect the ozone layer and trigger climate change when left to decay and decompose."</i> Provide cheaper stock feed: P7: <i>"If we look at the environment, the alternative is that the element we use can be used for stock feed and is high in protein. We can produce a protein in a shorter cycle using less water and carbon dioxide; the conversation is faster and fat-free."</i> Afforestation: P6: <i>"We plant trees as beekeepers, prevent, protect and control fires and educate on the same."</i>

Figure 5.7 Network diagram for SMME's sustainable entrepreneurship balance



5.6.1 Economic

All of the respondents indicated that their businesses were profitable. Even though they did not elucidate extensively, they acknowledged that, except for one social organisation, they are for-profit entities. For the company to succeed, it must have a stable financial foundation, enabling it to expand and impact sustainability.

P2 desires his business to be successful and to expand. He understood, however, that it would not happen overnight and would require perseverance, determination, and a passion for the undertaking. He stated, *"We are driven by profit; it makes us go to the next level. In the first years, we were not making too much money, and if I was not passionate about what we were doing, we could have left it long back, and I would not be where I am today. I was doing experiments so that I could come up with a model that works."* During the interview, it became clear that he strongly desires to succeed and enjoys his work.

P9 saw an opportunity to financially advantage himself while also assisting the environment and people. " *We are not only targeting cash from selling maggots for stock feed. We are environmentally friendly in the sense that we are reducing the number of greenhouse gases that are emitted into the environment.*" Regarding profit-making, the other business owners responded similarly. Therefore, it is about sustainability and making a profit, preserving future endeavours' security, and ensuring the business's longevity.

Without the perspective of operating a profitable business, the goal of resolving a sustainability-related issue is rendered ineffective, as the entrepreneur's solution becomes unsustainable. Therefore, this analysis suggests that a sustainable entrepreneur values the economic dimension, as it ensures the ability to realise individual motivations to address a social and environmental sustainability-related problem. In other words, although the personal reason of a sustainable entrepreneur is to address a sustainability-related problem, the universal objective is to generate a profit, ensuring the business's sustainability.

5.6.2 Social

The analysis demonstrates that the social dimension is the least developed lever of the TBL based on how the social dimension resonates among the interviewees. Several interviewees exhibit and implement social consciousness, but it is not their primary concern. As these companies are just getting started, it has been observed that they prioritise their primary strategy and product development, which are economic and environmental concerns. As P6 is the longest in the sustainable business journey, it is more evident that they have shifted their focus to incorporating various social aspects and benefits into their business objectives as they continue to develop and expand. P6 stated, " *Getting partnerships, especially with women who have been marginalised, we have partnered with three groups in Makoni Rural District and a UK organisation called Bees for Development.*" Since he adopted a "Participatory approach by involving the people through public consultations," the community has also become a part of his decision-making committee. It can be deduced that the direct social impact of SMMEs during their startup phase is relatively feeble. Still, as the companies grow and become profitable, they balance the TBL more evenly.

P15 is a company that collects recyclable refuse. As a non-profit organisation, P15 strongly emphasises the social aspect, benefiting families and communities in the peri-urban area, with an indirect benefit to the environment that may not be readily apparent. The innovative business model enables individuals in her community to start their businesses, generating a sustainable and self-fulfilling income through waste collection. She stated, " *Farmers are benefiting from these soil enhancers. For cattle and goats, livestock was now feeding from the dumpsites, so we are clearing those dumpsites to help with waste management. We give a livelihood to the waste collectors.*" Thus empowering the community, particularly the most vulnerable members, preserving their source of wealth and prestige (cattle), and creating employment. This is unambiguous evidence of a social benefit, both in the short- and long term. When asked to define the company's sustainable entrepreneurship balance, she emphasised that she is a social entrepreneur. " *We are a social enterprise that eliminates waste by using the circular economy to reduce, recycle, and reuse,*" as well as making a profit. The non-profit status does not preclude concern for the

financial aspect. We can conclude that P15 is a sustainable entrepreneur based on this equilibrium of all three dimensions of sustainability.

The social value was mainly described by the training being done in the community, provision of healthy foods, improved livelihoods for farmers and employment creation. P2 and P12 indicated that they are concerned about the health status of their communities. P2 pointed out, *"We value people, so we are concerned with what gets into their bodies and health."* P12 added, *"We are providing health products for society."* For health reasons, many people are shifting to organic food; hence, these entrepreneurs are fulfilling the changing customer preferences.

P3 and P6 emphasised educating the community about smart agricultural technologies. P3 mentioned, *"I am training people in my community in innovative agricultural technologies."* This empowers the community to increase farm productivity and end hunger and poverty. Going down to the grassroots increases the adoption of innovative strategies. This is in line with the conduct of P6, *"We raise awareness in the various communities at different platforms and gatherings."* The information will reach a bigger audience and will leave no one behind.

The interviewed entrepreneurs showed that they positively impact their societies through employment creation, as stated by P7: *"I am working with six farmers producing 6 tonnes of mushrooms a month. They will also employ 2 or 3 people and will cascade like that. We are targeting wealth creation and mechanisation, and it is sustainable."* P4 mention a different dimension in which he is helping his community, *"We are helping businesses, individuals, and institutions to manage their waste and also recover other products from waste, which means, in a way, we are helping to fight pollution."* The findings show that the community is benefiting differently from sustainable entrepreneurs.

Therefore, one could contend that the TBL's three dimensions are interconnected. The environmental objective of SMMEs indirectly benefits society by making the world a better place to live by reducing greenhouse gases and pollution, educating the public, providing nutritious food, and creating jobs. Throughout the entire procedure, they will generate profits to sustain the business. Thus, all three objectives will be met.

5.6.3 Environmental

The environmental value creation was the most elaborated sustainable entrepreneurship opportunity outcome. The interviewees showed they relate sustainable entrepreneurship to protecting the environment, mitigating climate change, sparing natural resources, and recycling. The environmental value was commonly described through a firm's products or services. P1, P2, P3 and P12 adopted innovative climate technology, saving the environment, soil and water. P2 stated, *"For starters, this type of business doesn't take much space, so there is no tree cutting, no soil degradation, changing the soil and tilling and all that. We are reusing the water and running away from synthetic fertilisers. We use fish waste (aquaponics) as fertiliser to power our system; I believe we are climate smart."* P2 has a motto that they are stewards of nature, so all they do in their business aims to protect the environment: *"We are not impacting the environment the wrong way; we are stewards of creation; that's our motto. As much as we are doing business, we are stewards of the environment. We are mitigating climate change by creating awareness. There is a lot of carbon in the ozone layer, but when plants grow, they will take a lot of carbon, more so if grown sustainably."* His regenerative farming reduces the production of greenhouse gases, which causes climate change. P4, P5, P11 and P15 recycle waste to produce biogas, giving customers access to renewable and sustainable energy. P14 and P13 protect the soil through their organic fertilisers.

P9 narrated his unique contribution towards looking after the planet: *"We are not only targeting cash from selling maggots for stock feed. We are environmentally friendly in the sense that we are reducing the number of greenhouse gases that are emitted into the environment. As far as we feed our larvae, we recycle biodegradable waste, which produces many greenhouse gases that affect the ozone layer and trigger climate change when left to decay and decompose. We are getting our environment clean and safe for generations to come. When we recycle this organic waste, we do away with filthy flies and odorous smells, dealing away with landfills. Our company can recycle 500kg of degradable waste daily, which is a significant impact. However, many people do not understand his project and do not appreciate his contribution to the environment, so they give him names. He said, "There is a misconception like the new project, which involves looking after flies; people will give you many names."*

As a result of the nature of their products, we observed during the analysis that renewable companies emphasize environmental impact. Moreover, two resounding aspects emerged: empowering people to produce their renewable energy and solving a waste management problem - a solution-oriented strategy. Both P4 and P11 were highly motivated to enable people to generate pure electricity. P11 stated, "*We make profits, and after the system is installed, it offers the client the waste management system and deals with the waste problem. They also get biogas as a renewable resource; trees are not cut down, and the effluent produced is an excellent organic fertiliser for their crops.*" P5 seeks to provide a sustainable waste management solution for similar reasons. The primary objective of these biogas companies is to generate a profit, followed by an impact on the environment; their social impact is less evident and is considered implicit. Second, it enables individuals with limited or no access to electricity to acquire a pure and dependable energy source that can be used for cooking, lighting, and powering electrical appliances. Thirdly, it eliminates the customary practice of cutting down trees for firewood. Utilising firewood is neither sustainable nor environmentally beneficial. The objective of biogas entrepreneurs is to disrupt this conventional practice, as they provide renewable energy with social and environmental benefits. Their primary purpose is to solve environmental issues by reducing the use of fossil fuels, pollution, and greenhouse gas emissions. This will indirectly encourage these companies to make the world a better place to live, thereby ensuring the long-term viability of our planet.

5.7 BENEFITS OF SUSTAINABLE ENTREPRENEURSHIP

This theme seeks to determine whether sustainable entrepreneurs are aware of their contribution to a sustainable economy. By adhering to sustainability principles, businesses assume responsibility for their impact on society and the environment.

A total of 72 codes were identified in the interview. These were amalgamated into 21 codes and later grouped into three sub-themes:

- People with six codes and mentioned 27 times.
- Planet with nine codes mentioned 43 times.

- Profit with six codes mentioned 12 times.

The planet (environmental) code always has many frequencies compared to people and profit. SMMEs align sustainability with the environment, and the code mentioned by most participants is the reduction of greenhouse gases. Under social, the highest code was the increase in food security. Some interviewees said that they were recognised by the ministry for their outstanding innovations, and awards were granted. Figure 5.8 below shows a matrix showing the sub-themes, their codes and the participants who mentioned them.

Figure 5.8: Matrix for benefits of sustainable entrepreneurship

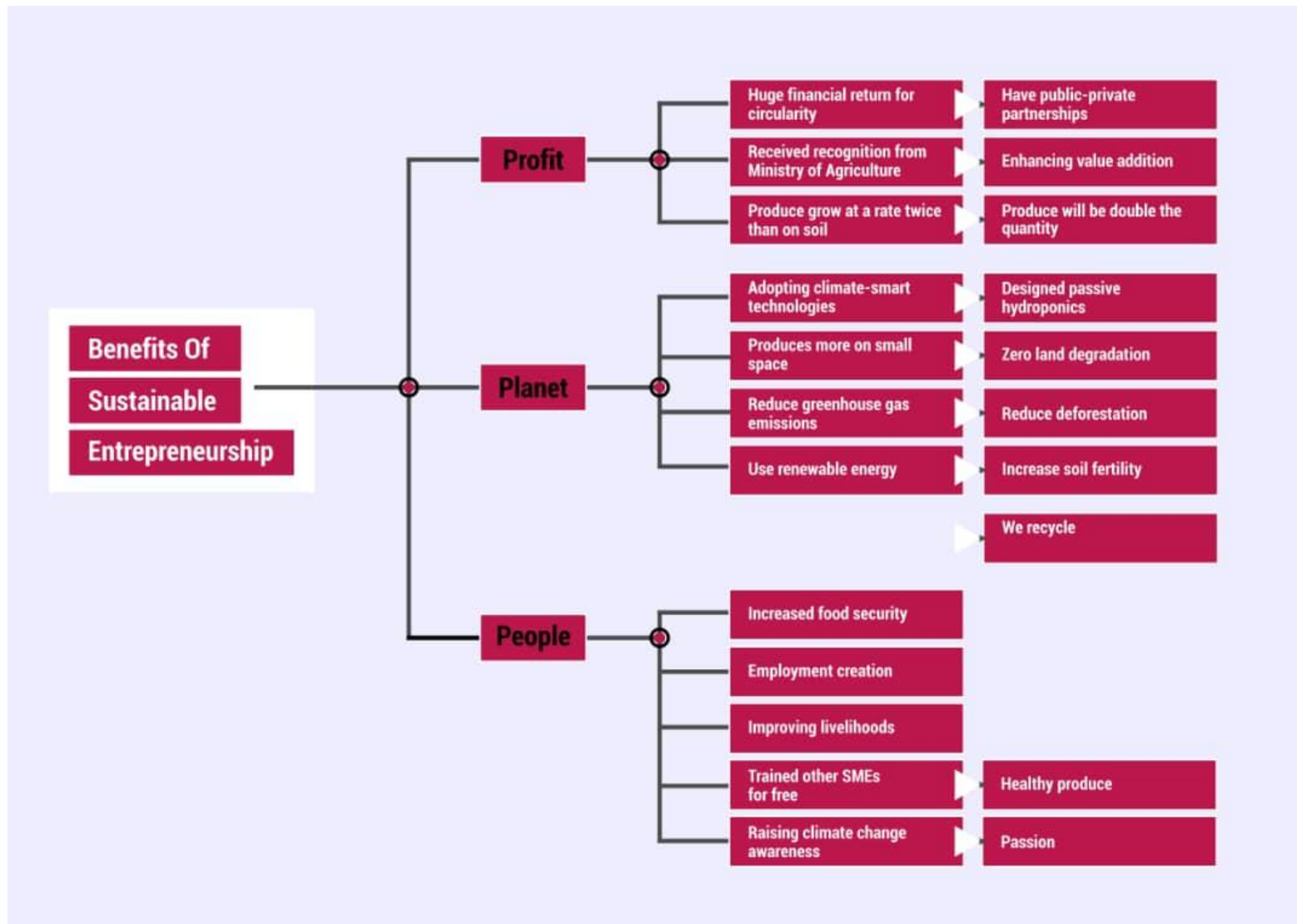
Theme 4: Benefits of sustainable entrepreneurship		Participants															
Sub-themes	Codes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16
People	Healthy produce	x	x										x	x			
	Employment creation							x								x	x
	Increased food security	x	x			x		x		x				x	x		
	Improving livelihoods	x													x	x	x
	Trained other SMMEs	x						x			x		x				
	Raising climate change awareness	x	x									x	x				x
Planet	Zero land degradation	x	x										x				
	Designed passive hydroponics		x										x				
	Produces more on small space	x	x														
	Increase soil fertility				x	x								x		x	
	Reduce greenhouse gas emissions	x	x		x			x		x	x	x			x	x	
	Use renewable energy							x									x
	Adopting climate-smart technologies	x	x	x	x	x								x			x
	We recycle	x	x		x	x		x				x				x	x
Profit	Reduce deforestation	x	x		x	x	x					x					
	Enhancing value addition				x												x
	Produce will be double the quantity	x	x														
	Produce grow at a rate twice than on soil	x	x														
	Received recognition from Ministry of Agriculture					x			x	x							
	Huge financial returns					x											
	Have public-private partnerships						x	x									

Table 5.6: Benefits of sustainable entrepreneurship

Themes	Sub-themes	Codes and Quotations from participants
Benefits of sustainable entrepreneurship	Economic	Quality produce: P1: <i>“Surely hydroponics is the future of farming, in the sense that there is zero land degradation, you recycle water, the produce is of better quality than the ground, and it grows twice the quantity and twice the rate.”</i> The substantial financial return for circularity: P5: <i>“Economically, there are huge returns if one man's trash becomes someone's raw material. It's going round and round; that is a circularity to me: sustainability.”</i> Increased productivity: P14: <i>“We are providing the small-scale farmers with an important farming input, which is fertiliser, which is a positive contribution in improving their production levels, and through the supply of the product, we are contributing to the improvement of agricultural productivity of the country.”</i> Public-Private Partnership: P7: <i>“I am engaging Universities for seed production. I have public-private partnerships.”</i>
	Social	Increased food security: P1: <i>“In this type of farming, we utilise small spaces and harvesting volumes. You find even in a back yard you harvest a lot to support your family.”</i> Healthy food: P2: <i>“Farming sustainably benefits people because they are eating healthy because nowadays a lot of people are eating food, but they are still hungry because what they are eating does not have any nutrition.”</i> Pieces of training: P7 <i>“I am engaging Universities for seed production. I have public-private partnerships. I want to create a source of reliable seeds. I am training farmers.”</i> Little soya beans can be reserved for human consumption. P9: <i>“The effects of climate change cause agricultural output to deplete, especially soya beans, so currently, we are facing a shortage. We are adapting by introducing an alternative source of protein for stock feed formulation so that the little soya beans Zimbabwe can produce can be reserved towards human consumption whilst insects will be channelled towards feeding our livestock.”</i>

		Inspire other SMMEs: P12: <i>We have managed to inspire other people, we have taught others, and we did not make them pay, and others are already advertising through social media. We are producing vegetables hydroponically without the use of electricity. We also use our Facebook page to discuss food and nutrition and inform people about healthy options.</i> Improve livelihoods: P16: <i>"The support for the out-growers who can send their children to school has improved people's livelihoods, especially in the rural areas and employment creation."</i>
	Environmental	Protect the soil: P1: <i>"This type of business doesn't take much space, so there is no tree cutting, no soil degradation, changing the soil and tilling and all that. We are reusing the water and running away from synthetic fertilisers. We use fish waste (aquaponics) as fertiliser to power our system; I believe we are climate smart."</i> Natural Pesticides: P2: <i>"Like you can grow lettuce with a bezel; the bezel has a scent that repels aphids, so instead of using other harmful chemicals that are harmful to your body, they are also toxic to many insects."</i> Reduce Deforestation P4 <i>"With our service, we are also assisting people in reducing deforestation because when they use biogas, they will reduce the use of firewood for cooking."</i> Saves water: P12: <i>"We are taking the lead in preventing land degradation. We are using hydroponics to grow our vegetables and reduce water usage vertically. We are designing passive hydroponic kits that do not need electricity energy or pumps."</i>

Figure 5.9: Network diagram for benefits of sustainable entrepreneurship



5.7.1 Economic benefits

The economic contribution of sustainability is associated with the purpose of a business to generate profits, maintain its viability, and positively impact the financial status of its stakeholders. This aligns with the objective of P9, which is to reduce the cost of livestock feed production to increase the profit margin for producers, *“I was trying to solve problems faced by smallholder farmers, especially in stock feed, because most of their production cost lies in the stock feed, so this is an alternative source of stock feed for SMMEs in agribusiness.” Hence, if the farmers adopt his alternative feed, they will increase their profits.*

According to Azapagic (2003:305), the economic dimension of sustainability plays a central position in the business context of sustainable development. It enhances community well-being by generating profits and employing community members. In this respect, the economic dimension consists of two components: 1) microeconomic issues relating to the financial performance of the business, such as sales or turnover, and 2) macroeconomic issues relating to the business's contribution to national and international economies, such as employment.

For microeconomic benefits, P2, P5 and P9 pointed out that adopting sustainable entrepreneurship reduces costs and increases profits. P5 stated, “Economically, there are huge returns if one man's trash becomes someone's raw material. It's going round and round; that is a circularity to me: sustainability.” P1 shared his experience after adopting sustainable farming methods; his produce doubled, growing at a rate twice that of conventional farming. Ultimately, his income increased significantly. *“Many people whom I meet are not bold enough to move out of the old to take up the new; surely hydroponics is the future of farming; we recycle water, the produce is of better quality compared to the ground, and it grows twice the quantity and twice the rate, so I think people should change, should be open enough to new possibilities, instead of sticking to what they know and what they used to do.”*

The interviewed SMMEs acknowledged that they contribute to the economic development of their communities, agricultural sector and the nation, which constitutes the macro-economic benefits of sustainable entrepreneurship. P5 mentioned that his

business reduces pressure for electricity on the national grid, which is already overwhelmed. They provide cheaper and sustainable renewable energy, reducing energy shortage in the country. He stated, *“We construct biogas digesters for individuals, institutions, and organisations. We build systems which they can use to treat organic waste and recover biogas. We install systems that are required to upgrade biogas into other forms of fuel, for example, bio-methane, if people want the biogas converted into electricity.”* P5 explained how his business is of national benefit and their contribution to creating employment, *“Looking at the benefits, health and financial issues, the community upkeep, and how you absorb the youth in the community making sure they are kept busy is sustainability. These are the future, so if they are groomed, that's sustainability; the recovery of the material is sustainability as their future generation will find the environment suitable for their livelihoods.”*

5.7.2 Social benefits

Social sustainability requires organisations to satisfy their stakeholders' diverse requirements and expectations. Entrepreneurs committed to sustainability should accept their broader responsibilities towards the community and stakeholders to meet their requirements and strengthen their commitments. They seek to reduce community inequality, improve the quality of life, and foster better relationships with the firms' stakeholders (Halme *et al.*, 2012:748).

Additionally, it considers the health and security of society. According to Azapagic (2003:306), the social dimension of sustainable development in the context of business is divided into three sections:

- Social welfare provides a healthful, secure living and working environment, particularly education. P9 tackles the part of providing education to the community about his sustainable product; he stated, *“I attend various farmers' forums and on social media, where we share with farmers and farm organisations the good aspect of a fly so that they get basic information on the feed that we produce so that they can adopt the feed quickly without any hesitation.”* P2 gave a good description of how society benefits from sustainable farming: *“Farming sustainably benefits people because they are eating healthy*

because nowadays a lot of people are eating food, but they are still hungry because what they are eating does not have any nutrition.”

- The community has access to equal opportunities without discrimination. This aligns with P16’s objective of empowering the marginalised; she said, *“I have always been passionate about business and employment creation. The idea also came when I saw a lot of vendors in high-density areas, so I wanted to create employment for the marginalised groups, especially women and do value addition.”*
- Moral considerations regarding the observance of human rights (such as the non-exploitation of young or immigrant employees). In the study, none of the participants indicated that they had child labour; even during the site visit, the researcher did not see any underage labourers.

The interviews also showed that society greatly benefits if SMMEs adopt sustainable entrepreneurship. Sustainable entrepreneurs can support their families and community; they will provide healthy food, increase food security and improve society's lifestyle by introducing new technologies like switching from firewood to biogas and solar. Interview participants also indicated that they are training other SMMEs in new technologies and collaborating with universities for knowledge transfer.

5.7.3 Environmental benefits

Benn and Bolton (2011:8) state that the environmental benefits of sustainability are contingent on how a company manages its operations to minimise its impact on the environment, preserve the natural environment, and better the health of the biosphere. This aspect of sustainability in a business context is demonstrated in various ways; some businesses practise waste reduction and recycling (P4, P5, P9, P11, P15). Others use environmentally friendly technologies and materials (P13 and P14 use organic fertiliser instead of synthetic, which damages the soil).

The majority of the interviewee emphasised their contribution to the protection of the environment. Reducing greenhouse gas emissions was the most pointed-out benefit, with more than 50% of the participants highlighting it. The interviews showed that sustainable entrepreneurs are protecting the environment through the use of natural

pesticides (P2), adoption of smart climate agriculture (P3, P2, P1 and P12), promoting circular economy (P4), planting trees (P6 and P11), using renewable energy (P7 and P16), recycling (P7, P4, P5, P1 and P15) and reduced land degradation (P1, P2, P3, P12, P13 and P16). P1 gave an account of how his business benefits the environment: “Surely hydroponics is the future of farming, in the sense that there is zero land degradation, you recycle water, the product is of better quality compared to the ground, and it grows twice the quantity and twice the rate so I think people should change.” P4 added, “With our service, we are also assisting people in reducing deforestation because when they use biogas, they will reduce the use of firewood for cooking. We are also helping the country to cope with climate change.”

Businesses should monitor and control the environmental impacts of their activities to cause less harm to the natural environment (Roxas & Chadee, 2012:6). A company should invest in activities such as reducing water consumption (P1, P2, P3, P8 and P12), purchasing green products (P6, P7, P8, P12 and P16), using less traditional fuels (P4 and P11), and minimising the negative impact on animal species and natural habitats (P1, P2 and P6) to be environmentally sustainable. By investing in environmentally responsible practices, businesses gain a competitive advantage that results in enhanced operational performance. In addition, there is a growing social awareness of the importance of environmental preservation, which requires businesses to adapt their operations to manage the environment and natural resources efficiently. Suppose enterprises want to be competitive in the business environment in which they operate. In that case, they must take responsibility for their practises and work to reduce their environmental impacts (Wagner, 2009).

5.8 STRATEGIES THAT ENCOURAGE THE ADOPTION OF SUSTAINABLE ENTREPRENEURSHIP

While the efforts of various governments, particularly in developing nations, to promote entrepreneurship are commendable, they should go beyond encouraging business startups in which people seek benefits only for themselves or unwittingly operate in a destructive manner that creates imbalances. Entrepreneurs should be encouraged to consider sustainable entrepreneurship, which necessitates the application of entrepreneurial values and methods to resolve sustainability issues. That is, the

application of imagination to complex problems by conceiving, prototyping, and developing solutions that provide environmental, social, and economic value (Abereijo, 2016:3). Consequently, the objective of this theme is to identify the strategies that can encourage SMMEs to embrace sustainable entrepreneurship.

Figure 5.10 shows the matrix of the strategies the interviewed sustainable entrepreneurs suggested. It illustrates six sub-themes and their codes.

- Financial with three codes, cited five times.
- Policies with nine codes are mentioned 24 times.
- Partnership with four codes cited six times.
- Training and awareness with eight codes cited 13 times.

The matrix shows that most strategies are aligned with policy issues, training, and awareness. The method with the highest frequency is giving incentives to sustainable entrepreneurs and having conducive and supportive policies.

Figure 5.10: Matrix for strategies that encourage the adoption of sustainable entrepreneurship

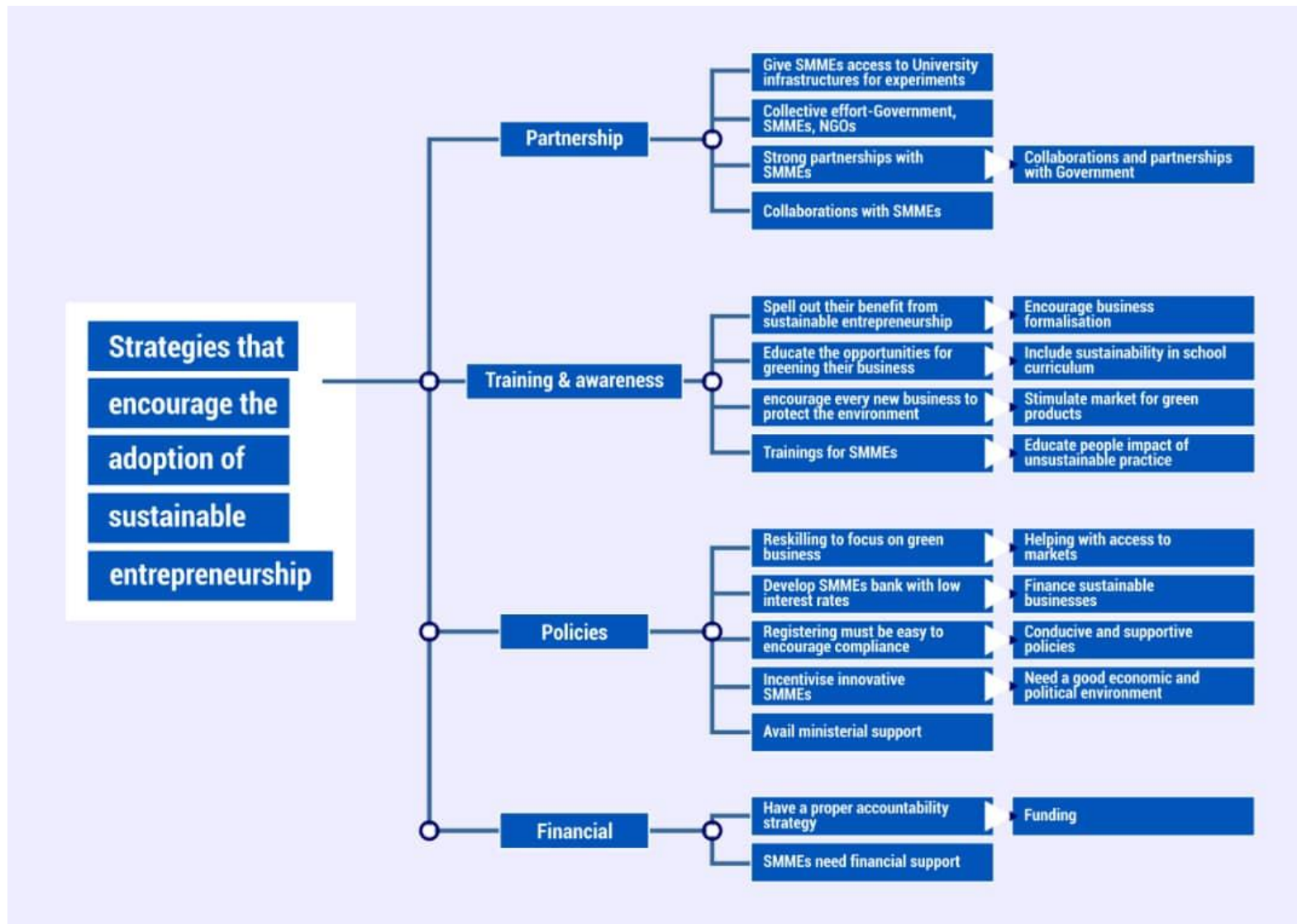
Theme 5: Strategies that encourage the adoption of sustainable entrepreneurship		Participants															
Sub-theme	Codes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16
Financial	Funding	x												x			
	SMMEs need financial support									x							x
	Have a proper accountability strategy															x	
Policies	Develop SMMEs bank with low interest rates					x								x			
	Need a good economic and political environment			x						x							
	Avail ministerial support											x				x	
	Conducive and supportive policies		x	x	x									x	x		
	Finance sustainable businesses					x				x			x				
	Reskilling to focus on green business					x											
	Incentivise innovative SMMEs		x							x		x		x			
	Helping with access to markets												x		x		
	Registering must be easy to encourage compliance							x			x	x					
	Collaborations and partnerships with government		x							x						x	
Partnership	Strong partnerships with SMMEs									x							
	Collective effort-Government, SMMEs, NGOs																x
	Give SMMEs access to University infrastructures for experiments																x
	Educate people impact of unsustainable practice				x												
Training & awareness	Educate the opportunities for greening their business				x			x									
	Stimulate market for green products				x												
	Include sustainability in school curriculum					x											
	Spell out their benefit from sustainable entrepreneurship				x			x									
	More training on sustainable entrepreneurship							x									
	Encourage every new business to protect the environment					x											
	Trainings for SMMEs				x						x	x					x

Table 5.7: Strategies that encourage the adoption of sustainable entrepreneurship

Theme	Sub-themes	Codes and Quotations from participants
Strategies that encourage the adoption of sustainable entrepreneurship	Policies	Ministerial support: P15: <i>“The Ministry of Lands has to play a significant role in getting land for SMMEs. The SMES must take part in government programmes so that they grow.”</i> Supportive policies: P13: <i>“More encouragement at the policy level, more policies for organic farming or integrated farming and even incentives for those adopting organic farming.”</i> Government department for SMMEs: P11: <i>“Setting up a branch mandated with identifying startup ideas, nurturing ideas which may lead to the creation of big organisations, developing the strategy of buying in some of the start-ups.”</i> Make registration easy: P11: <i>“Registering companies should be more straightforward to get the compliance certificate.”</i> Conducive policies: P4: <i>“Review the policy framework; our policies must be conducive to sustainable entrepreneurship. The government needs to put policies that enforce and support sustainable entrepreneurship.”</i>
	Partnerships	Collaborations: P16: <i>“By making collective efforts, coming together of Government, businesses, NGOs and SMMEs. Access to infrastructure at tertiary institutions would go a long way in supporting SMEs.”</i> Government and SMMEs partnerships: P2: <i>“There should be collaborations and partnerships between the governments with these sustainable enterprises to spread these skills to many farmers.”</i>
	Financial	Funding: P13: <i>“There must be start-up funding for the younger entrepreneurs. There should be exemptions like no paying for the first year, like cushioning to encourage people to start something for themselves.”</i> Funding sustainable ideas: P9: <i>“The loan repayment period should be flexible; remember, some of the innovations by SMMEs will be at an ideating stage. Hence, it isn’t easy to go to a bank and</i>

		<i>say I have this idea, which requires 5000 USD to take off. There is no financial institution in Zimbabwe which can finance an idea."</i> Incentivise sustainable SMMEs: P9: <i>"Incentivise people who come up with innovative ways in the agricultural sector to give them waiver in taxes."</i> Bank with low-interest rates: P6: <i>"Develop SMMEs bank with low-interest rates."</i>
	Training and Awareness	Education: P11: <i>"The issue of culture, if we look at sustainable solutions such as solar energy, there is a need for farmer education to do a cost-benefit analysis."</i> Spelt of the benefit of sustainability: P7: <i>"As more is pitched on formalising the green economy, many SMEs will adopt it. The intersection of how the entrepreneur benefits and what's in it for them should be spelt out. More must be done in training on entrepreneurship."</i> Increase sustainability awareness: P6: <i>"One important thing is awareness done in various ways workshops, media, radio, conferences, broadcast, those are the ways to capture a lot of people and also in schools catching them young they will be aware at an early age."</i> Reskilling: P5: <i>"We need to relook into reskilling, focusing on this new business area we are discussing."</i> Training: P4: <i>"Training is one of the most critical strategies. Many people might not know what it fully entails when you say sustainable entrepreneurship." Suppose people know the full implications of their actions on the environment and the opportunities for greening their business. In that case, they will also adopt sustainable entrepreneurship.</i> Sustainability in the curriculum: P10: <i>"There should be some education and training. There should be an ongoing training program that will reach out to entrepreneurs, making them aware of what is happening. I think that will be a good starting point. Our educational curriculum should include sustainability; young children should know they should look after the environment. Sustainability issues should find their way to the everyday conversation in Zimbabwe; whether it is your friend, brother, or work colleague, there should be some sense of what we are doing for the environment."</i>

Figure 5.11: Network diagram for strategies that encourage the adoption of sustainable entrepreneurship



This theme aimed to find strategies SMMEs can suggest to encourage other SMMEs to adopt sustainable entrepreneurship. Many methods were mentioned, and most were aligned with policies, training and awareness, partnership and finances. P2 gave a holistic response: *"There should be policies to support and incentives that promote people who are farming responsively. There should also be organic produce markets to get many SMMEs on board. So, the government should put policies in place that promote sustainable enterprises. There should be collaborations and partnerships between governments and sustainable enterprises to spread these skills to many farmers."* P13 also added on policies, saying, *"More encouragement at the policy level, more policies for organic farming or integrated farming and even incentives for those adopting organic farming."*

Emphasis was also made on training SMMEs so that they appreciate sustainable practices. P4 gave a good narration of strategies that can increase adoption, *"Training is one of the most critical strategies. Many people might not know what it fully entails when you say sustainable entrepreneurship. Please review the policy framework; our policies must be conducive to sustainable entrepreneurship. The government needs to put policies that enforce and support sustainable entrepreneurship."* In support, P7 added, *"More must be done in training on entrepreneurship."* P5 suggested, *"We need to relook into reskilling, focusing on this new business area we are discussing."* P6 went on to add the element of creating awareness and involving SMMEs in decision-making: *"One important thing is awareness done in various ways workshops, media, radio, conferences, broadcast, those are the ways to capture a lot of people and also in schools catching them young they will be aware at an early age. Adopt a participatory approach by involving the people through public consultations."* To create awareness and interest, P7 also mentioned, *"As more is pitched on formalising the green economy, many SMEs will adopt it. The intersection of how the entrepreneur benefits and what's in it for them should be spelt out."* Entrepreneurs must be told how they will benefit from sustainable entrepreneurship besides protecting the environment and society. P9 also added that even the financier needs to be educated about sustainable entrepreneurship because they might fail to finance innovative ideas if they don't appreciate the concept.

Literature acknowledges that entrepreneurship education can help foster sustainable entrepreneurship. Education can help produce future leaders with the skills, attitudes, and behaviours necessary to be entrepreneurial and socially responsible. Shane *et al.* (2003:259) hypothesise that individuals with a higher level of education are more likely to seize opportunities. The knowledge and skills acquired through schooling can increase expected returns from exploiting opportunities. Additionally, the literature indicates that sustainable entrepreneurship necessitates a new educational approach. Students should have the knowledge and skills necessary to operate on renewable energy. Waste should be eliminated by transforming every waste product into a raw material or input for another activity or returning it to the natural cycle. Sustainable entrepreneurship students should ultimately be able to apply sustainability frameworks to design new products, services, and procedures (McEwen, 2013:8). Hence, sustainability should be incorporated into the curriculum as advocated by (P4, P6 and P10). P10 stated, *“There should be some education and some training. There should be an ongoing training program that will reach out to entrepreneurs, making them aware of what is happening. I think that will be a good starting point. Our educational curriculum should include sustainability; young children should know they should look after the environment. Sustainability issues should find their way to the everyday conversation in Zimbabwe; whether it is your friend, brother, or work colleague, there should be some sense of what we are doing for the environment.”*

Financial assistance was mentioned by most of the interviewees, and it was being tackled from different angles. P9 gave a lengthy narration of the need to financially support innovative entrepreneurs: *“SMMEs, particularly those looking for financial assistance, may they be given in a competitive currency, say in USD. The loan repayment period should be flexible; remember, some of the innovations by SMMEs will be at an ideating stage. Hence, it isn't easy to go to a bank and say I have this idea, which requires 5000 USD to take off. There is no financial institution in Zimbabwe which can finance an idea. They will say they want to see your financial cash flows and three months' bank statements. Still, all these are not there, but there is an idea which can turn the financial situation of young people in the country from ashes to riches. It is not being supported that far. Their interest rates are also very high.”* P14 also suggested that the adoption can be increased: *“If there can be the support of the finances, that would greatly assist the SMEs to grow; as I said, one may have an*

excellent innovative idea, but lack of working capital may bring the whole concept down." P5 and P6 also added that there is a need for an SMME bank that will be financing innovative entrepreneurs at a low-interest rate.

The interview participants also highlighted the need for a market for green products. Suppose there is demand for sustainable entrepreneurs' products and services of sustainable entrepreneurs. In that case, more SMMEs will be able to adopt the practice. P4 pointed out, *"We need to do a lot to stimulate the market for green products. Suppose people know the full implications of their actions on the environment and the opportunities for greening their business. In that case, they will also adopt sustainable entrepreneurship."* P11 and P12 concurred that there is a need to help sustainable entrepreneurs create markets both locally and internationally.

P16 gave a unique strategy which she thought might increase the adoption of sustainable practices. *"By making collective efforts, coming together of Government, businesses, NGOs and SMME, more entrepreneurs will adopt sustainable practices. Access to infrastructure at tertiary institutions would go a long way in supporting SMEs."* P6 collaborate closely with university faculty and students. His company collaborated with universities and training institutes, so he highly values working with a knowledge institution. *"We were awarded for working with the Africa University and MSU in the Applied Science Department and the Magamba Training Centre."* He indicated that he prefers to work with educational institutions because students are early adopters of technology, offer excellent knowledge and insights, and provide helpful feedback.

5.9 CHALLENGES

In connection with the introduction of sustainability principles in SMEs, also the question of barriers to their implementation, including in particular, lack of knowledge of the problems, unsatisfactory understanding of sustainability, the perception of the costs associated with the sustainability introduction, the lack of necessary resources for the sustainability introduction and not too strong internal motivation.

This theme aims to answer one of the secondary research questions:

- What opportunities and challenges do SMMEs face in adopting sustainable entrepreneurship?

When asked this question, the interviewees gave varied responses; however, some were generic, like lack of capital, unstable economy, misconception of the product/service and lack of support, be it financial or ministerial support.

145 codes were initially identified but later merged into 40 codes. They were further grouped into eight sub-themes, as shown in Figure 5.12 and photographically in Figure 5.13.

- Capital with six codes cited 21 times.
- Economic environment with 10 codes, cited 24 times.
- Technology with three codes cited eight times.
- Lack of knowledge with four codes cited 13 times.
- Legislative with seven codes, cited 21 times.
- An organisational structure with five codes, cited five times.
- Competition/competitiveness with four codes, cited eight times.
- COVID-19 pandemic with 1 code, cited once.

This theme has its one uniqueness as compared to the other themes; it is the one with the most sub-themes, and it has two sub-themes with codes which a single participant mentioned; this shows that all the participants' views were captured despite being off the standard reasons given by the other participants.

Figure 5.12: Challenges faced by SMMEs in adopting sustainable entrepreneurship

Theme 6: Challenges						Participants															
Sub-themes	Codes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16				
Capital	No collateral-no loan		x		x								x				x				
	No credit facilities	x	x			x		x							x		x				
	Lack of capital		x		x					x					x	x					
	Capital intensive	x		x	x						x										
	Most SMMEs do not bank, no banking history																x				
	Most SMMEs no financial records																x				
Economic environment	Volatile currency	x				x				x											
	High cost of exporting							x									x				
	High interest rates							x		x				x							
	High unemployment-low income-low sales										x		x								
	Bad debts												x				x				
	Volatile policies					x											x				
	Unstable economy			x		x							x				x				
	No foreign currency for imports				x								x								
	High cost of production	x													x		x				
	Expensive licences																x				
Technology	Raw material not locally available									x			x								
	Technology not yet mature locally				x					x											
	Machinery not available locally				x	x				x						x					
Lack of knowledge	Misconception of the project/product					x	x	x		x			x			x					
	No networks																				
	Knowledge gap	x			x	x		x								x	x				
	Brain drain																x				
Legislative	No financial support							x		x		x		x		x	x				
	No support from responsible ministries		x					x		x			x	x	x		x				
	Opportunities are politically aligned		x			x															
	Volatile policies																				
	Corruption											x					x				
	No regulation on agricultural products							x						x							
	Little encouragement for sustainable farmers									x				x							
Organisational Structure	Had no referral	x			x																
	Low growth rate																				
	Farmers killed the soil for a long time													x							
	Farmers not making profit													x							
	Most SMMEs not registered																x				
Competition/competitiveness	Our price not competitive													x			x				
	Product highly perishable												x								
	Stiff competition				x							x	x								
	People want quantity not quality		x										x								
Covid	Was affected by Covid															x					

Table 5.8: Challenges faced by SMMEs in adopting sustainable entrepreneurship

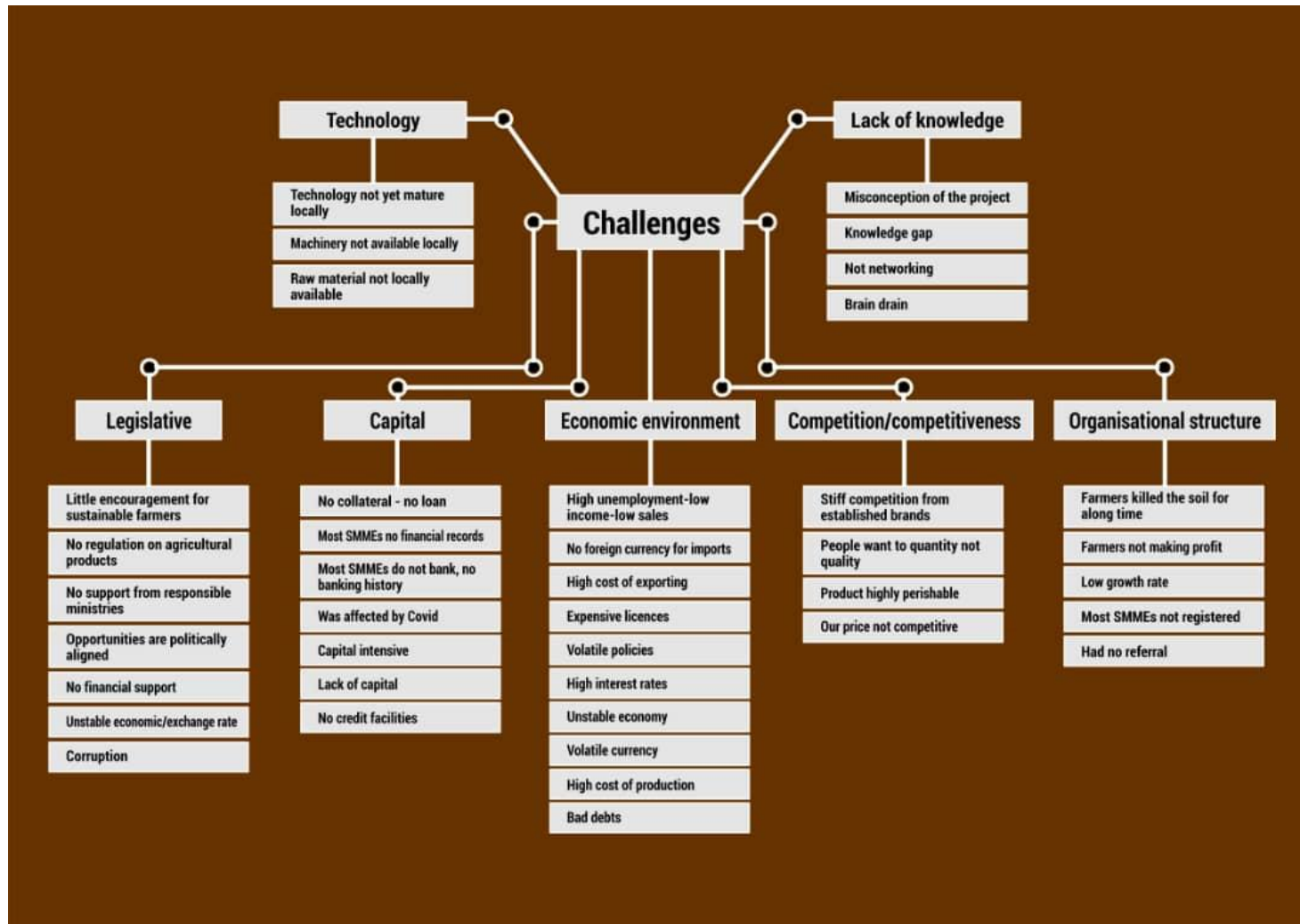
Theme	Sub-themes	Codes and Quotations from participants
Challenges	Capital	No collateral: P1: <i>“No, because banks require collateral, and most startups like us don’t have title deeds, we don’t have anything to put as collateral. So it is hard for us to find finance.”</i> Little capital: P3: <i>“I started with little capital, so the speed at which my company grew was not what I expected.”</i> No finance for sustainable ideas: P5: <i>“If you look at the entrepreneur's ideas, they are not common ideas, which are still at premature stages, so financial institutions are sceptical about financing those ideas or businesses.”</i>
	Economic environment	No foreign currency: P4: <i>“The operating environment in the country is highly challenging for businesses. We import some of our biogas appliances, and it is not easy to access foreign currency; we are forced to go to the parallel market because the banks will say they do not have foreign currency.”</i> Volatile economy: P5: <i>“Economically, the financial governance has let us down if we look at the banking sector where today we have a lot of changes in policies which dismantle our operations because we have to change to suit the banking changes. Issues to do with exchange rates, change in currency, the threshold is this amount you want to use your money, and it’s unavailable.”</i> Customers can’t afford the product: P10: <i>Scaling up is our issue; the market is interested in the product, but their income limits them from buying such a machine.</i> Low income: P12: <i>“Due to unemployment and low GDP, people have low incomes. Microgreens are considered a luxury, and edible weeds are poverty-related, so getting clients is difficult.”</i> Bad debts: P12: <i>“We offer our products on credit, but some people will take longer to pay, and others will become bad debtors.”</i> Unstable economic environment: P16: <i>“Our environment is not so good. It is unstable; it is not conducive for business. Our cost of production is very high, and the prices will not be competitive. The cost of exporting is very high, and it is not easy for people in business here.”</i>

	Technology	Expensive to import machinery: P5: <i>“Technologically, the biggest challenge is the technology imported from China is expensive even to ship.”</i> Technology gap: P9: <i>“The machinery we use is not locally available; if we are to get them locally, we have to improvise- so you will not get the exact tool you need; hence, technology-wise, there is still a technology gap.”</i> Raw materials are not locally available: P9: <i>“I wanted to start the project with the seed for the flies, which was not locally available in Zimbabwe, and did not know how to rear and breed the flies. So, I had to go to South Africa to acquire the seed.”</i> Low presence of farmers on social media: P11: <i>“We created our website then also Facebook. Some of our clients are farmers, so online marketing is new; they are not on social media.”</i>
	Lack of knowledge	No background in agriculture: P1: <i>“I don’t have a background in agriculture, so I had to do research. I had to engage people who have been into hydroponics for some time, to the extent that I would feel that I was encountering fewer challenges.”</i> No referrals: P4: <i>“When starting a business without experience and no experience, people would want to know, okay, you are talking about biogas. They will ask where you have done it before.”</i> No business knowledge: P5: <i>“Remember, we never said we wanted to go for training or administrative knowledge; we started learning as we were implementing, so the challenges were everywhere in every department: financial management, administration, and operations.”</i> Project misunderstood: P6: <i>“Convincing the other directors of the business idea was a challenge, but now people are enjoying it.”</i> Product not well appreciated: P12: <i>“The products are not well appreciated except by people who have travelled or have interacted with white communities to know the importance of vegetables in the diet.”</i>
	Legislative	Political involvement: P2: <i>“Yes, we are facing challenges. We talk of politics; if you are not aligned with the party ruling at that particular time, you are not in a position to access other opportunities.”</i> Corruption: P11: <i>“Corruption more than anything else. We once did a project with the city council when we needed police clearance; it was difficult. We had to pay some money, and even the company registration took a long time; you get slowed down, and you will face obstacles if you follow the proper channels because of someone who will want to be paid.”</i>

		No binding contracts: P12: <i>"We look for orders first, so we supply where there is demand, but sometimes after the crop has matured, someone might say they are no longer interested, and they do not pay."</i> Little encouragement for sustainability: P13: <i>"From the government perspective, there is very little support at the policy level. There is little encouragement for farmers to use organic products, sustainable products, and environment-friendly products; for example, in Europe, the farmers are almost forced to use at least part of their environmentally friendly inputs, whereas, in Zimbabwe, there is no policy to encourage the farmers to start reducing chemicals and synthetic fertilisers which is a gap."</i>
	Organisational structure	Few customers: P11: <i>"Not having many customers, we had potential customers, but those who would actually commit were a challenge."</i> Insecurity: P12: <i>"Not really; the financial institutions are worried about the security that small entrepreneurs will be able to return the money. Also, entrepreneurs usually do not have the collateral required for borrowing."</i> Effects of unsustainable SMMEs: P13: <i>"For 30 to 40 years, they have been killing the soil; now, the soils are dead, and they are not producing anymore."</i> SMMEs not registered, no banking records: P16: <i>"Most of the SMEs are not banking, so for them to get the funding, they will not have a banking history; also, there are no financial records."</i>
	Competition/ competitiveness	Competition: P2: <i>"It is a challenge because organic produce will usually be more expensive, so people tend to rush for cheaper products."</i> Unfair competition: P4: <i>"We are having unfair competition from the government through REA (Rural Electricity Agency) because they construct biogas digesters for institutions for free."</i> Globalisation: P11: <i>"The issue of globalisation, cheap imports from China, the products are cheaper than the ones we will produce."</i> Competition with established brands: P12: <i>"Stiff competition from established brands which do traditional farming, the challenge we face is that people are worried about quantity, not quality."</i> Uncompetitive: P13: <i>"The farmers are not making a profit anymore; they cannot compete in the region because the import prices are high and the production is too expensive."</i>

	COVID 19	Affected by lockdowns: P15: <i>“After that, COVID-19 came; it was a drawback for us, who won the awards at COVID-19 time when the ILO guys told us that COVID-19 was coming. Then it came, and there were a lot of ups and downs. It was risky, but we had to go on.”</i>

Figure 5.13: Network diagram for challenges faced by SMMEs in adopting sustainable entrepreneurship



The cross-case analysis revealed that capital was the most frequently raised challenge. Small and medium-sized enterprises had difficulty securing adequate funding, which is not uncommon for startups. Most sustainable entrepreneurs interviewed used bootstrapping strategies to implement their innovative ideas. P1 loved his project to the extent of using his wedding presents to finance the implementation of his project: *"I did hydroponic through savings. We used the money which we got from our wedding."* P2 made some savings toward realising his innovative idea, *"I financed my business through savings. I did not get any assistance from banks or anyone."* P6 used savings and invested the profits back into the business, making his business grow, *"Savings, we did not borrow from anywhere, then the profits from the business and the grant we got from a competition."*

Only P9 indicated he did not face this challenge, as he receives capital from many international grants and awards. Even though he started using his savings like other SMMEs, the external funding came early in his entrepreneurial journey. *"First, it was through personal savings, using my bonus as a civil servant. I got several grants from SMMEs- Innovation Challenge of 2019- 5000 USD, followed by CBZ, which was \$10000; ILO, Youth Connect; and the recent one, Net Impact from America - \$5000. The funding helped us to finance company registration, working permits, import and import permits, trade licences, and licences with the Breeder of the Flies. 75-80% of our finances came from grants."* However, he also agreed that it was not easy to find funding from local investors, *"The financial institutions are not even taking it up to support the SMMEs to implement their innovation in the country; if it wasn't for these international awards and grants, our project could have been crawling or could be an idea up to now."*

This theme analysis indicates that external third-party investors are hesitant to invest in sustainable initiatives due to the long-term perspectives pursued by start-ups, resulting in a low, unattractive rate of return. P5 is an example of this: *"We are not getting financial assistance, simply because if you look at the entrepreneur's ideas are not common ideas which are still at premature stages, financial institutions are sceptical about financing those ideas or businesses."* He added, *"I met with my bank; they did not appreciate the waste management industry. It is new to them, so to finance something they do not understand is impossible. Still, if you look at global trade, waste*

management is the 2nd biggest industry in the world.” This is consistent with Shepherd and Patzelt's (2011:140) assertion that sustainable entrepreneurs have more incredible difficulty obtaining external financing due to their long-term orientation and elevated risk. Numerous financiers lack advanced knowledge of sustainability initiatives and, as a result, cannot assess the return-on-investment risks.

The interviewed SMMEs found it challenging to source capital finance due to a lack of collateral. P16 stated, *“When you approach the bank, they need collateral, but as young people, you will not have it, and you could also be told we are not giving agricultural loans.”* P11, P1 and P12 also gave the same sentiments. However, P16 mentioned that SMMEs contribute to their lack of funding from financial institutions: *“Most of the SMEs are not banking, so for them to get the funding, they will not have a banking history; also, there are no financial records.”* Sustainable entrepreneurs are also facing a challenge in finding capital to buy equipment (P9); they are starting small and slowly because they are using personal savings and they are not given credit facilities (P14); their capital is being strained by late payments (P16 and P12) and most of the finances are being offered in Zimbabwean currency which they cannot use to procure raw materials (P10).

Most of the interviewees also mentioned the challenge they are facing as a result of Zimbabwe's economic environment. P4 thoroughly explained his challenge: *“The operating environment in the country is highly challenging for businesses. We import some of our biogas appliances, and it is not easy to access foreign currency; we are forced to go to the parallel market because the banks will say they do not have foreign currency. We talk of a situation where two currencies are working; we have an official exchange rate and the parallel exchange rate, and as a business player, we would want to do all our businesses above board and comply with the regulations in the country, but some of the rules they make business extremely difficult.”* P5, P12 and P9 also narrated their challenges with volatile monetary policies, exchange rate losses, unstable currency, high taxes and unavailability of money in the banks. It was also raised that the economic environment has reduced people's disposable income. P10 and P11 indicated many potential customers, but their income limits them. P3 said it is difficult to make long-term plans in this environment because things can change without notice.

It also came out of the interview that some SMMEs were venturing into projects they did not know. P1 had no background in agriculture, and P9 did not know how to rear and breed the flies. In other instances, society does not have enough understanding of the sustainable businesses that SMMEs will be doing. P9 mentioned, *"There is a misconception like the new project, which involves looking after flies; people will give you many names."* P15 also stated, *"Waste management is a discouraged business, even in the family. It takes time for people to appreciate it."* P10 and P12 also faced the same challenge of their product being misunderstood. P1 mentioned a problem other SMMEs were silent about even though it affected them: *"Firstly, I was unknown; I had to make a name for myself, so that was a challenge. To start this business is quite expensive; it is capital intensive."* Breaking new ground is a problem for sustainable entrepreneurs.

According to our analysis, it is difficult for our entrepreneurs to overcome established consumer perceptions. It has been determined that potential consumers must be informed of these products' numerous implicit and explicit benefits. P12 explains how incorrect perceptions prevent her customers from maximising the health benefits of her produce. *"Microgreens are considered a luxury, and edible weeds are viewed as poverty-related, so getting clients is difficult. Restaurants buy them to enhance their food presentation, not because they want to consume them or because they are tasty."* On a different angle, P10 said he found it challenging to persuade customers with low disposable income to buy his product as they take the baler as a luxury. *"Scaling up is our issue; the market is interested in the product, but their income limits them from buying such a machine. They would instead buy something like fertiliser."* It appears that only a small percentage of farmers are prepared to buy machinery, making this a niche market.

Breaking through a specific pattern and making people aware of alternatives is challenging. P5 also acknowledges that environmental issues are new for a lot of people, *"There is plenty of opportunity for growth since this type of business is not yet so common to many, and if you look at global trends and the sustainability reports, few people understand these, so it is our added advantage to understand these sustainability issues."* However, the participants believe people are increasingly aware

of using resources sustainably. Due to the electricity challenge, people are now forced to look for an alternative source of energy, and for those who relied on firewood, climate change has also affected the forest; hence, even the trees to cut down are now scarce, so they are forced to look up to biogas as sustainable energy. According to the study, sustainable entrepreneurs must overcome market ignorance regarding the need for change and better methods to utilise available resources.

P5, P9, P10, P11 and P15 raised technological challenges they face in their businesses. There was a technology gap between P11's marketing strategy and the target market, the farmers with limited access to social media, particularly Facebook; "Marketing was also a challenge, so on the online side, we were quite vocal. We created our website, then also Facebook. Some of our clients are farmers, so online marketing is new since they are not on social media." Besides this challenge, P4 had to break through the almost fixed way of how biogas is installed; the farmers knew that biogas installation is done through the government or donors even though it has proven not to have a sustainable and long-term impact. P9 mentioned that *"The machinery which we use is not locally available. If we are to get them locally, we must improvise- so you will not get the exact tool you need; hence, there is still a technology gap."* P5 added that it is expensive to import the machinery from China.

SMMEs are adamant that the government does not provide an enabling environment. Their responses indicate that they are highly dissatisfied with the role of government as an enabler. Lack of government support was also raised often, with P13 pointing out, *"From the government perspective, there is very little support at the policy level. There is little encouragement for farmers to use organic products, sustainable products, and environment-friendly products; for example, in Europe, the farmers are almost forced to use at least part of their environmentally friendly inputs, whereas, in Zimbabwe, there is no policy to encourage the farmers to start reducing chemicals and synthetic fertilisers which is a gap."*

The interviewees condemned a high level of corruption. P2 mentioned, *"If you are not aligned with the party ruling at that particular time, you are not in a position to access other opportunities."* There was also disgruntlement about export/import permits, trading licences and other legal requirements. P15 said, *"The product we produce has*

better money if exported, but the long process of getting the export permits and the information for application of trading permit is not readily available." P8 also highlighted that some of the regulations are now outdated. Interviewee participants also mentioned that they are challenged with working space; they cannot afford to buy land.

Because regulatory stakeholders frequently disregard the opinions of SMEs when drafting legislation, SMEs find these guidelines difficult to implement, a drain on their resources, inappropriate in their imperative tone, and unfair, as many SMMEs believe society is best served by focusing on profitable growth (Ernst *et al.*, 2022:6). Not consulting SMMEs in legislation that affects them is equivalent to P7's recommendation that SMMEs be involved in the implementation of sustainable innovations; he stated, *"The interventions do not have the entrepreneurs in the programs; the people who sit in the planning meetings do not have the knowledge, and the intended beneficiaries are not in the committees; hence the interventions normally flop."* Therefore, legislation remains one of the primary reasons why SMEs are hesitant to embrace sustainable entrepreneurship and why SMEs view sustainability issues as a threat rather than an opportunity.

The authors discovered that these SMMEs viewed regulatory compliance as a costly luxury that was optional. To avoid legal repercussions, the SMEs responded to regulatory pressure by striving for minimum compliance with regulatory thresholds rather than exceeding them. Some respondents indicated that they register with environmental law organisations but do not pay the required membership fee, taking advantage of the periodic compliance checks.

On the other hand, many academicians believe that regulatory pressure is one of the primary drivers of sustainable entrepreneurship. They contend that SMMEs frequently require a stimulus to reduce their reluctance towards sustainable entrepreneurship and an incentive to convince them that sustainability can benefit them. Tilley (1999:241) discovered that owner-managers viewed the legislation as a valuable code of conduct, providing clear guidance on what firms should do regarding sustainability. This indicates that regulatory pressure may be a necessary and valuable stimulus for reducing SMMEs' controlled sustainable entrepreneurship motivation. Interestingly, some SMEs themselves advocate for more stringent regulatory requirements. P7

resembles this notion, *“Everything is fragmented, the seed is not regulated, and there is no quality supply of seed. There is a need for some control because there are many counterfactuals and no infrastructure to support its farming.”*

Sustainable entrepreneurs also admitted during the interviews that they have negatively impacted the environment for a long time and are now feeling the impact. P13 pointed out, *“For 30 to 40 years, SMMEs have been killing the soil; now, the soils are dead, and they are not producing anymore. The farmers are not making a profit anymore; they cannot compete in the region because their prices are high and the production is too expensive”.*

Many interviewed participants showed they had forgotten the disruption they faced due to the COVID-19 pandemic, except P15, who indicated that her business was affected by the pandemic, *“Operating was risky, which was a real drawback of her project.”*

P16, P2, P4, P11 and P12 mentioned that they faced a challenge in the competitiveness of their products and services. P16 pointed out, *“Our environment is not so good. It is unstable; it is not conducive for business. Our cost of production is very high, and the prices will not be competitive. The cost of exporting is very high, and it is not easy for people in business here.”* P11 also gave the same sentiment that they are having stiff competition from cheap Chinese products. P2 added, *“It is a challenge because organic produce will usually be more expensive, so people tend to rush for cheaper products.”*

P12 indicated that the economic environment also contributes to this challenge, *“Due to unemployment and low GDP, people have low incomes. Microgreens are considered a luxury, and edible weeds are poverty-related, so getting clients is difficult. Stiff competition from established brands which do traditional farming, the challenge we face is that people are worried about quantity, not quality and lack knowledge on how much fertilisers and pesticides have been used.”* She said she is losing a lot of income due to post-harvest losses since her products are perishable. If the crop matures and she does not find customers, that is a loss to her business. P4 highlighted

a rare scenario of unfair competition from the government constructing biogas digesters for free.

For sustainable entrepreneurs, customer perceptions and ignorance of alternative sustainable products remain a formidable obstacle. However, the interviewed SMMEs were optimistic that consumer awareness and appreciation of their sustainable products and services would increase. P9 is making an effort to raise awareness of his product, *"I attend various farmers' forums and on social media, where we share with farmers and farm organisations the good aspect of a fly so that they get basic information on the feed that we produce so that they can adopt the feed quickly without any hesitation"*.

Dean and McMullen (2007:67) emphasise this idea by stating, "Although the market for products differentiated by their environmental characteristics has been relatively small as a proportion of total demand, the absolute number of such consumers is substantial and subject to change." Dean and McMullen (2007:69) assert that the lack of customer information on the environmental impacts of products precludes them from purchasing products introduced by Sustainable Entrepreneurs. Thus, they conclude that "imperfect customer information regarding product or service attributes presents opportunities for entrepreneurial action if entrepreneurs can inform customers about product or service attributes." P1 mastered this notion, eliminated the middlemen, and approached his customer to explain his sustainable product fully, *"There wasn't any because people were not familiar with hydroponics; I had to introduce it to the people and tell them the difference between produce grown on the soil and the one from hydroponics. The quality is better than the ones grown on the soil. Day by day, I am unlocking the market as we go. I had to cut the middle man to maximise profits and explain the benefits of my product, so that is how I started having customers."* People began to appreciate his product due to their newfound knowledge, which increased his customer base.

5.10 RECOMMENDATIONS

This theme aimed at finding recommendations from sustainable entrepreneurs on how their challenges can be resolved and the support they want for their businesses to grow.

This theme aims to answer one of the secondary research questions:

- What recommendations can support adopting a sustainable entrepreneurship framework by SMMEs in Zimbabwe's agriculture sector?

The participants were free to air their recommendations, which they felt would increase the adoption of sustainable entrepreneurship by SMMEs. Their recommendations were directed into four sub-themes:

- To legislators with 11 codes, mentioned 43 times.
- To SMMEs with 13 codes, mentioned 34 times.
- To the general populace with three codes, mentioned five times.
- To the business world with four codes, mentioned nine times.

This indicates that the majority of the recommendations were targeted at the legislators. The significant codes for this theme were:

- Conduct training for SMMEs.
- Have supportive policies.
- SMMEs should embrace change.
- Need for affordable financial assistance.

These had the highest frequencies in their respective sub-themes, as shown in the matrix in Figure 5.14.

Figure 5.14: Matrix for recommendations that increase the adoption of sustainable entrepreneurship

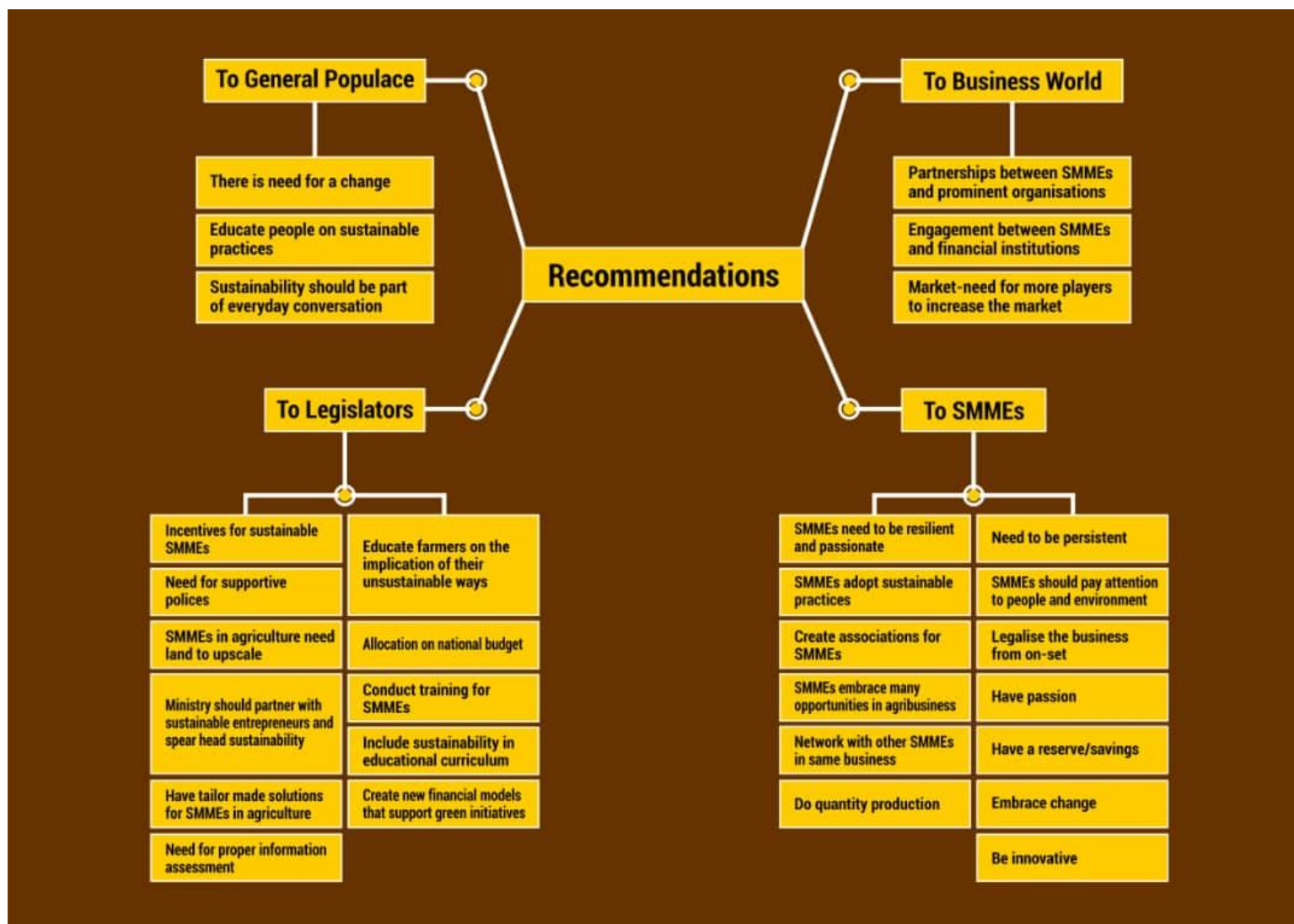
Theme 7: Recommendations		Participants															
Sub-themes	Codes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16
To Legislators	Create new financial models that support green initiatives	x			x	x						x					
	Have tailor made solutions for SMMEs in agriculture	x					x						x				
	Ministry should partner with SMMEs and spear head sustainability	x	x		x								x	x			
	Conduct training for SMMEs	x			x	x	x		x	x	x					x	
	Include sustainability in educational curriculum				x						x						
	Incentives and subsidies for Sustainable SMMEs		x										x				
	SMMEs in agriculture need land		x													x	
	Need for proper information dissemination	x			x					x							
	Need for supportive policies		x	x	x	x	x		x					x	x		
	Educate farmers on the implication of their unsustainable ways	x		x						x							
	Allocation on national budget				x	x					x						
To SMMEs	Create associations for SMMEs		x											x			
	SMME adopt sustainable practices	x		x						x							
	Network with other SMMEs in same business					x	x			x					x		
	Embrace change	x			x		x	x	x								
	Be innovative						x		x			x					
	Do quality production						x										
	Have passion						x			x							
	Legalise the business from on-set						x				x						x
	Have a reserve/savings											x					
	SMMEs should pay attention to people and environment											x					x
	Need to be persistent			x										x	x		
	SMMEs embrace many opportunities in agribusiness					x				x			x				
	SMMEs need to be resilient and passionate			x													x
To General Populace	Educate the people on sustainable practices									x							
	There is need for a change	x				x			x								
	Sustainability should be part of everyday conversation										x						
To Business world	Market-need for more players to increase the demand	x															
	Provide affordable financial assistance		x		x	x	x								x		
	Partnerships between SMMEs and prominent organisations		x														
	Engagement between SMMEs and financial institutions	x	x														

Table 5.9: Recommendations that increase the adoption of sustainable entrepreneurship

Themes	Sub-themes	Codes and Quotations from participants
Recommendations	To SMMEs	Legalise contracts: P16: <i>“Taking things step by step. Sign contracts for the orders because sometimes customers say they no longer need the products.”</i> Be persistent: P13: <i>“SMMEs need to believe they can do it. They need to be persistent and try to push it for three years and not give up because of financial hindrances; most companies give up too early. SMMEs should support each other; there is too much competition instead of working together.”</i> Embrace sustainable agribusiness: P12: <i>“There are many sustainable opportunities in the agricultural sector; let us embrace them.”</i> Make savings: P11: <i>“Always have funds like we kept 500us on the side. Once the problem becomes financial, that's how businesses fail.”</i> Shift to sustainable methods: P9: <i>“It is high time we start greening our projects or enterprises so that they become climate smart. That is where the ball is going now. We are shifting from the ordinary way of doing business to sustainable methods.”</i> Benchmark with successful SMMEs: P7: <i>“As an entrepreneur, try to benchmark with entrepreneurs from other countries like South Africa or India or any industry performing better to curb dynamics so that you are not shattered when there are changes.”</i> Incentives and subsidies for Sustainable SMMEs: P2: <i>“If there can be incentives and subsidies for SMMEs who are doing sustainable farming because we are not only doing it for people but also the environment.”</i>
	To legislators	Ministry to assist SMMEs: P15: <i>“The Ministry of Land and Agriculture has to play a part in the land issue because it is costly, and many SMMEs cannot afford it without financial support.”</i> Government should financially support innovative SMMEs: P14: <i>“Government should support SMEs. Looking at the ideas, there is great innovation within the SMEs, but some of those ideas die before even kicking off due to lack of support, mainly financial support.”</i>

		Review outdated policies: P13: <i>“The Ministry of Agriculture should be more encouraged to integrate organic inputs into farming. Also, if you look, the policies are from 1977; the products like these biostimulants were not there, and organic products were not prominent.”</i> Incentives for sustainable SMMEs: P12: <i>“There should be regulations on production and incentives for those doing organic and sustainably produced products.”</i> Include sustainability in the educational curriculum: P10: <i>“There should be some education and training. There should be an ongoing training program that will reach out to entrepreneurs, making them aware of what is happening. Our educational curriculum should include sustainability; young children should know they should look after the environment. Sustainability issues should find their way to the everyday conversation in Zimbabwe.”</i>
	To business world	Finance pilot projects: P11: <i>“Financial institutions should come up with smaller funds loan facilities to allow the running of a pilot project and then give more funding after verification from the small funding.”</i> Need for patient investors: P7: <i>“We are asking for patient capital for the transition to high volume and low margin.”</i> Financial sector to give credit lines for green business: P5: <i>“There is a need for reskilling, also financial sector credit lines for a green industry like what is done for other industries.”</i> Financial institutes should embrace sustainability: P5: <i>“There is a need to relook at the skills of different financial institutions focusing on these new business areas that we are discussing.”</i> Partnerships between SMMEs and prominent organisations: P2: <i>“SMMEs can also partner or collaborate with other prominent organisations with collateral and approach banks together.”</i>
	To general populace	Young people should also tap into sustainable businesses. P5: <i>“There is enormous potential to start in composting, so there is a need for young people to tap into this industry.”</i> People should embrace change: P1: <i>“Let me start with culture; many people I meet are not bold enough to move out of the old to take up the new. So I think people should change, should be open enough to new possibilities, instead of sticking to what they know and what they used to do.”</i>

Figure 5.15: Network diagram for recommendations that increase the adoption of sustainable entrepreneurship



5.10.1 Recommendations to legislators

Most of the recommendations were being directed to the attention of the legislators. Concerning finance, P4 recommended that *“There should be government backing to increase SMME access to financial resources, especially during the inception phases. If adequately supported, many people have brilliant ideas to culminate into successful businesses.”* P14 seconded P4 that the government should support SMMEs; he stated, *“Looking at the ideas, there is great innovation within the SMEs, but some of those ideas die before even kicking off due to lack of support, mainly financial support. So, if the finances can be supported, that would greatly assist the SMEs in growing; as I said, one may have an excellent innovative idea, but lack of working capital may bring the whole concept down.”* P5 pointed out that the government should allocate funds for sustainability projects in the national budget. P2 added, *“If there can be incentives and subsidies for SMMEs doing sustainable farming, it is because we are not only doing it for people but also the environment. Some SMMEs get carbon credits in other nations for protecting the environment and mitigating climate change.”* These incentives will motivate sustainable entrepreneurs to continue pushing the sustainability agenda and attract other SMMEs to adopt sustainable entrepreneurship.

The interviewees recommended that there is a need for proper dissemination of information about sustainable practices. P1 suggested that to increase awareness, *“Ideally you can use social media, National TV, radio and community workshops. Target people like the youths and older people; the message will spread quickly and faster. You can also go to the rural areas because they are normally neglected, but they are the most unsustainable. Let us go to the grassroots to tailor-make solutions for agriculture in Zimbabwe.”* On creating awareness, P2 added, *“There should be TV programmes promoting sustainable enterprises showcasing entrepreneurs who are farming sustainably and responsibly, and then people will start to see and appreciate what some of us are doing. So, the government can partner with these few sustainable enterprises to further the knowledge.”* Like P1, who stated, *“I feel I have a lot to give to the community, so I feel if I can partner with the ministry, it will go a long way in uplifting the community and individuals.”*

The participants recommended that sustainability should be included in the curriculum. The curriculum should provide learning opportunities for real-world problems in the students' immediate social environment, the larger community, government, and industry. P4 stated, *"We need to lay a good foundation for entrepreneurship. There is a need to groom entrepreneurs. Apart from dealing with the foundation, we need our training at the tertiary level to be redesigned; when they leave tertiary, they should be prepared to be entrepreneurs to create employment. We need to train them on sustainability issues. For those in agriculture, there is a need to train them, capacity building letting them know of the impact of their activities on the welfare of societies and the environment."* P10 said, *"Even our educational curriculum should include sustainability; young children should know that they should look after the environment."* This is supported by the recommendation made by McEwen (2013:14) that the curriculum should incorporate skill-building courses in entrepreneurship education, such as creativity, new venture creation, business idea development and opportunity recognition, business planning, leadership, entrepreneurial marketing, entrepreneurial finance, and growth management.

Some recommendations were explicitly for the Ministry of Agriculture as the mother ministry of the focus study:

- SMMEs recommended that the ministry renew outdated policies to be relevant and applicable in current times; P13 stated, *"The Ministry of Agriculture should encourage integrating organic inputs into farming. Also, if you look, the policies are from 1977; the products like these biostimulants were not there, and organic products were not prominent."* P4 recommended the government *"Review the policy framework; our policies must be conducive to sustainable entrepreneurship. The government needs to put policies that enforce and support sustainable entrepreneurship."*
- The ministry should help SMMEs find land to operate from to upscale their operations. P2 mentioned, *"Maybe if we are allocated land to upscale what I am doing."* P15 emphasised that the only help she expects from the ministry is land to work from.

- Ministry should come in to promote some of the required licences, which will quicken the process and be cheaper. It will increase the formalisation and compliance by SMMEs. P5 pointed out, *"We feel that the Ministry of SMEs should come in to promote some of the required licences."*
- The Ministry of Agriculture should collaborate with sustainable entrepreneurs. P2 mentioned the area where he expects collaboration with the ministry, *"Collaboration on doing some programs and projects, even having a talk show on TV, can change people's minds."* P1 expressed his interest in impacting society with his innovative practice. Still, his dream can only be fulfilled if he partners with the ministry. He stated, *"I feel I have a lot to give to the community, so if I can partner with the ministry, it will go a long way in uplifting the community and individuals."*
- The ministry should give SMMEs a grace period to start trading even without a licence for them to build up money for compliance. P12 acknowledged the importance of registering and complying with industry regulations; however, considering the financial constraints that SMMEs face in their initial business stages, she recommended a debatable request from the ministry: *"Yes, to start trading, you need to be registered; then, I have to comply with tax regulations, to have a tax clearance. Paying taxes helps the government to develop our utilities. However, the government should allow people to start trading without those things until such time is possible to comply after running the business for a while."*
- Generally, there should be policies to support sustainable agriculture in Zimbabwe. P13 mentioned, *"From the government perspective, there is very little support at the policy level. There is little encouragement for farmers to use organic products, sustainable products, and environment-friendly products; for example, in Europe, the farmers are almost forced to use at least part of their environmentally friendly inputs, whereas, in Zimbabwe, there is no policy to encourage the farmers to start reducing chemicals and synthetic fertilisers"*

which is a gap. There should be more policies to support sustainable agriculture in Zimbabwe because it is still very, very behind."

- The ministry should involve SMMEs in developing, rolling out and implementing sustainable innovation in agriculture; this participatory approach will help the interventions succeed. P6 encouraged a participatory style: *"Participatory approach by involving the people through public consultations."* P2 added that the ministry is the best to spearhead sustainable practices: *"The government runs the nation, and the ministry runs agriculture, so if it is from the top, I think it is a bit easy to disseminate or go further to everyone. There are structures so it can be enrolled throughout the country quickly."*

5.10.2 Recommendations to SMMEs

Knowledge and skills are required to be aware of local and global environmental problems and future trends, acquire environmental values, and engage in ecological values (Richardson, Irwin, and Sherwin, 2005:11). SMMEs must be able to seek alternative and innovative methods to meet current needs, as well as develop new business models to support the innovative products and services that result. Future sustainable entrepreneurs should also be able to draw inspiration from the solutions already provided by participants who are already sustainable entrepreneurs.

The interviewees also gave recommendations to the other SMMEs. P12 encouraged SMMEs to embrace many sustainable opportunities in the agricultural sector. P16 added that they should take things step by step, not cut corners, and not get involved in immoral practices that harm the people and the environment. They should follow stipulated laws and regulations (P2). Even if they face obstacles, P14 stated, *"I can say all businesses face challenges along the way but remain focused and pinned on the main idea of the business and be connected to help individuals along the way that can also assist in improving one's business."* P9 added, *"Keep on going. It is high time we start greening our projects or enterprises so that they become climate-smart. That is where the ball is going now. We are shifting from the ordinary way of doing business to sustainable methods."* P5 and P6 recommended that SMMEs share their innovative ideas with other people who would have done business before them to get some ideas,

reducing the time spent learning new skills. P7 also advised entrepreneurs to benchmark their work with successful entrepreneurs.

P1 also admitted that sustainable entrepreneurs have a significant role in increasing sustainability adoption. He said, *"We need to get the word out there; you find that not so many people know about hydroponics. Suppose we can have educational clinics and workshops on teaching the community this type of farming. In that case, it will go a long way."* He said that if sustainable entrepreneurs increase in number, the demand for their products and services will also increase. P1 emphasised the need for urgent action: *"I think we are at a critical point concerning our planet, so we need to be climate smart; there needs to be a change. We must educate the SMMEs that there is another way of doing things."* P11 added, *"We are in business to make profits, but we should also pay attention to the people and the environment."* The recommendation is that SMMEs should be stewards of nature.

The finance issue was mentioned as a significant challenge, and the interviewee suggested the following recommendations. P11 advised that *"SMMEs should always have funds like we kept 500 USD put aside. Once a financial problem comes, your reserve will help you."* P13 also added that *"SMMEs need to believe they can do it. They need to be persistent and try to push it for three years and not give up because of financial hindrances; most companies give up too early. SMMEs should support each other; there is too much competition instead of working together."* On the challenge of accessing funds, P2 recommended that *"If SMMEs in the agricultural sector can create associations, they can negotiate with financial institutions collectively."* This will kill the challenge that most SMMEs face of a lack of collateral to get a loan from financial institutions.

5.10.3 Recommendations to the general populace

The general public has a role in adopting sustainable entrepreneurship; hence, the interviewees suggested some recommendations. P1 felt that the society needed to divorce their culture and embrace the new norms, *"Let me start with culture; many people I meet are not bold enough to move out of the old to take up the new practices; surely hydroponics is the future of farming. I think people should change, should be*

open enough to new possibilities, instead of sticking to what they know and what they used to do.” P15 advised farmers to use soil enhancers and avoid synthetic fertilisers and pesticides, “My advice is to use soil enhancers, which are environmentally friendly. Those who use pesticides should dispose of the empties in a way that will not cause water pollution and protect the environment.” P10 recommended differently that sustainability should be part of everyday conservation between friends, families and work colleagues, “Sustainability issues should find their way to the everyday conversation in Zimbabwe; whether it is your friend, brother, or work colleague, there should be some sense of what we are doing for the environment.”

5.10.4 Recommendations to the business world

The recommendations to the business world were mainly targeted at financial institutions. P2 suggested that *“Financial institutions should be lenient when giving a loan to SMMEs. May there be reasonable interest rates so that it will not be too heavy for SMMEs to repay.”* SMMEs need financial assistance, but the interest rates are beyond their reach; it will take all their capital, which will drain the business. P11 also added that they should develop smaller funds loan facilities to allow running a pilot project and then give more funding after verification from the trivial money. P14 reiterated, *“We need to create new financial models that support green initiatives; there is a need to relook at the skills of different financial institutions focusing on sustainability.”* P12 recommended SMMEs to partner or collaborate with other prominent organisations with collateral and approach banks together for funding, *“SMMEs can also partner or collaborate with other prominent organisations with collateral and approach banks together.”* This kills the challenge that SMMEs face of lack of collateral to get funding from financial institutes.

5.11 SUMMARY

The chapter has fully presented what transpired during the interviews. The interview process and the demographic information of the interviewees were laid out. The eight themes raised were explicitly explained with the help of quotes from the interview participants, matrix and photographic images. The data presented showed the determinants of sustainable entrepreneurship and the opportunities available for

sustainable entrepreneurs. The interviewees showed they balanced sustainability's economic, social and environmental dimensions. They also highlighted the benefits of practising sustainable entrepreneurship. However, they also mentioned the challenges they face as sustainable entrepreneurs. They also pointed out strategies to encourage other SMMEs to adopt sustainable entrepreneurship. Lastly, they made recommendations to the legislators, the business community, SMMEs and the general public. The presented data will be analysed concerning available literature in the next chapter.

CHAPTER 6

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The study's conclusions are presented in this last chapter of the thesis. The objective is to answer research questions and the purpose of the study. The summary of the empirical findings will be presented, and these findings will be utilised to develop an integrated framework for sustainable entrepreneurship. Recommendations will be given based on the framework. In addition, the study's theoretical, social, and practical contributions are discussed. Similarly, limitations associated with the study and suggestions for future research are presented in the conclusion.

6.2 ACHIEVEMENT OF RESEARCH OBJECTIVES

The primary objective of this study was to develop a sustainable entrepreneurship framework for SMMEs in Zimbabwe's agricultural sector. The aim was to explore the strategies, motivation, challenges and opportunities for sustainable entrepreneurship through the lived experience of SMMEs. To achieve this primary objective, the following secondary objectives were formulated:

- To establish the determinants that compel SMMEs to adopt sustainable entrepreneurship.
- To determine the opportunities and challenges that SMMEs face in adopting sustainable entrepreneurship.
- To describe and elaborate on the sustainable entrepreneurship framework.
- To explore the motivational factors that lead to sustainable entrepreneurship from the perspective of selected SMMEs and experts.
- To explore the contribution of sustainable entrepreneurship to economic development.
- To summarise, strategies that encourage SMMEs in the agriculture sector to adopt sustainable entrepreneurship.

- To recommend and advocate for adopting a sustainable entrepreneurship framework for SMMEs in Zimbabwe's agriculture sector.

The research questions addressing each of the objectives were also formulated. These are summarized in Table 6.1 below.

Table 6.1: Secondary objectives and corresponding research questions

Secondary Objectives	Corresponding Research Questions
To establish the determinants that compel SMMEs to adopt sustainable entrepreneurship	What are the determinants of sustainable entrepreneurship?
To determine the opportunities and challenges that SMMEs face in adopting sustainable entrepreneurship	What are the opportunities and challenges that SMMEs face in adopting sustainable entrepreneurship?
To explore the motivational factors that lead to sustainable entrepreneurship from the perspective of selected SMMEs	What are the motivational factors that lead to the adoption of sustainable entrepreneurship by SMMEs?
To explore the contribution of sustainable entrepreneurship to economic development.	What is the contribution of sustainable entrepreneurship to the economic growth of Zimbabwe?
To summarise, strategies that encourage SMMEs in the agriculture sector to adopt sustainable entrepreneurship.	What strategies can encourage SMMEs in the agriculture sector to adopt sustainable entrepreneurship?
To recommend and advocate for adopting a sustainable entrepreneurship framework for SMMEs in Zimbabwe's agriculture sector	What recommendations can support adopting a sustainable entrepreneurship framework by SMMEs in Zimbabwe's agriculture sector?

To achieve the research objectives, the study carried out a two-chapter literature review (Chapters 2 and 3) to collect secondary data from accredited sources which addressed similar topics. Chapter 2 focused on sustainable entrepreneurship, determinants, motivation, challenges, and benefits, and the three theories laid the study's foundation. Chapter 3 focused on the SMME landscape in Zimbabwe's agricultural sector. The researcher also collected primary data from 16 sustainable entrepreneurs in the agricultural sector in Zimbabwe. The data was collected through semi-structured interviews, qualitatively explored and analysed. Chapter 4 gave a complete description of the methodology employed to achieve the research objectives. The empirical study findings were descriptively presented and discussed in Chapter 5.

The table below summarises how the researcher achieved the study's six objectives through secondary and primary research. The table specifies the research sections that address each of the research objectives. Additionally, the table summarises the research findings about each research objective.

Table 6.2: The achievement of research objectives

Research Objectives	Research Findings	Secondary Research	Primary Research
To establish the determinants that compel SMMEs to adopt sustainable entrepreneurship	SMMEs are influenced by strong networks, role models, availability of raw materials, online resources, research and development, employees, suppliers and customers.	Literature review. Chapter 2, section 2.4.2-2.4.9	Theme 1: Determinants of sustainable entrepreneurship Chapter 5, section 5.5
To determine the opportunities and challenges that SMMEs face in adopting sustainable entrepreneurship	The majority indicated they recognize opportunities through their effort (creation theory). SMMEs face challenges in terms of capital, unstable economic environment, lack of technology, unsupportive legislation, stiff competition and the COVID-19 pandemic.	Literature review. Chapter 2, section 2.10.1 Literature review. Chapter 2, section 2.8	Theme 2: Sustainable Entrepreneurship opportunity recognition. Chapter 5, section 5.6 Theme 6: Challenges Chapter 5, section 5.10
To explore the motivational factors that lead to sustainable entrepreneurship from the perspective of selected SMMEs	SMMEs are motivated more by intrinsic than extrinsic factors. Passion was the most dominant motivating factor.	Literature review. Chapter 2, section 2.4.1	Theme 1: Determinants of sustainable entrepreneurship. Chapter 5, section 5.5
To explore the contribution of sustainable	SMMEs have economic, social and environmental impacts.	Literature review. Chapter 2, section 2.10.3	Theme 3: SMME's sustainable balance. Chapter 5, section 5.7

entrepreneurship to economic development.	However, they are optimizing ecological contribution.		Theme 4: Benefits of sustainable entrepreneurship. Chapter 5, section 5.8
To summarise, strategies that encourage SMMEs in the agriculture sector to adopt sustainable entrepreneurship.	Strategies align with finance, policy issues, partnership, training and awareness.	Literature review. Chapter 2, section 2.9	Theme 5: Strategies that encourage the adoption of sustainable entrepreneurship. Chapter 5, section 5.9
To recommend and advocate for adopting a sustainable entrepreneurship framework for SMMEs in Zimbabwe's agriculture sector	Recommendations were directed to legislators, SMMEs, the general populace and the business world. Still, the majority were targeted at the legislators.		Theme 7: Recommendations Chapter 5, section 5.10

All the research objectives were achieved, and the corresponding research questions were answered, as indicated in Table 6.2 above. The section below explains how the empirical responses align or disagree with the secondary data as it summarises the research findings.

6.3 SUMMARY OF FINDINGS

This section is organised according to the seven themes identified and covers six research objectives. It briefly summarises the academic debates within these themes, synthesises critical empirical findings, and identifies unresolved issues.

6.3.1 Theme 1: Determinants of sustainable entrepreneurship

To increase the adoption of sustainable entrepreneurship, academicians have focused on identifying the factors that determine a company's sustainability orientation. Although previous research has primarily focused on firm-level aspects, some empirical evidence suggests that the owner's or entrepreneur's personal factors can play a significant role in determining their sustainability orientation (Gold *et al.*, 2021:8). Most studies have identified external factors, including pressure from institutions and stakeholders. The internal determinants include both individual elements and firm-level internal. External determinants refer to environmental/contextual and institutional factors at the macro level. This study found that internal and external factors influence SMMEs' adoption of sustainable entrepreneurship.

This theme covers two research objectives which are related:

- To establish the determinants that compel SMMEs to adopt sustainable entrepreneurship.
- To explore the motivational factors that lead to sustainable entrepreneurship from the perspective of selected SMMEs.

The primary and secondary research findings for this theme are shown below in Table 6.3.

Table 6.3: Findings for determinants of sustainable entrepreneurship

Secondary research findings	Primary research findings
Motivational factors <i>Intrinsic</i> • Independence and control • Innovativeness • Improved social status • Income security • Financial success • Personal development <i>Extrinsic</i> • Contribution to community welfare • Family security • Opportunity to innovate and create new products/services • Community/social motivation	Motivational Factors <i>Intrinsic</i> • Passion • Innovative/creative/ambitious • Risk taker • Networking/good communicator • Flexible • Persistence/determination <i>Extrinsic</i> • Climate change mitigation • Financial independence • Passion for the environment • Desire to make a positive impact • Providing environmental and social solutions
Stakeholders • Customers • Employees • Competitors • Suppliers • Intermediary organisations	Stakeholders • Role models • Access to skilled personnel • Strong networks • Vulnerability of supply chain • NGO project support program • Social media • Successful SMMEs
Legislation • Offering training • Encouraging financial incentives • Funding • Business-friendly regulatory policies • Harsh and severe fines • Lowering subsidies for resource-intensive industries	Legislation-not mentioned
Organisational setting • <i>Firm sector</i>-tangible product companies are more sustainable • <i>Firm size</i>-larger enterprises are more sustainable	Organisational setting • Networking • Learnt from practices

• Firm ownership-owners of the same lineage are more environmentally friendly	
Gains in productivity and competitiveness • Cost cutting • Recycling • Differentiation • Growth • Competitive advantage • Reputation	Gains in productivity and competitiveness • Reducing production cost • Recycling • Market imperfection • Noticed agribusiness opportunity • Availability of raw materials
Culture • Entrepreneur's standards, values, ethical and moral duty • Management support • Knowledge management	Culture • Want to provide a solution • Grew up farming • Inspiration from home • Hard-working family culture • Taught business at a young age
A focus on innovation • Innovative companies adopt sustainable entrepreneurship	A focus on innovation • Innovative mind • Creativity • Technology is in demand
Expertise in the field of entrepreneurship • Entrepreneurial knowledge • Sustainability awareness	Expertise in the field of entrepreneurship • Technical skills • Widely research

6.3.1.2 Motivational factors

Empirical research on entrepreneurial motivations uncovered several factors influencing entrepreneurs' decision to create and pursue sustainability-oriented opportunities. Motivation is the motive that encourages a person to act or do something, increasing the drive to attain specific goals (Elliot & Covington, 2001:80). Motivation can be intrinsic or extrinsic. Shane and Venkataraman (2000:220) define intrinsic motivation as the psychological processes that drive action or the internal desire to pursue one's objectives. In contrast, extrinsic motivation is the desire to achieve outcomes for external work duties, such as rewards and recognition. However, empirical evidence suggests that intrinsic motivations influence SMMEs more than extrinsic motivations.

In small and medium-sized businesses, entrepreneurial motivation is characterised by risk-taking, innovativeness, passion, and proactivity (Presutti & Odorici, 2019:699; Shane & Venkataraman, 2000:221). According to empirical data, these motivational concepts also apply to the context of sustainable entrepreneurship. Most frequently mentioned was passion. It encouraged numerous SMMEs to launch sustainable businesses and helped transform their ideas into profitable, sustainable enterprises. P5 and P16 indicated how passion drove them to pursue a sustainable entrepreneurial path:

“The idea was based on being passionate about the industry we entered...We had a lot of ups and downs and losses; all that drives us can only be passion.”
(P5)

“The idea of doing business was always in me. There is depression because of the ups and downs, but the risk does not stop us from doing business, especially when we have passion.” (P16)

Additionally, sustainable entrepreneurs revealed that they are risk-takers. P2 indicated he took risks to do what others had not done when he stated, "It takes a lot of courage to run a successful business because if you're going in a direction no one has gone before, you must be very courageous." It demonstrates that sustainable entrepreneurs are innovators motivated to launch new products or services even though they have not yet been evaluated in their market. Many respondents indicated they were the first to introduce their business in their respective territories, while others were the first to do so nationwide.

Positive perspectives on sustainability and entrepreneurship are essential motivators for sustainable entrepreneurship. Attitude determines the business strategy employed when launching a new venture. For instance, Vuorio *et al.* (2018:362) discovered that entrepreneurs who view sustainability as an opportunity to assist others and the adjacent communities are likelier to promote sustainable entrepreneurship. This is consistent with the research findings: P16 stated that her compassion for the marginalised members of her community prompted her to establish a sustainable business to provide them with employment.

“The idea also came when I saw a lot of vendors in high-density areas, so I wanted to create employment for the marginalised groups, especially women and do value addition.”

Due to interior concerns for the sufferings or misfortunes of others, it can be concluded that a compassionate person is more likely to engage in sustainable entrepreneurship. On the other hand, a greedy individual will prioritise financial gains and may, therefore, choose profit-driven conventional entrepreneurship.

Conventional entrepreneurship research views profitable opportunities and growth as the primary motivators for individual actions (Shane & Venkataraman, 2000:222). Regarding sustainable entrepreneurship, empirical data revealed that opportunities that result in profit and expansion are similarly present but are not the sole objective. Additionally, supplementary motivational factors are, in some ways, even more critical to the entrepreneur than profit and development. Kuckertz and Wagner (2010:524) and Parrish (2010:510) categorised entrepreneurs as opportunity-driven or sustainability-driven based on their ultimate motivation regarding the economic or sustainable value created. The empirical data did not reveal any differences between the reasons for these two categories of entrepreneurs. Instead, results demonstrated that entrepreneurs are motivated by opportunity sustainability in the context of sustainable entrepreneurship.

In contrast, economic value is both necessary and desirable. Still, it does not exclude sustainable value from the entrepreneur's scope, nor is there evidence that a profitable firm prevents a broader value creation (Kuckertz & Wagner, 2010:524; Parrish, 2010:510). To demonstrate that sustainable entrepreneurs generate profit and deliver lasting value, P4 stated:

“Apart from aiming to derive financial benefits, we are doing much to help the environment. We are helping businesses, individuals, and institutions to manage their waste and recover other products from waste, which means, in a way, we are helping to fight pollution. We are helping to reduce greenhouse

gases in the atmosphere. In Zimbabwe, 4% of greenhouse gases emanate from waste.”

P9 admitted that he is profiting from his business, but that is not his sole objective; he protects the environment.

“We are not only targeting cash from selling maggots for stock feed. We are environmentally friendly in the sense that we are reducing the number of greenhouse gases that are emitted into the environment.”

Consequently, sustainable entrepreneurs evaluate their advantages in terms of economic and non-economic benefits, diverging from the economic value definition of conventional, commercial entrepreneurship (Sarango-Lalangui *et al.*, 2018:3).

Under extrinsic motivation, sustainable entrepreneurs aim to transform a sector or market towards an improved environmental and social state by exploiting economic opportunities (Hockerts & Wüstenhagen, 2010:483). The research findings confirmed this assumption, as many participants indicated they were motivated by a passion for the environment, a will to provide environmental and social solutions, and a desire to positively impact and mitigate climate change. P9 was motivated by the desire to make a positive impact and provide a cheaper solution to smallholder farmers.

“I was trying to solve problems faced by smallholder farmers, especially in stock feed, because most of their production cost lies in the stock feed, so this is an alternative source of stock feed for SMMEs in agribusiness.”

P5 got an economic opportunity when he was reducing pollution in the environment:

“It was an ambitious idea. When we graduated, we used to do clean-up campaigns at college, so we thought, what can we do to make something meaningful to the cleaning that we do not as a business it was a social thing. It was now more of adding value to waste and selling it to recyclers. It was more of our passion for the environment.”

Consequently, interviewees viewed environmental and social concerns as the driving force behind the formation and exploitation of opportunities, focusing on sustainability. Environmental and social problems presented motivational factors in sustainable entrepreneurship, as hypothesised in the theoretical framework (Kuckertz & Wagner, 2010:524). However, most interviewees emphasised the significance of environmental values as motivators. In contrast, only a minority of interviewees indicated that social values had inspired them. In this regard (Sarango-Lalangui *et al.*, 2018:4) conclude that sustainable entrepreneurship is an evolving concept in various research fields. Consequently, the definition and interpretation of sustainable entrepreneurs' categories and motivations lack "definitional consensus" (Gast *et al.*, 2017:46). For example, socially and environmentally motivated entrepreneurial motivations are frequently treated closely or interchangeably (Kuckertz & Wagner, 2010:526; York *et al.*, 2016:698). This is due in part to similar ("hybrid") tensions that all sustainable entrepreneurs face when resolving conflicts between the creation of economic, social, and environmental value (Battilana & Dorado, 2010:1421).

6.3.1.3 Stakeholders

Literature also suggests that intermediary organisations (such as industry associations, environment support institutions, non-governmental organisations, and international donors) can exert normative pressure on firms to demonstrate environmentally responsible behaviour (Berrone *et al.*, 2008:3). Parker *et al.* (2009:281) found that the role of environment support institutions in motivating and enabling these firms to take innovative measures for reducing their environmental footprints was significant in the case of small and medium-sized enterprises (SMEs), which are generally thought to be deterred by resource scarcity and capability deficits from taking sustainability-oriented initiatives.

P1 indicated how an NGO helped him,

“Luckily, an NGO supported youth projects, so when I mentioned hydroponics, they took me into their wings.”

P4 appreciated the support he received from intermediary organisations:

“I want to credit ILO (International Labour Organisation) because they extended a grant to us as we started and 12 months of Business Development support. They also linked us with one of the successful entrepreneurs in renewable energy.

Analyses of the determinants of sustainable entrepreneurial practise among small and medium-sized enterprises (SMEs) in Pakistan's leatherworking industry revealed that sustainability values and the support services of intermediary organisations are a more powerful incentive for environmental improvement than regulations (Wahga *et al.*, 2017:4).

The intermediary entities have achieved their environmental goals through various interventions, such as educational and training programmes and collaborative asset development while acting as meso-level drivers. Frequently, these interventions sought more excellent ecological benefits through the environmental engagement of a broader community of smaller businesses. Research has demonstrated that stakeholders play an essential role in enhancing the performance of small and medium-sized enterprises in ecological management (Tilley, 1999:240). Internal and external stakeholder pressure is among the most influential change-inducing forces, particularly regarding technological innovation implementation. According to Henriques and Sadorsky (2007:125), employee support is crucial to influencing environmental behaviour in the workplace. P5 indicated the importance of employee support:

“At one point, we thought this would never work, so it was more of having a good partnership with the colleagues we started with, having unity of purpose and being able to work with each other and learn from each other.”

It has also been demonstrated that management support for environmentally responsible practices is a factor in environmental performance.

Moreover, exemplary companies profiled as case studies of best practices can aid in promoting the advantages of sound environmental management to others (Naffizger

et al., 2003:25). This supports the influence of successful SMMEs on P1. He indicated that during seminars, he met other players in hydroponics; he said:

“...when I met guys like Hydro160 and Shift Organics and learned from them. Shift Organics is one of my mentors; he also does hydroponics and aquaponics in Harare. I got to be around him for quite some time, and I was taken by his amazing work. He made it simple and made me feel I could do it. The more I hang around him, the more the passion and the fire grew in me.”

Hence, best practices from successful sustainable entrepreneurs motivate other SMMEs to adopt sustainability into their businesses.

Support from external stakeholders is also essential (Marsden & Ashe, 2006:210). Governments, trade or business associations, and the general public as consumers or customers are three critical external stakeholders with the ability and authority to positively influence small and medium enterprises' environmental behaviour. Trade and business associations may be the missing link in communicating environmental issues to small- and medium-sized businesses. Associations interact directly with SMEs and can relate to them similarly. This capability should enable them to share pertinent information with the industry and offer guidance and support. The research findings indicate that associations assist SMMEs in skill development and training. Governments could use trade or business associations to disseminate environmental information. While most trade or business associations lack the financial resources to provide advice and support, they could be a conduit for sharing ecological information (Tilley, 1999:6).

Support does not need to be expensive; small and medium-sized businesses prefer high-quality, low-cost support (Hilton, 2002:6). This aligns with what P6 said.

“One important thing is awareness done in various ways: workshops, media, radio, conferences, broadcast; those are the ways to capture many people. Also, in schools, catching them young, they will be aware at an early age. Adopt a participatory approach by involving the people through public consultations. Going into communities at a church or a funeral.”

Also essential is the ability to share information through networking and business partnerships.

Consumers can influence business operations in the current business environment by expressing their opinions and feedback via multiple channels, including social media. P4 responded well to customer demand and made an effort to improve the product to satisfy the current demand:

“We are trying to modernise the appliances our customers can use. Traditionally, what has been happening is that people build a biogas digester and put together a very fun stove. Biogas was mainly for cooking and lighting, but now we are saying it is possible to use biogas with modern LP gas cookers. We want our customers to enjoy the same comfort level as LP gas users.”

As a result, businesses use customer and other stakeholder data to innovate their business models to meet expectations and demands perpetually. Customers are more involved in value creation and business processes under sustainable entrepreneurship; consequently, it is essential to strengthening organizational–customer relationships (Rosario *et al.*, 2022:5).

6.3.1.3 Legislation

Environmental regulations appear to be the most frequently cited promoter of sustainable practises in SMMEs (Brammer *et al.*, 2012:426). However, none of the participants cited legislation in implementing sustainable entrepreneurship. Wilson *et al.* (2012:144) provide evidence that SMEs dislike environmental regulations primarily due to the complexities and costs associated with their enforcement. It may be why SMMEs did not mention legislation as a determining factor. However, legislation is not the only means by which SMEs can be compelled to implement sustainable practices. They can use incentives to promote the adoption of sustainable enterprises. In the Nordic countries, for instance, governments now aim to assist businesses in adopting a longer-term approach to business management, which includes providing financial incentives for environmental improvement (Walker *et al.*, 2008:22). The research also revealed that SMMEs anticipate government incentives and financial support. P2

indicated that government incentives could increase the adoption of sustainable practices:

“If there can be incentives and subsidies for SMMEs, who are doing sustainable farming because we are doing it for people and the environment. Some SMMEs get carbon credits in other nations for protecting the environment and mitigating climate change.”

Small and medium-sized enterprises favour education, local and information initiatives, and technology assistance over legislation. In support of this, P4 stated:

“Training is one of the most critical strategies. Many people might not know what it fully entails when you say sustainable entrepreneurship. The government needs to implement policies that enforce and support sustainable entrepreneurship. Suppose people know the full implications of their actions on the environment and the opportunities for greening their business. In that case, they will also adopt sustainable entrepreneurship.”

He said education will open local initiatives that SMMEs can utilise to be sustainable entrepreneurs.

“Making them aware of what can be done and the available best environmental practices. They can access the best available technologies to improve their processes and activities and ensure that whatever they do is sustainable. It is also essential to support them with alternatives when they have no other options; they will be left with few choices, like an alternative to firewood and open discharge of waste, which are much better, so we need to support them with information on the other options.”

However, evaluation studies have shown that legislative changes can increase the efforts of SMMEs to reduce their environmental impact. Regulation promotes small and medium-sized businesses' ecological education and training, and companies participate in industry-specific regulation programmes (McKeiver & Gadenne, 2005:522). Gunningham (2003:20) added that for environmental legislation to be more

effective, it must pay attention to specific policies and regulations about small and medium-sized businesses; these policies and regulations must be simplified, communicated appropriately, enforced, and enforceable. Many participants in this study indicated that they adhere to the rules in their respective fields. Still, none showed that the regulations inspired them to engage in sustainable business practices.

Legislation is believed to be one of the most influential promoters of sustainable behaviour; however, it is difficult and costly to monitor and necessitates formalised standards, benchmarks, and procedures. Due to the diversity and number of small businesses, many pass under the radar regarding legislative compliance, and they will continue to do so unless they are more actively involved in the entire process.

6.3.1.4 Gains in productivity and competitiveness

The focus of business is the bottom line. Recent research indicates that the ratio of positive economic benefits increases as the firm's environmental performance improves. Although there is no consensus in the literature regarding whether or not small and medium-sized businesses can gain a competitive advantage from sustainable practises the ratio of positive economic benefits increases as the firm's environmental performance improves (Hitchen *et al.*, 2003:48). The empirical study found out that SMMEs gain competitive advantage through reducing production cost, recycling, market imperfection and availability of raw materials.

P9 indicated that he adopted sustainable entrepreneurship to reduce stockfeed production costs for smallholder farmers:

“I was trying to solve problems faced by smallholder farmers, especially in stock feed, because most of their production cost lies in the stock feed, so this is an alternative source of stock feed for SMMEs in agribusiness.”

P2 identified the shift in customer preferences to organic food, and he started his business to gain a competitive advantage,

“Many people demand my product because I am organically growing these things. So, whenever I advertise on Facebook, people start putting in orders. People are now shifting to organic products because they are healthy. I am looking at increasing my supply to meet the demand.”

It can be concluded that sustainable entrepreneurs can engage in business for their gain or the advantage of society and the environment.

6.3.1.5 Culture

The leadership and management of an organisation provide and integrate the resources and capabilities required to produce sustainable products and services. To ensure the effectiveness and success of the initiatives implemented, sustainability responsibilities should be disseminated across all organisational levels (Leendertse *et al.*, 2020:1022). Since they know the supportive leaders, employees and department managers are willing to innovate products and services and share innovative ideas. Consequently, leadership support is crucial to the success of sustainability initiatives. Leaders and administrators are responsible for developing an organisational culture that promotes sustainability. These leaders should advocate sustainability principles to influence employees' perceptions and attitudes towards sustainable entrepreneurship (Meek & Sullivan, 2018:4).

The participants indicated that they were determined to start sustainable businesses because they value providing a solution, they grew up farming, drew inspiration from home-indicating that they had a culture of conducting business sustainably, they were taught business at a young age-so running a sustainable business was now ingrained in them, and they were influenced by a culture of hard work in their families. Individual values and ethics are tightly intertwined with the belief in nurturing sustainability. These two factors are crucial in forming behaviours and executing sustainable actions (Franco & Rodrigues, 2021:140). Values refer to higher-order social cognitions that govern how individuals conduct themselves. Hence, individual behaviours are typically consistent with their values following society and culture.

Emotions have a significant impact on entrepreneurial individuals and business activities. Positive emotions are linked to the capacity to overcome adversity. These positive sentiments help individuals recover from setbacks by refocusing their efforts and reorienting their endeavours towards success (Baron & Tang, 2011:57). P2 had positive emotions that even though he was not making any profit, he stayed in business:

“In the first years, we were not making too much money, and if I was not passionate about what we were doing, we could have left it long back, and I would not be where I am today. I was doing experiments so that I could come up with a model that works.”

This finding is consistent with Baron and Tang's (2011:58) conclusion regarding the significance of emotional self-regulation in entrepreneurial processes, in which entrepreneurs must respond to a succession of setbacks that may prove discouraging.

6.3.1.6 A focus on innovation

Innovation capabilities are viewed as determinants and precursors of sustainable entrepreneurship (Dias *et al.*, 2021:1902). This empirical study found that SMMEs venture into sustainable businesses because of their innovative mind and creativity, and they discovered that the technology is in demand.

P10 discovered that the technology was in demand but was unavailable in the market; hence, as an engineer, he designed a manual hay baler:

“We did research and found there was no sort of a commercial product of this type available in Zimbabwe. We consulted people from the agricultural mechanisation sector who confirmed that there was nothing like this and saw we could produce something like this.”

P14 identified a fertiliser shortage, and as a creative entrepreneur, he started producing organic fertiliser, which is cheaper and sustainable:

“We saw a fertiliser challenge in our country's agricultural sector, so we took the opportunity to research to see how best we could solve this. The product is economically sustainable for ordinary small-scale farmers, positively contributing to improving their livelihoods as they can produce it at a relatively low cost. The product is environmentally friendly, contributing to the fight against climate change.”

Consequently, they demolish everything conventional with their ingenuity, replacing norms with superior environmental and social products and services.

Sustainability is an evolving concept based on the requirements of the people (Franco *et al.*, 2021:8). Due to globalisation and immigration, sustainability challenges are becoming increasingly diverse as demographics and people's needs evolve (Pabst *et al.*, 2021:319). P16 took advantage of the immigration and was determined to fill the gap:

“Many people are leaving for green pastures, and it is giving room for opportunities. The population is also growing; hence, there is a need for more sadza, sugar beans and agribusiness.”

Therefore, openness to change is a crucial entrepreneurial value in sustainable entrepreneurship required to assist SMMEs in adapting to these populations' rapidly changing requirements and expectations (Rosario *et al.*, 2022:6).

6.3.1.7 Expertise in the field of entrepreneurship

In addition to motivational factors, interviewees also mentioned the influence of a particular cognitive factor. Knowledge, skills, and abilities (KSAs) are common cognitive factors that entrepreneurs can either possess or acquire (Locke & Baum, 2007:93; Shane *et al.*, 2003:275). The empirical study revealed that the participants were committed to adopting sustainable entrepreneurship because they possessed the technical skills, had prior experience, and, in some cases, conducted extensive research to acquire the most recent technologies in their field:

P10 indicated that he utilised his educational qualification, technical skills and abilities to venture into a sustainable business, and he is continuously innovating it because of his expertise:

“Because of the engineering study, my engineering came in handy. We are improving in making the product cheaper and more accessible. We are looking more at how to improve the components to something lighter.”

P5 took advantage of his knowledge of sustainability issues to pursue sustainable entrepreneurship:

“There is plenty of opportunity for growth since this type of business is not yet so common to many, and if you look at global trends and the sustainability reports, few people understand these, so it is our added advantage to understand these sustainability issues.”

P4 had prior work experience and an advanced level of educational knowledge in his field, which opened his eyes to recognise a sustainable opportunity:

“I worked in the related environmental sector for about 12 years. I got an opportunity to travel to Thailand, where I started pursuing sustainable energy. In 2016, I did my Master's, and my research was on waste to energy; that's when I developed the idea that when I got home, I needed to pursue waste energy systems and start with the less complicated ones like biogas.”

Most operational functions or products reflected the entrepreneur's prior experience, knowledge, skills, or abilities, as indicated by interviewees' associations between previous experience and KSAs' defining elements. Even though Shane *et al.* (2003:275) excluded the integrative nature of entrepreneurial motivations and KSAs, the existence of KSA factors was evident. Consequently, prior experience has been characterised as impacting the opportunity process. According to this empirical data, the adoption of sustainable entrepreneurship was determined by previous experience or KSAs.

6.3.2 Theme 2: Sustainable entrepreneurship opportunities recognition

In this section, we analyse the collected data alongside theoretical perspectives regarding recognising opportunities for sustainable entrepreneurship. The objective is to develop a unified understanding of how the opportunity process is constructed in sustainable entrepreneurship. Without opportunities, there is no entrepreneurship or sustainable entrepreneurship (Hockerts & Wüstenhagen, 2010:482; Shepherd & Patzelt, 2011:142).

This theme seeks to achieve the second secondary objective of the study. It aims to determine how SMMEs recognise sustainable entrepreneurship opportunities. Figure 6.1 below summarises the primary and secondary data findings on sustainable entrepreneurship opportunity recognition.

Figure 6.1: Sustainable entrepreneurship opportunity recognition findings



6.3.2.1 Discovery theory

According to the discovery theory of sustainable entrepreneurship opportunity recognition, demand exists, but supply does not, and vice versa; therefore, the non-existent side must be "discovered". This concept of opportunity relates to investigating extant and dormant markets (Sarasvathy & Dew, 2005:536).

The opportunity discovery theory postulates that opportunities exist independently of entrepreneurs due to exogenous shocks such as changes in consumer preference, technology, and resource availability (Shane & Venkataraman, 2000:221). When reflecting empirical data, these definitive factors were reflected. P2 discovered his sustainable entrepreneurship opportunity during the unexpected COVID-19 pandemic. The supply chain was disrupted, the suppliers could not deliver their products, and the customers were, on the other hand, in lockdown; they could not go out to look for food

suppliers. He discovered he could grow food during that period and started regenerative farming.

“But I intensified during the COVID 19 times; we could not go out to buy food, so I started to think about sustainable farming and integrated, thus the circular economy. It is a complete ecosystem.” (P2)

The study findings also show that SMMEs discovered their opportunity by identifying customer preference changes. P12 led how she found her business opportunity through satisfying customer preference changes:

“The growing demand for organic foods Onis an opportunity we are exploiting. Also, people suffering from chronic diseases are reverting from meat to vegetables.” (P12)

According to Dean and McMullen (2007:52), extant market failure prompted the opportunity process. The findings of the empirical study also indicate that interviewees discovered opportunities for sustainable entrepreneurship through existing market inefficiencies. P4, P11 and P15 identified an electricity shortage in the country and realised they could use abundant free, biodegradable waste to produce sustainable energy sources.

P11 and P4 indicated that they discovered their opportunity from electricity shortage and uncollected waste. Their business provides an alternative energy source and reduces pollution through sustainable use of waste, the raw material in biogas production. The residue is a good soil enhancer.

“Electricity challenges, poor waste management and an agro-based economy are opportunities for my project, so I thought, why not implement the technology of bio digestive system.” (P11)

“Zimbabwe is an agri-economy, and we have realised that unutilised organic waste is abundant, which is what we need for biogas. We know they have problems with waste management, and we also know that the energy scarcity

and those opportunities give significant reasons to go into this particular business.” (P4)

The empirical data also revealed that opportunities were created in response to the identification of personal needs that existing market solutions could not meet. P4 considered "doing things better," which meant that there was an existing solution on the market. Still, the potential value had not been realised, or the opportunity with the most significant potential value had never been exploited.

“We are trying to modernise the appliances our customers can use. Traditionally, what has been happening is people build a biogas digester, and they put together a very fun stove. Biogas was mainly for cooking and lighting, but now we are saying it is possible to use biogas with modern LP gas cookers. We want our customers to enjoy the same comfort level as LP gas users.” (P4)

Biogas has been used before, but P4 discovered that he could improve the use of biogas so that he could get more customers by making it better than before.

6.3.2.2 Creative theory

Suppose neither supply nor demand exists in an obvious fashion. In that case, one or both must be "created," as well as several economic innovations in marketing or financing, for an opportunity to exist. This concept of opportunity involves the development of new markets (Sarasvathy & Dew, 2005:536).

Sarasvathy and Dew (2005:536) argue that entrepreneurial opportunities emerge from the creative activities of individuals and groups in their daily lives. Beginning with personal ambitions, limited resources, and an open view of the future, the opportunity's content, identity, and direction can emerge through implicit 'negotiations' with various stakeholders, such as suppliers, partners, and customers. The opportunity then arises as a byproduct of this social process, drastically reducing the requirement for prediction. These factors are almost the same as the ones the interviewees raised in the study. They recognised the opportunity because they were innovative, had prior

experience, provided sustainable alternatives to limited resources, had sustainable knowledge, supported society, and did research and development.

P1 indicated that he realised that natural resources cannot support the current economic activities; hence, he opted to venture into sustainable agricultural practices.

“Let me start with culture; many people whom I meet are not bold enough to move out of the old to take up the new; surely hydroponics is the future of farming, in the sense that there is zero land degradation, you recycle water, the produce is of better quality compared to the ground, and it grows twice the quantity and twice the rate, so I think people should change, should be open enough to new possibilities, instead of sticking to what they know and what they used to do.” (P1)

P9 realised there was a shortage of soya beans for human consumption. He introduced insect use for stock feed and reduced pressure on soya beans.

“The effects of climate change cause agricultural output to deplete, especially soya beans, so currently, we are facing a shortage. We are adapting by introducing an alternative source of protein for stock feed formulation so that the little soya beans Zimbabwe can produce can be reserved towards human consumption whilst insects will be channelled towards feeding our livestock.” (P9)

P5 got community support, making him identify that his waste management service was a sustainable business opportunity.

“They are beginning to support and to realise the impact. For instance, a lot of households and companies pay the local authorities. Still, because of the services we are providing now, they are beginning to appreciate that they should pay for the services, and we believe there will be massive growth if we keep on being efficient.” (P5)

Pacheco *et al.* (2010:464) asserted, in the context of sustainable entrepreneurship, that entrepreneurs and their innovative capacity contribute to a more sustainable future. Most interviewees verified the individual entrepreneur strategy by describing their process as a factor in forming the opportunity. In some cases, the entrepreneur recognises a sustainable opportunity and seeks partners, the community, or colleagues to assist in transforming the concept into a sustainable business.

P6 agreed that having partners to help realise the identified opportunity is beneficial.

“Getting partnerships, especially with women who have been marginalised, we have partnered with three groups in Makoni District and a UK organisation called Bees for Development, where we got the opportunity as we had the experience of managing a grant since we got 1st prize under the Agribusiness.”
(P6)

When entrepreneurs leverage contingencies and act on their local environment, they enlist the support and contributions of various stakeholders.

Creating opportunities suggests that the creative perspective may be broader, preceding the discovery perspective. This is because creative processes require recognition and discovery as inputs. In contrast, recognition and discovery can function without many essential aspects of creativity. For instance, once specific objectives, values, and preferences have been formulated through the creative process, discovery processes can uncover various means to achieve the goals. When both ends and means become apparent, allocative processes determine which specific means can attain which specific ends most effectively (Sarasvathy & Dew, 2005:537).

According to Berglund (2007:248), even if opportunities exist independently, they are not equally visible to everyone. People have varied access to information about available options. This is partly because some information is complex and can only be comprehended by specialists. Therefore, experts in the discipline will recognise sustainable opportunities. This aligns with how P4, P6, P8, P10 and P14 identified

sustainable business opportunities. They used their expertise to see opportunities where a layperson could not see it:

P4 is an environmentalist who holds a master's degree and is currently doing a PhD; he saw an opportunity to utilise abundant biodegradable waste to biogas:

"I got an opportunity to travel to Thailand, where I started pursuing sustainable energy. In 2016, I did my Master's, and my research was on waste to energy; that's when I developed the idea that when I got home, we must pursue waste energy systems and start with the less complicated ones like biogas."

P6 is an agronomist who specialises in beekeeping and honey production; he holds a PhD:

"I went to Canada for developmental and international developmental programs. I wrote and presented an independent paper on beekeeping, and my skills strengthened. I went to South Africa and Tanzania as well for further training." (P6)

P10 is an engineer who used his expertise to design a manual hay bailer that was not in the market.

"Because of the engineering study, my engineering came in handy and technical skills of operating machines such as grinders and other machines. We are improving in making the product cheaper and more accessible. We are looking more at how to improve the components to something lighter." (P10)

Typically, information about opportunities is mundane, such as observing the price differences between two cities. Seeing such opportunities does not require specialised knowledge. Instead, it depends on individuals' spatiotemporal location, prior knowledge, and position within and between social networks (Shane, 2000:450). Entrepreneurs may differ in their entrepreneurial human capital, levels of vigilance, and cognitive abilities to recognise and evaluate opportunities given the same information (Berglund, 2007:248).

From the findings of empirical data and the literature review, it can be concluded that both theories are necessary for determining the recognition of sustainable entrepreneurship opportunities. Although some interviewees emphasised the principles of opportunity creation theory, their interpretations emphasised the existence of discovery theory. These results suggest that the central assumptions of both theories overlap more in the context of sustainable entrepreneurship than in conventional entrepreneurship research (Alvarez & Barney, 2007:13). Moreover, empirical evidence supported Pacheco *et al.*'s (2010:470) contention that sustainable entrepreneurship cannot be studied solely through the opportunity discovery theory. The nature of overlapping assumptions and the nearly equal distribution of interviewees in both theoretical categories (see Table 5.4) indicated that both approaches are required if the objective is to produce a more accurate view regarding the opportunity recognition for sustainable entrepreneurship.

6.3.3 Theme 3: SMME's Sustainable entrepreneurship balance

The third theme aims to meet the study's fourth secondary objective, which seeks to explore the contribution of sustainable entrepreneurship to economic development. Table 6.4 below summarises the reviewed literature and empirical study findings.

Sustainability-focused opportunities do not differ significantly from entrepreneurial ones (Eckhardt & Shane, 2003:336). The differences involve the creation of value beyond profit and opportunities in sustainable entrepreneurship that extend beyond the episodic processes typically associated with entrepreneurial opportunities (Shane & Venkataraman, 2000:221). No business, corporation, or venture operates on a desert island; they are embedded in an economic, social, and ecological environment (Crals & Vereek, 2005:6). Sustainable entrepreneurship seeks equilibrium within these contexts.

Table 6.4: Summary of findings for SMME's sustainable entrepreneurship balance

Secondary Data	Primary Data
Profit • Economic wealth • Employment	Profit • Making a profit • Sustainable wealth
People • Improve the quality of life • Employment creation • Sense of social mutuality • Good working climate • Human right • Fulling both individual and community needs	People • Improving farmers livelihood • Creating employment • Support other SMMEs • Creating sustainability awareness • Healthy products for society • Educate communities
Planet • Environmentally friendly service • Recyclable products • Diminish environmental impact • Save natural resources	Planet • Use environmentally friendly products • Recycling • Sustainable agriculture • Circular economy • Promote a clean & healthy environment. • Reduce greenhouse gases

6.3.3.1 Profit

Without the expectation of operating a profitable business, the goal of resolving a market failure related to sustainability is invalid, as the entrepreneur's solution becomes unsustainable. In other words, although the individual motivation of a sustainable entrepreneur is to solve a social or environmental sustainability-related market failure, the primary objective and aspiration are to make a profit year after year, which guarantees a self-profit, the sustainability of the business, and thus the ability to have a positive environmental or social impact. When the business grows and becomes profitable, the sustainable entrepreneur's attention will transition to achieving a better balance and integration of the TBL dimensions. This empirical investigation supported this concept.

In addition to environmental and social goals, sustainable entrepreneurs are profit-driven. In the literature on entrepreneurship, generating a profit is so central that various definitions include the profit element. Crals and Vereeck (2005:176) define sustainable entrepreneurs as for-profit entrepreneurs. "Gain is broadly construed to

include economic and non-economic gains to individuals, the economy, and society," write Shepherd and Patzelt (2011:142). Profits are essential to the survival of a business and can be reinvested in the organization's long-term objectives. In his description of the company's sustainable equilibrium, P2 revealed that he is a for-profit entrepreneur who relies on profits to maintain and expand the business.

"We are driven by profit; it makes us go to the next level. We value people, so we are concerned with what gets into their bodies and their health. Environment: we are not impacting the environment the wrong way; we are stewards of creation; that's our motto. As much as we are doing business, we are stewards of the environment." (P2)

The profit motive is paramount, but it is always accompanied by social and environmental considerations (Choi & Grey, 2008:7; Schaltegger & Wagner, 2011:230). Profit is more than a fruitful transaction or a substantial short-term benefit in the context of sustainability. Its conceptual boundaries are much broader to simultaneously encompass economic and non-economic gains at the individual, community, and societal levels (Shepherd & Patzelt, 2011:150). This is demonstrated in the study by the response of P9, whose profitable business aims to reduce greenhouse gas emissions and encourage people to live in a pure environment.

"We are not only targeting cash from selling maggots for stock feed. We are environmentally friendly in the sense that we are reducing the number of greenhouse gases that are emitted into the environment. We are getting our environment clean and safe for generations to come." (P9)

However, sustainable entrepreneurs place a strong emphasis on non-economic benefits in addition to economic gains. They place non-economic aims (environment and social concerns) on par with financial objectives.

TBL employs an alternative methodology incorporating sustainability into the final calculation by doubling the authentic economic benefit with societal and environmental benefits. Entrepreneurs cannot operate beyond a reasonable doubt without adequate financial resources and economic viability. This is also true for environmentally

conscious enterprises (Shepherd & Patzelt, 2011:151; Richomme-Huyet & De Freyman, 2011:6). The empirical study concurs with this secondary data that sustainable entrepreneurs strive to balance all the three facets of TBL, as was shown by P12 and P13:

“All three, I am making a profit. My products are environmentally friendly, and I am also helping the farmer with more sustainable farming.” (P13)

“We are making a profit from our business. Providing healthy products for the society. We use hydroponics which saves water and the environment.” (P12)

Participants in the study did not exclude economic value creation from the context of sustainable development. In addition, economic value was considered a prerequisite for creating additional value through operational functions, a prevalent viewpoint in the literature on sustainable entrepreneurship. Consequently, empirical data indicated that sustainable development could be considered through weak sustainability, which does not exclude profitability from sustainable development and enables quantitative growth instead of focusing solely on qualitative improvements (Parrish, 2010:512).

6.3.3.2 People

The social dimension of sustainable entrepreneurship entails fostering the development of people, communities, and cultures to achieve a meaningful life, utilising appropriate healthcare, education, gender equality, global peace, and stability. The empirical study showed that SMMEs contribute to the social dimension of sustainable entrepreneurship by educating the communities, creating sustainability awareness, creating employment, supporting other small enterprises, providing healthy products, and improving society's livelihood. Benaim and Raftis (2008:8) and Saner *et al.* (2019:3) argue that social sustainability is difficult to achieve because the social dimension appears complex and overwhelming due to the highly intangible dynamics. According to Kolk (2016:23), social sustainability is not about meeting everyone's requirements. Instead, it seeks to create the conditions for everyone to be able to meet their own needs if they so choose. P9 strives to assist poultry women's clubs in maximising their projects by reducing their start-up and feed costs to boost their profits. He declared:

“Recently, they were giving women chicken as projects, and if we can partner, then we train those beneficiaries on feed formulation using the flies. We set up the cages so they can produce their bird (poultry) relatively cheaper than the traditional way they operate. So, I think collaborations and partnerships are the way to go.” (P9)

P10 purchases basic materials from other SMMEs as a means of mutual support. A circular economy is practised; one company's waste is another's primary material; this is sustainable.

“We try to source most of our stuff from entrepreneurs like us, such as Magaba in Highfields. We procure or order in bulk, which lowers the cost. In terms of disposal, where our workshop is located, there's someone who runs carpentry. The baler structure is made out of wood from there.” (P10)

For individuals, institutions, or communities to progress towards social sustainability, any factor that impedes this capacity is considered a barrier and must be addressed (Pierobon, 2019:149).

The social dimension includes ensuring a positive working environment for employees, a sense of social interdependence when pursuing common objectives, and responsible organisational actions. P 5 benefited from a positive working relationship with his employees and attributed their contributions to the success of his business.

“At one point, we thought this would never work, so it was more of having a good partnership with the colleagues we started with, having unity of purpose and being able to work with each other and learn from each other.” (P5)

Adopting an integrative, responsible vision for the surrounding community is a stepping stone in its strategic planning (Bell & Stellingwerf, 2012:30). P5 demonstrated that his enterprise has the idea to impact the local community.

“Waste management has a substantial social impact. Looking at the benefits, health and financial issues, the community upkeep, and how you absorb the youth in the community, making sure they are kept busy is sustainability. These are the future, so if they are groomed, that's sustainability; the recovery of the material is sustainability as their future generation will find the environment suitable for their livelihoods”. (P5)

According to Pascual, van Klink, and RozoGrisales (2011:4), these organisations have "a personal mission to make the world a better place for those around them."

The respondents' responses indicate that the social dimension is the least developed lever of sustainable entrepreneurship. Several SMMEs exhibit and implement social responsibility, but it is not their primary concern. As these companies are just starting, the study discovered that they prioritise their core strategy and product development, which are economic and environmental concerns. Nonetheless, as they continue to develop and expand, it has become more apparent that they have shifted their focus to implementing various social aspects and benefits within their business objective. P6 has been in business longer than any other participant, and his social concerns have grown. He collaborates with numerous social organisations and universities, has adopted a participatory approach in which he consults the grassroots in his strategic planning, and is committed to ensuring no one is left behind. The study concludes that the direct social impact of SMMEs during their startup phase is minimal; however, as they develop and become profitable enterprises, they begin to balance the TBL more evenly.

Although the creation of social value by an individual was perceived to be a common factor, empirical data similarly revealed the conception of social value in favour of a third party or stakeholders (Patzelt & Shepherd, 2011:634). Interviewees viewed value creation through employment opportunities, which enhance an individual's income, social networks, and overall quality of life. P12 and P7 indicated how they improved the lives of their communities through healthy food provision and employment. P12 and P7 showed how they improved the lives of their communities through beneficial food provision and work.

“We have managed to inspire other people, we have taught others, and we did not make them pay, and others are already advertising through social media. We also use our Facebook page to discuss food and nutrition and inform people about healthy options. Socially, we also help the communities to have better health and well-being.” (P12)

“I am working with six farmers producing 6 tonnes of mushrooms a month. They will also employ 2 or 3 people and will cascade like that. We are targeting wealth creation and mechanisation, and it is sustainable.” (P7)

According to Richomme-Huet and De Freyman (2011:6), sustainable entrepreneurs must generate "social cohesion," which refers to meeting the needs of individuals and communities.

6.3.3.3 Planet

The TBL approach was used to calculate the sustainable value within the theoretical framework (Elkington, 1999:397), mirrored in the empirical data. In this context, the intriguing interpretation regarded the apparent existence of value creation based on the interviewer's evaluation of all TBL dimensions. The participants indicated they use sustainable farming practices, produce environmentally friendly products, recycle, save water, reduce greenhouse gases, promote a clean environment and practice a circular economy. In a few cases, interviewees could define all aspects of value creation, but in most cases, the value creation approach resembled environmental entrepreneurship (Cohen & Winn, 2007; Dean & McMillan, 2007) assumptions.

Commonly, environmental value was generated through environmentally favourable solutions relating to energy consumption or the efficient use of energy for various purposes, which accumulated directly or indirectly from economic value (Haugh, 2006:186-187). P4 and P11 are pushing for innovation that provides sustainable energy. Below, they explain how their service protects the environment.

“Apart from aiming to derive financial benefits, we are doing much to help the environment. We are helping businesses, individuals, and institutions to

manage their waste and recover other products from waste, which means, in a way, we are helping to fight pollution. We are helping to reduce greenhouse gases in the atmosphere. In Zimbabwe, 4% of greenhouse gases emanate from waste". (P4)

He went on to show how renewable energy will save the forest.

"With our service, we are also assisting people in reducing deforestation because when they use biogas, they will reduce the use of firewood for cooking." (P4)

"We make profits, and after the system is installed, it offers the client the waste management system and deals with the waste problem. They also get biogas as a renewable resource; trees are not cut down, and the effluent produced is an excellent organic fertiliser for their crops. We employ unskilled labour, thereby providing employment." (P11)

P4 and P11 primarily focus on resolving environmental issues and providing off-grid energy solutions to customers. The primary objective of the interviewees is to solve environmental problems, such as reducing the use of fossil fuels, pollution, and greenhouse gas emissions. This will indirectly encourage these companies to make the world a better place to live, thereby ensuring the long-term viability of our planet. Due to the nature of their sector, agricultural SMMEs prioritise environmental impact, according to the study's findings. Moreover, two resounding aspects emerged: protecting natural resources and resolving an ecological problem initiated by the consumer - a solution-based approach. They recycle and implement sustainable agricultural techniques such as hydroponics and aquaponics that conserve water and land, promote a circular economy, and reduce greenhouse gas emissions.

"Surely hydroponics is the future of farming, in the sense that there is zero land degradation, you recycle water, the produce is of better quality compared to the ground, and it grows twice the quantity and twice the rate." (P1)

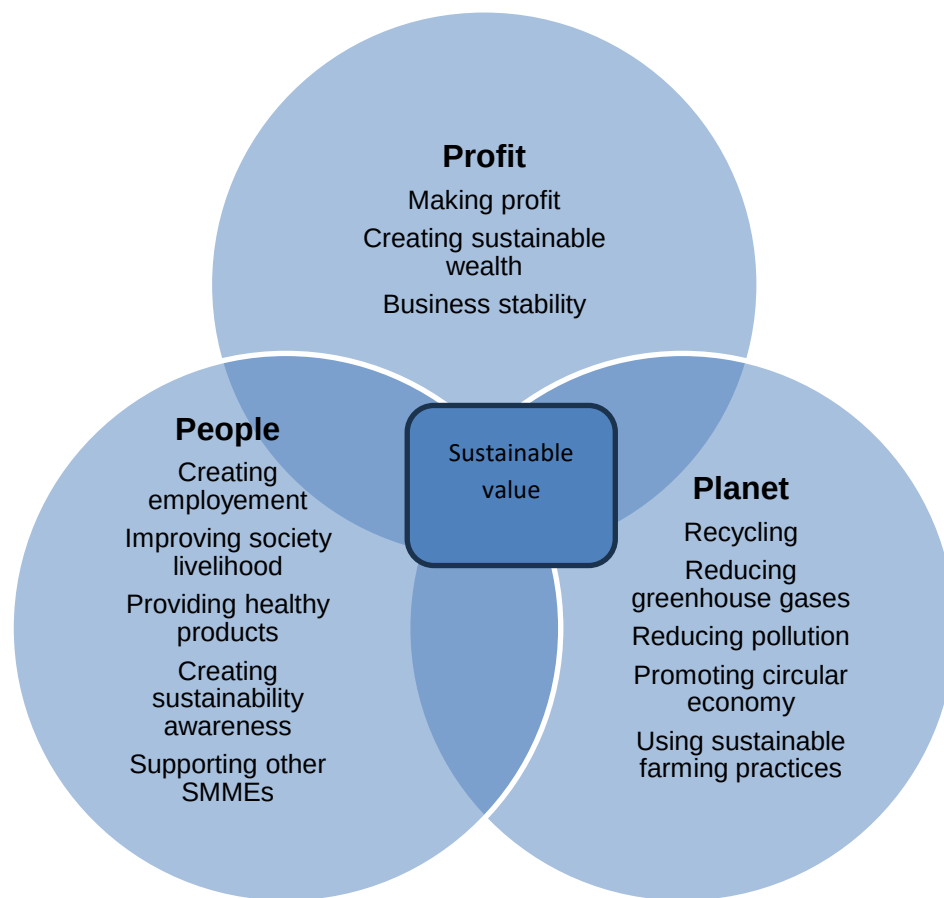
P16 concurred that her business venture protects natural resources.

“We use modern sustainable farming practices that ensure we reduce negative effects on the environment. We use greenhouse and drip irrigation, meaning we are using less water, therefore, taking care of the environment.” (P16)

In a sense, their primary business strategy is an environmental objective.

Figure 6.2 below shows the value of sustainable entrepreneurship in the empirical study from the selected SMMEs in the agricultural sector.

Figure 6.2: Sustainable value from the empirical study



We conclude from the analysis that SMMEs in the agricultural sector balance all three dimensions of TBL in their sustainable business ventures. This is inconsistent with Hockerts and Wüstenhagen's (2010) assertion that entrepreneurs devote all their resources and focus to optimising a single environmental or social issue. This is due to limited resources. Due to their sector, the entrepreneurs might seem to concentrate on the ecological facet. Still, the study found that their business directly or indirectly benefits the social aspect. Even though it was not their primary objective, the SMMEs had to make a profit from their company. Without the perspective of operating a profitable business, the goal of resolving a sustainability-related issue is rendered ineffective, as the entrepreneur's solution becomes unsustainable. Profit ensures the business's long-term viability and longevity, thus the ability to realise the sustainability goals. In addition, as sustainable entrepreneurs develop their enterprises and become

profitable over time, they will have the capacity and resources to balance all the dimensions of sustainable entrepreneurship equally.

6.3.4 Theme 4: Benefits of sustainable entrepreneurship

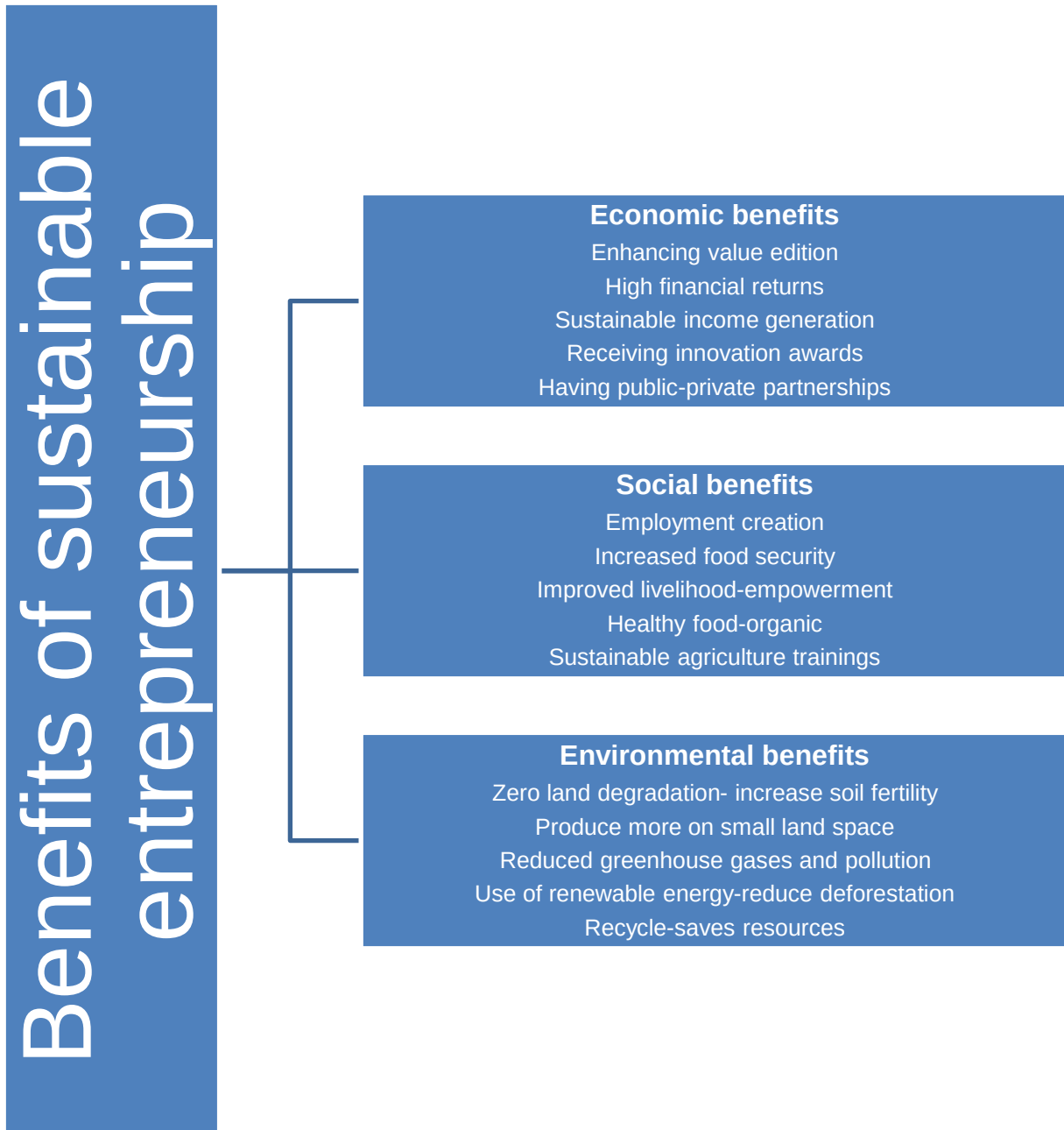
The transition to service-oriented business models, which entails creating economic value to generate societal value, has been a significant change brought about by sustainable entrepreneurship. These sustainable business models require entrepreneurs to incorporate environmental and social value into a broader definition of value (Dickel, 2018:60). This characteristic distinguishes sustainable entrepreneurship from traditional entrepreneurship (Munoz & Cohen, 2017:312). Sustainable entrepreneurship encourages entrepreneurs to generate simultaneous economic, social, and environmental benefits. In this scenario, society benefits from business activities, businesses maximise financial advantages, and ecological issues are reduced.

This theme covers the same objectives as the previous theme. It seeks to answer this secondary question:

- What is the contribution of sustainable entrepreneurship to the economic growth of Zimbabwe?

This research question provides insight into the economic, social and environmental benefits which accumulate when SMMEs in the agricultural sector adopt sustainable entrepreneurship. This research question presents the contribution of sustainable entrepreneurship to the three dimensions of sustainable development in light of the research findings and the extant literature.

Figure 6.3: Summary of findings on the benefits of sustainable entrepreneurship



6.3.4.1 Economic benefits

Economic gain, such as employment distribution, job growth, monetary capital, and investment, improves individuals' socio-economic living standards, principles, and psychological and physical fitness (Parish, 2010:514). A substantial corpus of literature discusses how identifying entrepreneurial opportunities yields economic benefits for individuals and their communities or societies (Parish, 2010:515). The study revealed that SMMEs operate businesses that prioritise the financial advantage of other stakeholders over shareholder profits. P9 prioritises minimising the cost of animal feed for farmers; he stated:

“I was trying to solve problems faced by smallholder farmers, especially in stock feed, because most of their production cost lies in the stock feed, so this is an alternative source of stock feed for SMMEs in agribusiness”. (P9)

Therefore, the concept of opportunities for sustainable development emphasises the economic benefits of economic development for individuals other than entrepreneurs. However, entrepreneurs are not precluded from the help of their progress, which is not a prerequisite for identifying opportunities for sustainable development. Even though he prioritised reducing the cost of stock feed for farmers, P9 indicated that he is profiting from his initiative. As a result of his innovation, he has also received grants and innovation awards from national and international organisations, representing an economic benefit.

“We are not only targeting cash from selling maggots for stock feed.” (P9)
“I got several grants from SMMEs-innovation challenge of 2019- 5000 USD, followed by CBZ, which was \$10000; ILO, Youth Connect; and the recent one, Net Impact from America-\$5000. 75-80% of our finances came from grants.” (P9)

This indicates that in addition to providing economic benefits to other stakeholders, he also benefits financially from his effective business.

The study also revealed that SMMEs are enhancing value addition in agriculture, having high financial returns, sustainable entrepreneurship is a source of sustainable income generation, receiving financial gains from awards and grants for their innovation, and many stakeholders are coming forth to have private-public partnerships with them. P5 indicated the benefits of promoting a circular economy because of sustainable entrepreneurship:

“Economically, there are huge returns if one man's trash becomes someone's raw material. It's going round and round; that is a circularity to me that is sustainability.” (P5)

The circular economy will preserve the scarce natural resources failing to sustain economic activities.

6.3.4.2 Social benefits

Social gain encompasses relative poverty, education measures, equity and access to social resources, health and well-being, quality of life, social capital equity, and equal opportunity (Pankov *et al.*, 2021:166). The study found that the social benefits of sustainable entrepreneurship include the creation of jobs, an increase in food security, an improvement in society's standard of living, the empowerment of marginalised groups, the provision of organic, healthy products, and the provision of sustainable agricultural training to raise sustainability awareness and increase adoption. This supports Pabst *et al.*'s claim (Pabst *et al.*, 2021:319) that social advantages are created by enhancing the well-being, security, and welfare of national states, rural regions, institutions, and, more recently, valued social ties and rural community organisations.

Even though P4, P5, P11, and P15 strongly emphasise social impact, and P15 has even labelled her business as a social enterprise, they are the most well-balanced ventures regarding the TBL. The innovative business model initially enables rural women to establish their own trash-collecting businesses, generating a sustainable and self-fulfilling income. Second, it allows individuals with limited or no access to electricity to utilise a renewable energy source (biogas). Third, it eliminates the chronic

need to purchase and burn costly paraffin to produce light. Paraffin combustion is neither sustainable nor environmentally beneficial. These small and medium-sized enterprises intend to replace this conventional practice with sustainable and renewable energy.

Some participants indicated that their businesses provided jobs and employment in their societies, which benefits society's development. This benefit also reduced unemployment, reduced crime, eradicated poverty, and increased empowerment of marginalised groups. P16 and P5 stated that:

“Waste management has a substantial social impact. Looking at the benefits, health and financial issues, the community upkeep, and how you absorb the youth in the community, making sure they are kept busy is sustainability. These are the future, so if they are groomed that's sustainability, the recovery of the material is sustainability as their future generation will find the environment suitable for their livelihoods” (P5)

“I have always been passionate about business and employment creation. The idea also came when I saw a lot of vendors in high-density areas, so I wanted to create employment for the marginalised groups, especially women and do value addition”. (P16)

P16 also highlighted another social impact, stating:

“The support for the out-growers who can send their children to school has improved people's livelihoods, especially in the rural areas and employment creation. I have also offered agriculture consultancy for people wanting to do the same business and represented young people of Zimbabwe abroad at summits.” (P16)

This direct reinvestment in their children's education is unambiguous evidence of a social benefit, both short-term and long-term.

The study also revealed that sustainable entrepreneurs provide farmers with modern and sustainable agricultural techniques to increase food production, provide nutritious food, and reduce food shortages in the country. According to P2, sustainable entrepreneurship offers nutritional sustenance for the community.

“Farming sustainably benefits people because they are eating healthy because nowadays a lot of people are eating food, but they are still hungry because what they eat does not have any nutrition.” (P2)

P4 revealed that he is helping farmers sustainably increase their agricultural productivity to advance food security. He stated:

“We are providing the small-scale farmers with an important farming input, which is fertiliser, which is a positive contribution in improving their production levels, and through the supply of the product, we are contributing to the improvement of agricultural productivity of the country.” (P4)

This finding is consistent with Abdelkafi and Hasen's (2018:41) assertion that, from an agricultural standpoint, people prioritise the ability to meet food and fibre requirements. In this regard, sustainable agriculture is connected to the likelihood of meeting national and global food requirements, the quality and security of food supplies, the well-being of the population, and human development. In general, it entails expanding people's options concerning three fundamental capabilities: a healthy and lengthy life, education, and a decent standard of living. To meet these needs, food production will need to increase significantly. However, increased production must originate from existing areas instead of expanding agricultural land. Competition from other human activities and the growing urgency of protecting vital ecosystem services (such as carbon storage in the rainforest or services provided by non-farm biodiversity) make expanding agriculture to new lands rugged (Pretty *et al.*, 2011:16).

Agribusiness has resulted in numerous benefits for producers. In addition to an enhanced nutrient balance, there is a "significant increase in the productivity of staple food crops and... food security" (Asaah *et al.*, 2011:115). Increased yields enable farmers to cultivate food crops on a smaller land area, allowing them to diversify into

other crops or agricultural products based on their needs. For example, Asaah *et al.* (2011:115) discovered that farmers had become beekeepers, allowing community members access to honey. This study also revealed that P6 has adopted agroforestry and begun beekeeping, benefiting the community.

“We have partnered with three groups in Makoni District and a UK organisation called Bees for Development, where we got the opportunity as we had the experience of managing a grant since we got 1st prize under the Agribusiness. Due to our compliance, we plant trees, guard against fires, and abide by the Bee Act, Environmental Management Act, and Rural and Urban Councils Act. All these affect us in one way or another.” (P6)

6.3.4.3 Environmental benefits

The concept of a 'planet' emphasises the impact of an entity on the environment and natural resources, such as oxygen, water, and energy. How to mitigate it (Crals & Vereeck, 2004:3). The study's findings concur with those of Crals and Vereeck (2004:3) in that the adopted sustainable entrepreneurship provides environmental benefits through zero land degradation, protecting and increasing soil fertility, producing more on a small plot of land, reducing greenhouse gas emissions, reducing pollution, utilising renewable energy, reducing deforestation, and conserving resources through recycling.

“The other farmer, who is into poultry, we did a digester for her; they used firewood to dress their chickens and now use biogas to heat their water. They use the chicken waste in the digester. So it is some form of value-adding and circular economy, the residue from the digester is also used as fertiliser in their fields to increase soil fertility, that's also a plus to agriculture.” (P4)

P1 indicated that his project saves water through recycling, no-tillage, and no deforestation, and he promotes smart agriculture.

“For starters, this type of business doesn't take much space, so there is no tree cutting, no soil degradation, changing the soil and tilling and all that. We are

reusing the water and running away from synthetic fertilisers. We use fish waste (aquaponics) as fertiliser to power our system; I believe we are climate smart.”
(P1)

P5 is increasing agricultural productivity through its sustainable soil enhancer, preserving trees by introducing sustainable bio-carbonated charcoal. He stated:

“Our model on the compost, where we turn the biodegradable waste into soil enhancers, 60 to 65% of waste is biodegradable; there is massive potential in the business and in supporting the agricultural sector. Then we have started making bio-carbonated charcoal, which can be used in the tobacco and agricultural sector and energy for households in the rural areas, and we have been cutting down trees in the tobacco sector and homes.” (P5)

P11's business provides environmental gain through reducing pollution, providing renewable energy, reducing deforestation and increasing soil fertility through biogas effluent.

“We make profits, and after the system is installed, it offers the client the waste management system and deals with the waste problem. They also get biogas as a renewable resource; trees are not cut down, and the effluent produced is an excellent organic fertiliser for their crops. We employ unskilled labour, thereby providing employment.” (P11)

These technologies and practices have resulted in widespread improvements and increased crop production. They are an essential component of the suite of strategies required to mitigate or adapt to the effects of climate change at the parcel, farm, and landscape scales. These practices have increased yields and resilience, thereby contributing to food security and poverty alleviation, as well as generating significant positive externalities, such as increased carbon sequestration in soils, nitrogen-fixation, reductions in the use of synthetic pesticides, decreased runoff and soil erosion, increased groundwater, and a greater diversity of habitats and species. Natural resources are scarce and non-renewable, necessitating their protection (Majid & Koe, 2012:304). According to Shepherd and Patzelt (2011), nature and the

environment are crucial factors that must be preserved in sustainable entrepreneurship. Therefore, it is essential to emphasise that entrepreneurial action can and should contribute to maintaining biodiversity by protecting the ecosystem, combating climate change, reducing environmental degradation and deforestation, improving agricultural practices, and increasing freshwater supply. According to Richomme-Huet and De Freyman (2011:6), sustainable enterprises should include environmental protection among their company values.

SMMs are raising society's awareness of sustainability to appreciate sustainability completely. P5 accomplished this by exposing them to a clean and secure environment, which they now understand, thereby instilling in them a culture. He declared:

“For instance, a lot of households and companies pay to the local authorities, but because of the services we are providing now, they are beginning to appreciate that they should pay for the services, and we believe there is going to be massive growth if we keep on being efficient.” (P5)

This not only has environmental benefits, but it also encourages a company's culture to have a greater personal awareness of acting environmentally conscious.

Sustainable entrepreneurship can be advantageous to the economy, society, and environment. Adopting it reduces poverty, increases food production, protects the environment, creates jobs, improves livelihoods, and boosts the nation's economic development.

6.3.5 Theme 5: Strategies that encourage the adoption of sustainable entrepreneurship

This theme answers the fourth research question of the study below:

- What strategies can encourage SMMs in the agriculture sector to adopt sustainable entrepreneurship?

The researcher aims to determine the strategies that can be adopted to influence SMMEs to adopt sustainable entrepreneurship. Below is a summary of the strategies which were found in the study. They are grouped into:

- Financial strategies
- Policies
- Partnerships
- Training and awareness

Table 6.5: Strategies that encourage the adoption of sustainable entrepreneurship

Financial Strategies
• Funding • SMMEs need financial support • Have a proper accountability strategy
Policies
• Develop SMMEs bank with low interest rates. • Need an excellent economic and political environment • Avail ministerial support • Conducive and supportive policies • Finance sustainable businesses • Reskilling to focus on green business • Incentivise innovative SMMEs • Helping with access to markets • Registering must be easy to encourage compliance
Partnerships
• Collaborations and partnerships with the government • Strong partnerships with SMMEs • Collective effort-Government, SMMEs, NGOs • Give SMMEs access to university infrastructures for experiments
Training and Awareness
• Educate people on the impact of unsustainable practices. • Educate the opportunities for greening their business • Stimulate the market for green products • Include sustainability in the school curriculum • Spell out the benefit of sustainable entrepreneurship • More training on sustainable entrepreneurship • Encourage every new business to protect the environment • Training for SMMEs

6.3.5.1 Financial strategies

The research found that for SMMEs to adopt sustainable entrepreneurship, they need financial support, funding, and a sustainable accounting strategy. Many participants highlighted the lack of funding to balance sustainability dimensions; hence, if the hurdle is resolved, many SMMEs can adopt sustainable entrepreneurship.

Many participants revealed that SMMEs need financial assistance to turn their innovative ideas into sustainable businesses. The funding should be enough to take up the project in foreign currency since most project costs are in foreign currency. The interest rates and repayment period should be favourable for SMMEs to take the loans to start up their businesses. If these requirements are met, many SMMEs will adopt sustainable entrepreneurship, knowing they have financial support. P9 said:

“We need to look into the budget of SMMEs, particularly those looking for financial assistance and offering assistance in a competitive currency, say in USD because currently, no business can run using our local currency. The loan repayment period should be flexible; remember, some of the innovations by SMMEs will be at an ideating stage. Hence, it isn't easy to go to a bank and say I have this idea, which requires 5000 USD to take off. There is no financial institution in Zimbabwe which can finance an idea. They will say they want to see your financial cash flows and three months' bank statements, but none are there. But there is an idea which can turn the financial situation of young people in the country from ashes to riches. It is “not being supported that far. Their interest rates are also very high.” (P9)

P5 indicated that there is a need for financial institutions to support sustainable innovation, reskill and refocus and include sustainability in their economic models. He stated:

“The green revolution is a global trend. In any development, you must look at financing and influencing financial models supporting green financing goals and proper waste management. If you look at the returns, they are huge, but most

financiers have not tapped into that knowledge. We need to relook into reskilling, focusing on this new business area of sustainability.” (P5)

P4 also indicated that the government could facilitate access to funding for SMMEs by enabling a pull-together fund with favourable loaning facilities. He stated:

“Government can significantly increase access of SMMEs to financial assistance and facilitate their growth. Government to pull together resources, something like a financial pull where existing SMMEs can contribute and then at some point, they will be able to access those finances in that pull, use them to grow their business and then pay back at reasonable interest rates, that would go a long way in terms of helping SMMEs to grow their business.”

The researcher concluded that SMMEs are not keen to adopt sustainable entrepreneurship due to limited resources but can be successful sustainable entrepreneurs if they are financially supported.

6.3.5.2 Policies

Policymakers and decision-makers are responsible for introducing new measures that encourage businesses to innovate and reconsider their operations sustainably (Paletto *et al.*, 2021:1055). Consequently, governments play a fundamental role in facilitating the transition to a sustainable economy. This is in line with the findings of the empirical study since the participants indicated many strategies aligned with policies. The participants stated that there is a need to develop SMME banks with low-interest rates, need an excellent economic and political environment, avail ministerial support, conducive and supportive policies, finance sustainable businesses, reskilling to focus on green business, incentivise innovative SMMEs, help with access to markets and registering must be easy to encourage compliance.

According to Nill and Kemp (2009:670), legislators can focus on establishing limits on emissions and releases and use taxation in the form of tariffs, fees, charges, levies, and pricing policies to internalise externalities and increase the adoption of sustainable enterprise. These were not, however, mentioned in the empirical study. Moreover,

Zollo *et al.* (2013:252) argued that various economists who evaluate neoclassical approaches as constraints on sustainable innovation view these systems as inefficient. In addition to the well-known difficulty of measuring and assessing externalities, establishing taxes and limits is considered an additional cost and effort that compromises revenue and limits industrial stakeholders' incentive to go beyond merely hedging over set requirements.

In recent years, win-win solutions have been explored through the implementation of participatory processes that facilitate knowledge creation, transfer, and sharing among all the local community's stakeholders (Stirling, 2011:85). Participatory approaches to knowledge creation and dissemination have yielded products and practises that are pertinent to farmers' requirements and suitable for their context. The reviewed literature also emphasised the significance of appropriate, low-cost technologies created with smallholders' financial constraints in mind. This strategy has allowed knowledge and new practices to spread organically throughout communities, with farmers teaching one another and allowing individuals to apply techniques to their circumstances. Awareness has been disseminated through the use of mass media, including television broadcasting, the creation of pamphlets, the use of print media, and even the use of videos for peer-to-peer learning. In conclusion, upscaling has been achieved, and further dissemination is ensured by developing and disseminating low-cost, context-appropriate technologies that are amenable to sharing and adaptation and yield widely discernible benefits. It can be adopted incrementally by smallholders with limited land, capital, and labour resources.

P2 indicated that the government should partner with sustainable entrepreneurs in knowledge transfer and use its capacity to disseminate the techniques to the general populace. He stated:

“There should be TV programmes promoting sustainable enterprises showcasing entrepreneurs who are farming sustainably and responsibly, and then people will start to see and appreciate what some of us are doing. Also, the government runs the nation, and the ministry runs agriculture, so if it is from the top, I think it is a bit easy for it to disseminate or to go further to everyone. There are structures so that it can be enrolled throughout the country quickly.

So, the government can partner with these few sustainable enterprises to further the knowledge.” (P2)

It indicates that policy is not formulated independently of political agendas and corporate interests (Nill & Kemp, 2009:670). By implementing digital and intelligent technologies, the current political agenda seeks to transform the economy from linear to circular and from fossil to bio-based resources (Stirling, 2011:86). Due to direct stakeholder engagement, numerous innovations have originated from producers.

6.3.5.3 Partnerships

The case studies reviewed by Pretty *et al.* (2011) demonstrate how the development of social capital helps to develop, disseminate, and sustain innovations, allowing farmers and communities to maximise their investment in agricultural development. Social capital incorporates interpersonal and intergroup relationships in cultural and economic life. It is based on trusting and reciprocal relationships and is maintained through norms and sanctions. Social capital is necessary for the successful and long-term adoption of agricultural innovations and environmentally responsible practices and technologies. In the empirical study, many SMMEs indicated that they adopted sustainable entrepreneurship with the help of their social capital. P13 revealed that she started her sustainable business with the help of her friends in Lithuania:

“I was looking for something from the development sector, and I was looking for something to do on my own, and some friends from Lithuania asked if I did not want to start selling these products.” (P13)

Several novel partnerships between farmers, private sector organisations, and public sector groups and organisations have yielded outstanding returns. The study demonstrates how novel partnerships and linkages have facilitated the development and dissemination new agricultural practices, market links, and value chains.

“Another support I expect is strong partnerships needed to partner as SMMEs in a group of youth and women. Recently, they were giving women chicken as projects. If we can partner, we will train those beneficiaries on feed formulation

using the flies. We set up the cages so they can produce their bird (poultry) relatively cheaper than the traditional way they operate. So, I think collaborations and partnerships are the way to go.” (P9)

“Getting partnerships, especially with women who have been marginalised, we have partnered with three groups in Makoni District and a UK organisation called Bees for Development.” (P6)

Notably, the study demonstrates the significance of various partners of varying sizes supporting multiple facets of each development endeavour, including funding, research and development, dissemination, providing support and opportunities for value addition, and marketing and sales.

Through providing knowledge, innovation, and markets, the private sector may play a beneficial role in fostering sustainable entrepreneurship. These can help to ensure that increased crop yields result in increased incomes for producers. Farmers are eager to participate in well-regulated and equitable markets. It is also evident that the global private sector is a significant source of much-needed agricultural investment. It has been demonstrated that partnerships between the public and private sectors yield substantial positive outcomes (Pretty *et al.*, 2011).

These relationships, as well as the trust and cooperation they engendered, were viewed as highly beneficial by the farmers (Mitei, 2011:62), who stated:

“If SMMEs in the agricultural sector can create associations, they can negotiate with financial institutions collectively. SMMEs can also partner or collaborate with other prominent organisations with collateral and approach banks together.” (P2)

When SMMEs partner with big corporates, they can access loans using their partners' collateral.

It can be concluded that policy support is essential for the efficacy of investments in agricultural sustainability. Supportive policies are well-targeted to their context to enhance welfare, reduce poverty, and contribute to the nation's sustainable economy.

6.3.5.4 Training and awareness

Entrepreneurs are constrained by their operating environment. Introducing and disseminating sustainable innovations requires extensive structural and organisational modifications to the system context. Policies, regulations, interactions, norms, and societal pressures influence entrepreneurs (Jacobsson, 2002:350). When entrepreneurs seek to introduce sustainable innovations that challenge the status quo in a given field, conflicts may arise with the established actors and institutional standards (routines, structures). The study found a need for training and raising awareness to increase the adoption of these sustainable innovations. The participants suggested that there is a need to educate people about the impact of unsustainable practices, educate them about the opportunities for greening their business, stimulate the market for green products, including sustainability in the school curriculum, spell out the benefit of sustainable entrepreneurship, more training on sustainable entrepreneurship, encourage every new business to protect the environment and hold training for SMMEs.

P4 revealed that many people are not aware of sustainable entrepreneurship. Hence, there is a need for training. There is a need to stimulate the market to increase awareness and demand. SMMEs need to know the damage they cause because of unsustainable practices; ignorance affects all the facets of sustainability.

“Training is one of the most critical strategies. Many people might not know what it fully entails when you say sustainable entrepreneurship. Please review the policy framework; our policies must be conducive to sustainable entrepreneurship. The government needs to implement policies that enforce and support sustainable entrepreneurship. We need to do a lot to stimulate the market for green products. Suppose people know the full implications of their actions on the environment and the opportunities for greening their business. In that case, they will also adopt sustainable entrepreneurship.” (P4)

Sustainable entrepreneurs whose actions, or the introduction of new products or services, have the intention or potential to alter the existing institutions and structures must, therefore, employ strategies that concentrate on their business and actively modify the context that enables their business to take off. In this study, P4, P5, P10 and P15 aim to introduce sustainable products and technologies (renewable energy-biogas) to increase the sustainability of the agricultural and energy sectors. There is a need for extensive awareness of biogas, explaining the short- and long-term benefits of using biogas instead of firewood, which they have been using for a long time. The customers need to understand the opportunity cost involved in deciding to take up the innovation.

Jacobsson (2002:350) argues that innovations emerge not in a vacuum but through a dynamic interplay between various players such as corporations, universities, and government agencies. P6 agrees with Jacobsson's assertion; he works very well with educational institutions; he stated:

“We were awarded for working with the Africa University and MSU in the Applied Science Department and the Magamba Training Centre.” (P6)

P16 indicated that SMMEs would benefit from access to higher education infrastructure for experiments. She, too, is supporting other farmers by providing consultancy services.

“Access to infrastructure at tertiary institutions would go a long way in supporting SMEs. (P16)

“I have also offered agriculture consultancy for people wanting to do the same business and represented young people of Zimbabwe abroad at summits.” (P16)

According to Rosalinde & Woolthuis (2010:514), the central concept of sustainable innovation results from the interactions of all entrepreneurs and institutions that impact the rate and direction of innovation in society. Therefore, innovation is both an individual and a collective act, resulting from interactions and coordination between

multiple firms and organisations as opposed to the actions of a single dominant firm acting independently.

6.3.6 Theme 6: Challenges in adopting sustainable entrepreneurship

Despite their lack of business experience and financial resources, small and medium-sized enterprises (SMEs) encounter similar challenges when attempting to strike a balance between the elements of the triple bottom line (Auwal *et al.*, 2018). This theme aims to answer the second secondary research question of the study.

- What are the challenges faced by SMMEs in the adoption of sustainable entrepreneurship?

It seeks to understand the challenges the SMMEs faced in their lived experience as sustainable entrepreneurs. Table 6.6 gives a summary of the challenges faced by the participants.

Table 6.6: Summary of findings on the challenges faced by SMMEs

Challenges	Challenges
Economic Environment • Volatile currency • High cost of exporting • High-interest rates • High unemployment • Low income-low sales • Bad debts • Volatile policies • Unstable economy • No foreign currency for imports • High cost of production • Expensive licences	Capital • No collateral-no loan • No credit facilities • Lack of capital • Capital intensive • Most SMMEs do not bank, have no banking history • Most SMMEs have no financial records
Lack of knowledge of the project/product • Misconception of the project/product • No networks • Knowledge gap • Brain drain	Technology • Raw material not locally available • Technology not yet mature locally • Machinery not available locally

Organisational Structure • Had no referral • Low growth rate • Farmers killed the soil for a long time • Farmers not making a profit Most SMMEs are not registered.	Legislative • No financial support • No support from responsible ministries • Opportunities are politically aligned • Volatile policies • Corruption • No regulation on agricultural products • Little encouragement for sustainable farmers
COVID 19 Pandemic • Was affected by COVID-19	Competition • Our price is not competitive • Product highly perishable • Stiff competition • People want quantity, not quality

The major challenge revealed in the study is the lack of capital. Most sustainable projects are capital-intensive, making it difficult for SMMEs to adopt them without financial assistance. Moreover, most sustainable businesses take time before they are profitable; hence, SMMEs need capital to sustain themselves during breakeven or loss-making periods. The study revealed that most SMMEs have approached financial institutions for loans. Still, they are not getting financial assistance due to lack of collateral, banks do not support sustainable ideas which have not yet been implemented, some SMMEs do not have banking history to support their loan applications because they do not bank their sales, and some financial institutions do not have credit facilities that cater for sustainable entrepreneurs.

P1, P2 and P4 revealed they faced working capital challenges and were not getting loans from financial institutions because of a lack of collateral.

“No, because banks require collateral and most startups like us don’t have title deeds, we don’t have anything to put as collateral. So it is hard for us to find finance.” (P1)

“Capital was the main challenge. Only a few are getting financial support. There is an issue of collateral that many SMMEs do not have, so getting financial aid is a bit of a challenge.” (P2)

“Financing the venture was a huge challenge.” (P4)

P5 and P9 indicated he could not get financial assistance because the bank could not fund his sustainable idea.

“No, simply because if you look at the entrepreneur's ideas are not common ideas which are still at premature stages, financial institutions are sceptical about financing those ideas or businesses. I met with my bank; they did not appreciate the waste management industry. It is new to them, so to finance something they do not understand is impossible. Still, if you look at global trade, waste management is the 2nd biggest industry in the world.” (P5)

“The financial institutions are not even taking it up to support the SMMEs to implement their innovation in the country; if it wasn't for these international awards and grants, our project could have been crawling or could be an idea up to now.” (P9)

P16 admitted that they (SMMEs) are equally to blame for their lack of financial support because of their mismanagement. They do not have any financial records to support their loan applications. She said:

“Then, on access to finances, when you approach the bank, they need collateral, but as young people, you will not have it, and you could also be told we are not giving agricultural loans. Most of the SMEs are not banking, so for them to get the funding, they will not have a banking history; also, there are no financial records” (P16)

This is a consistent theme in the global literature (McKeiver & Gadenne, 2005:520) that 'smallness' creates limitations on their resources; consequently, many will not have the financial strength to withstand the projects. The perceived cost is another

reason SMEs do not participate in sustainability management. Profit is the driving force behind businesses of all sizes, so factors that negatively impact the bottom line will always be difficult to surmount. Unlike other investments, the return on investment from sustainability initiatives may not be immediate (Luetkenhorst, 2004:160).

The second challenge the empirical study found is the unstable economic environment. SMMEs highlighted that they face the challenge of volatile currency, high cost of exporting, high-interest rates, high unemployment, low-income sales, bad debts, volatile policies, unstable economy, no foreign currency for imports, high cost of production and expensive licences.

P1 indicated that because of the unstable economy, they are losing more in supplying credit because the value at payment is less than the value of the good provided; the money will have already depreciated because of high inflation. He stated:

“Ok, let me start with economically; in Zimbabwe, with our currency, it’s hard to do business in the sense that big companies, you can give them something and pay in two weeks or so, you find you quote them at a certain amount and in two weeks the amount has lost value, it is volatile.” (P1)

Sometimes, even if the customer pays on time, the money will not be available in the bank due to cash shortages, withdrawal limits, and exchange rate changes.

“Economically, the financial governance has let us down. Let’s look at the banking sector today. We have a lot of changes in policies that dismantle our operations because we have to change to suit the banking changes. Issues to do with exchange rates, change in currency, the threshold is this amount you want to use your money and its not available.” (P5)

“Our currency is not stable. You are supposed to charge our products and services in local currency. A client pays using the local currency in the bank account. Still, it will be less than the expected value when you want to withdraw the particular money. They need thick skin, which must be a calling or a passion.” (P16)

P7 raises a concern that interest rates are incredibly high when they access loans, which do not tally with the small margin they will charge at their entities. He said:

“You can get the funds, but the interest rates are not workable. The margins which I am doing in my niche market do not permit me to take loans with high-interest rates.” (P7)

P12 indicated they face a challenge due to suppressed disposable income; there is high unemployment, so people cannot support their sustainable businesses and opt for cheaper, unsustainable products.

“Economic challenges, the exchange rate we lose money due to exchange rate risk we buy our material in USD and sell in local currency. Due to unemployment and low GDP, people have low incomes. Microgreens are considered a luxury.” (P12)

The empirical study also revealed that SMMEs face technological challenges in their sustainable entrepreneurship journey. Some SMMEs indicated that their raw materials are unavailable locally; for example, P9 could not get his black soldier fly larvae, and P12 could not get organic seed for her micro greens and material for the greenhouse.

“The machinery which we use is not locally available; if we are to get them locally, that means we have to improvise- so you will not get the exact tool you need; hence, technology-wise, there is still a technology gap.” (P9)

“I wanted to start the project with the seed for the flies, which was not locally available in Zimbabwe.” (P9)

“There are no organic seeds, and they are expensive, so I would need to import organic fertilisers and the resources to build the greenhouse.” (P12)

The study also found that some technologies SMMEs will be adopting are not yet fully embraced in the country, so their acceptance will be low.

“The biogas technology has matured for many years; it's only being adopted in our country. Its commercial viability is well-proven. Several African countries are miles ahead of us regarding technology adoption.” (P4)

Lack of knowledge of both the SMMEs and the target customers was a challenge revealed in the empirical study. Some sustainable entrepreneurs' projects faced misconceptions; people could not fully understand these projects' importance, benefits, and viability. There was a misconception about P5 (recycling waste), P6 (beekeeping), P7 (mushroom farming in sacks), P9 (black soldier fly husbandry), P12 (micro greens farming) and P15 (recycling waste).

“Waste management is a discouraged business, even in the family. It takes time for people to appreciate it.” (P16)

“There is a misconception like the new project, which involves looking after flies; people will give you many names”. (P9)

“The products are not well appreciated except by people who have travelled or have interacted with white communities to know the importance of vegetables in the diet.” (P12)

The study also revealed that SMMEs have a challenge of lack of knowledge of the field in which they will be venturing; for example, P1 had no agricultural background, and P5 had no business management experience.

“I don't have a background in agriculture, so I had to do research; I had to engage people who have been into hydroponics for some time, to the extent that I would feel that I was encountering fewer challenges. I overcame the challenges through research and networking.” (P1)

“Remember, we never said we wanted to go for training or administrative knowledge; we started learning as we were implementing, so the challenges

were everywhere in every financial management, administration, and operations department.” (P5)

Many people have died due to poisonous mushrooms; hence, P7 is facing the challenge of customers being sceptical about buying his mushrooms. Customers often ask for confirmation if the mushroom is safe, *“They just ask if they are not poisonous.”*

Legislation is one of the significant challenges mentioned by SMMEs in the study. They revealed that they are not receiving any financial support from the government, opportunities are politically aligned, the policies are volatile, there is too much corruption, no regulation on agricultural products, there is little encouragement for sustainable farmers, and there is no support from responsible ministries in their case Ministry of Lands, Agriculture, Fisheries, Water, Climate and Rural Development and Ministry of Women Affairs, Community, Small and Medium Enterprises.

P13 indicated that SMMEs are facing a challenge of lack of government support; they are trying to push for sustainable good practices but do not have permission. Hence, the adoption of sustainable entrepreneurship will be decelerated.

“From the government perspective, there is very little support at the policy level. There is little encouragement for farmers to use organic products, sustainable products, and environment-friendly products; for example, in Europe, the farmers are almost forced to use at least part of their environmentally friendly inputs, whereas, in Zimbabwe, there is no policy to encourage the farmers to start reducing chemicals and synthetic fertilisers which is a gap.” (P13)

SMME also revealed that their sustainable projects are being slowed down by counterfeiting raw materials, affecting the final product's quality.

“Everything is fragmented; the seed is not regulated, and there is no quality seed supply. There is a need for some control because there are many counterfeits and no infrastructure to support its farming.” (P7)

Corruption is also a big challenge which sustainable entrepreneurs face in their business. To avoid red tape or get approval, one must pay a bribe, which is unhealthy for a business. P11 said:

“Corruption more than anything else. We once did a project with the city council when we needed police clearance; it was difficult. We had to pay some money, and even the company registration took a long time; you get slowed down, and you will face obstacles if you follow the proper channels because of someone who will want to be paid.” (P11)

The study also revealed that opportunities are not equally available to SMMEs; they are politically influenced. Moreover, there was an outcry of corruption; SMMEs are made to pay bribes to get services, which is very unhealthy for small businesses since it increases costs on an already constrained budget.

“Yes, we are facing challenges. We talk of politics; if you are not aligned with the party ruling at that particular time, you are not in a position to access other opportunities.” (P2)

SMMEs also indicated that they face the challenge of a lack of referrals for their innovative works. P4 faced that challenge; institutions could not engage him to construct a biogas furnace without them seeing where he had built before. So, he had to make a biogas plant for free to have somewhere to point to when referrals were needed.

“When starting a business without experience and no experience, people would want to know, okay, you are talking about biogas. They will ask where you have done it before. So, we had to make sacrifices for the reference issue and build a biogas digester at a loss. We constructed a biogas digester at our Board Chairman's farm to have a reference point. We installed a biogas refrigerator at that farm, which was quite innovative.” (P4)

The challenge affecting the agricultural productivity of the SMMEs in the farming sector is caused partially by the unsustainable practices they have been doing all these years.

“For 30 to 40 years, they have been killing the soil; now, the soils are dead and not producing anymore. The farmers are not making a profit anymore; they cannot compete in the region because the import prices are high and the production is too expensive.” (P13)

Due to technology, the world is now a global village. However, this is exerting too much pressure on sustainable entrepreneurs. The SMMEs indicated that their prices are not competitive, there is stiff competition, people want quantity, not quality, and some SMMEs deal with highly perishable, exposing them to post-harvest losses with demand being lower than their supply.

“Stiff competition from established brands that do traditional farming. The challenge is that people worry about quantity, not quality, and lack knowledge on how much fertilisers and pesticides have been used.” (P12)

“The issue of globalisation, we face competition from cheap imports from China, their products are cheaper than the ones we will produce.” (P11)

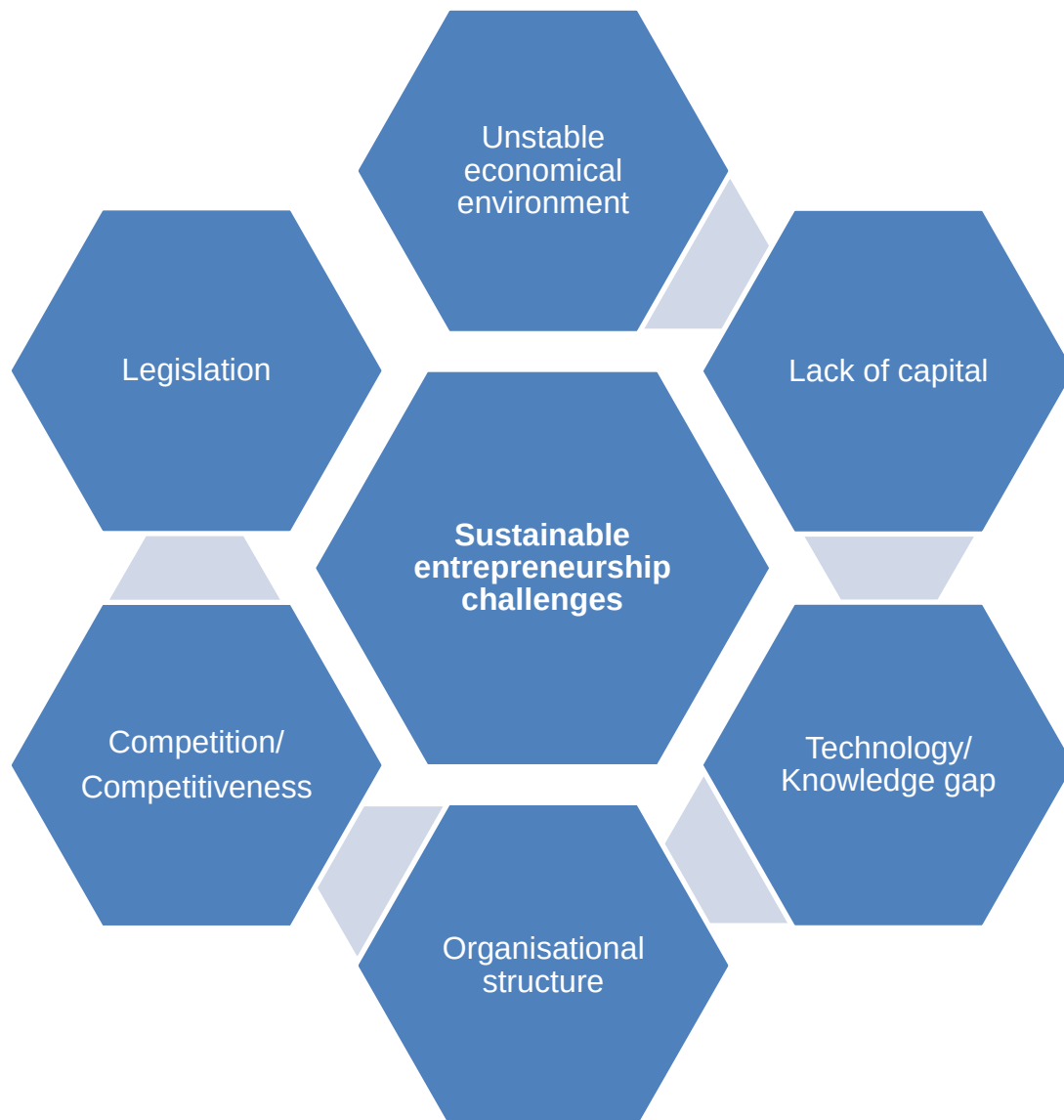
P12 further indicated the challenge of post-harvest losses.

“Sometimes it, not the capital but the clients since we expect someone to buy, so the risk we face is post-harvest losses. Microgreens are highly perishable, meaning lots of income losses.” (P12)

The perishability of their products indicates that any disturbance in the supply chain will significantly affect them. That shows that they were not spared by the COVID-19 pandemic, which put everything on hold for some time, meaning the produce due for sale was negatively affected, causing a significant loss to the SMMEs in the agricultural sector. A few mentioned this challenge, presumably thinking the pandemic is gone and no longer worth mentioning.

Figure 6.4 below summarises the challenges sustainable entrepreneurs in the agricultural sector face in pursuit of sustainability.

Figure 6.4: Sustainable entrepreneurship challenges



Overall, we conclude that there are many challenges which SMMEs face in their lived experience as sustainable entrepreneurs. Some are contributed by unsustainable practices by other SMMEs, some are economic, some are aligned to the legislation, and some come from being small. However, the research participants showed that despite these challenges, they are determined to make their sustainable businesses successful; they have developed strategies for overcoming the challenges, and the recommendation is given below.

6.3.7 Theme 7: Recommendations

This theme covers the last secondary objective of the study, which aims to recommend which SMMEs can increase the adoption of sustainable entrepreneurship by other entrepreneurs in the agricultural sector. The recommendations were made to four different groups:

- To legislators
- To SMMEs
- To general populace
- To business world

6.3.7.1 Recommendations to legislators

The empirical study found the recommendations below from the participants:

Give SMMEs financial support.

- SMMEs need funding for them to scale up their operation.
- The government should be supportive of SMEs. Looking at the ideas, there is excellent innovation within the SMEs. However, some ideas die before even kicking off due to a lack of support, mainly financial aid.
- There should be government backing to increase SMME access to financial resources, especially during the inception phases. Many people have brilliant ideas that culminate into successful businesses if adequately supported.

- The government can significantly increase SMMEs' access to financial assistance and facilitate their growth.
- Allocate funds for sustainability issues in the national budget, which can go a long way.
- Empower farmers so that they can invest in machinery.

Have tailor-made solutions for SMMEs in agriculture.

- Involve entrepreneurs in the planning meetings for sustainable intervention to participate fully, increasing the intervention's uptake.
- Include the entrepreneurs in the rural areas; do not neglect them. Let us go to the grassroots to tailor-make solutions for agriculture in Zimbabwe.

The ministry should partner with SMMEs and spearhead sustainability.

- Collaboration on doing some programs and projects, even having a talk show on TV, can change people's minds.
- The government should spearhead sustainability; it is easy to disseminate or go further to everyone. There are structures so that it can be enrolled throughout the country quickly.
- Government can partner with these few sustainable enterprises to further the knowledge and uplift the communities.

Conduct training for SMMEs

- There is a need to train SMMEs in agriculture capacity building, letting them know of the impact of their activities on the welfare of societies and the environment.
- Making them aware of what can be done, the best available technologies to improve their processes, and the best sustainable practices.
- It is also essential to support them with information on other sustainable alternatives when they have no other options; they will be left with very few choices.

- There should be some education and some training. There should be an ongoing training program that will reach out to entrepreneurs, making them aware of what is happening.

Include sustainability in the educational curriculum.

- The education system should teach sustainability.
- There is a need to groom entrepreneurs, which means by the time they complete their ordinary level or A level or Bachelor's degree, they should know that this is the direction they should be going. We need to lay a good foundation for entrepreneurship. Then, we discuss different tools to support them, such as training and coaching.
- Training at the tertiary level should be redesigned; they should be prepared to be entrepreneurs and create employment when they leave tertiary. We need to train them on sustainability issues.
- Our educational curriculum should include sustainability; young children should know they should look after the environment.

Incentives and subsidies for sustainable SMMEs

- There should be incentives and policies that support SMMEs.
- There should be incentives and subsidies for SMMEs doing sustainable farming because they do it for people and the environment.
- Give carbon credits to SMMEs for protecting the environment and mitigating climate change.

SMMEs in agriculture need land.

- SMMEs need land to upscale their sustainable projects.
- The Ministry of Land and Agriculture must play a part in the land issue because it is costly, and many SMMEs cannot afford it without financial support.
- Ministry should help SMMEs to get land.

Need for proper information dissemination.

- We need to get the word out there; you find that not so many people know about hydroponics. Suppose we can have educational clinics and workshops on teaching the community this type of farming. In that case, it will go a long way.
- There should be TV programmes promoting sustainable enterprises showcasing entrepreneurs who are farming sustainably and responsibly. Then, people will start to see and appreciate what some of us are doing.

Need for supportive policies.

- Sustainable entrepreneurship adoption can increase through supportive policies.
- The Ministry of SMEs should come in to promote some of the required licences.
- SMMEs need supportive structures.
-
- There should be regulations on production and incentives for those producing organic and sustainably produced products.
-
- The Ministry of Agriculture should encourage integration of organic inputs into farming.
- The ministry should update outdated policies to include sustainability elements.

From the study, the researcher concluded that the recommendations to the legislators are:

- Provide access to loans and financing options with affordable interest rates. Due to their limited financial resources and absence of collateral, SMBs frequently struggle to obtain financing. The government can assist by providing small businesses access to low-interest loans and financing options tailored to their requirements. This will allow them to develop and invest in their companies.
- Provide tax incentives and breaks. Small businesses frequently encounter significant obstacles when it comes to tax payments. The government can assist small businesses by providing tax exemptions and other incentives. For

instance, it can reduce the tax rate for small enterprises or offer tax credits for particular investments or expenses. This will simplify small businesses' ability to afford operating expenses and invest in their expansion.

- Provide business education and support services. Many small business proprietors lack the skills and knowledge necessary for successfully operating and expanding their companies. The government can assist businesses by providing education and support services. This may include programmes in financial management, marketing, and business planning. It may also include mentoring, networking, and advice on accessing funding and other resources.
- Incorporate sustainability into the curriculum. Children must be taught sustainability and entrepreneurship from a young age to grow up knowing they can start businesses, create jobs, and care for the environment and society.
- Reduce red tape and streamline regulations. Frequently, it is difficult for small businesses to navigate complex rules and bureaucracy. The government can assist by cutting back on red tape and streamlining regulations. This may involve streamlining the process for obtaining licences and permits, reducing the required forms and documents, and providing explicit guidance regarding compliance requirements.
- Invest money in infrastructure. Small enterprises require infrastructure like roads, ports, airports, and telecommunications to operate and expand. Investing in infrastructure that supports small enterprises is a way for the government to assist. This may involve enhancing roads and highways, renovating ports and airports, and expanding access to broadband internet and other telecommunications.
- Provide sustainable entrepreneurs with the land. The SMMEs need space to expand their sustainable projects. Still, they lack the funds to purchase land, so the government can assist them by providing free or reduced ground.
- Promote entrepreneurship and the growth of SMMEs. Investing in initiatives that support entrepreneurship and small business development can help the government promote these activities. This can include programmes that provide entrepreneurship education and training, grants and funding for small business development, and support for incubators and accelerators that help small businesses expand.

- Form strategic alliances with sustainable entrepreneurs to advance sustainability. When SMMEs observe that other small businesses have implemented sustainability practices, they may decide to do the same.
- Establish an environment favourable to SMMEs. By investing in initiatives that support entrepreneurship, innovation, and small business development, the government can aid in the creation of a good ecosystem for small businesses. This can include education and training initiatives, support for incubators and accelerators, and grants and funding for small enterprises.
- Create policies that aid small enterprises. The government can help small enterprises' growth and development by creating policies tailored to their needs. This can include policies that increase access to financing, decrease bureaucracy and regulations, and invest in infrastructure.
- Advocate on behalf of SMMEs. By advocating for small enterprises, the government can assist in their support. This can include advocating for policies and regulations that support small businesses, offering advice and assistance to small business owners, and highlighting the significance of small businesses to the economy.
- Support small business organisations and networks. Investing in networks and organisations that promote the growth and development of small businesses is one way the government can aid small businesses. This can include funding and supporting small business associations and advocacy organisations and investing in initiatives that help small companies connect and gain access to resources and support.

6.3.7.2 Recommendations to SMMEs

The participants gave the following recommendations to SMMEs, and the researcher made a concluding list.

Create associations for SMMEs

- SMMEs in the agricultural sector should create associations, and they can negotiate with financial institutions collectively.

- SMMEs to pull together resources, something like a financial pool to which existing SMMEs can contribute and then at some point, they will be able to access those finances in that pool, use them to grow their business and then pay back at reasonable interest rates, that would go a long way in terms of helping SMMEs to grow their business.

SMMEs adopt sustainable practices.

- The informal sector should also embrace sustainability.
- SMMEs should adopt sustainable practices.
- SMMEs should start greening their projects or enterprises so that they become climate-smart. That is where the ball is going now. We are shifting from the ordinary way of doing business to sustainable methods.
- SMMEs should use environmentally friendly fertilisers and desist from synthetic fertilizers and pesticides.
- The reason why we are in business is to make profits. Still, we should also pay attention to the people and the environment.
- SMEs should balance making a profit and protecting the environment; do not cut corners.
- Have principles not to get involved in evil practices, have a responsibility to protect the people and reduce the use of harmful chemicals; you earn customer loyalty because people comment on their excellent taste and organic nature.
- SMMEs should embrace many sustainable opportunities in the agricultural sector.
- There is a need for proper information dissemination about our projects to clear all misconceptions.

Network with other SMMEs in the same business

- Try to get knowledge and training as quickly as possible to push more informedly.
- A solid network system will give you opportunities because you are connected.

- Sharing the idea with other people who would have done the business before you, so you get some ideas from them, especially those who open up, reduce the time you spend learning the skills and about the equipment.
- Networking, everyone is a potential network, more of incremental growth, not regarding high profile people as the only people to network with.
- SMMEs should support each other; there is too much competition instead of working together.

Be innovative and embrace change.

- SMMEs should adopt climate-smart; we are at a critical point about our planet, so there needs to be a change. We need to educate the SMMEs about another way of doing things.
- Benchmark with entrepreneurs from other countries like South Africa, India, or any industry performing better to curb dynamics so that you move with new technologies.
- Have an open mind and be open to learning. If you are open to learning, there is nothing you can't do.
- Research new sustainable technologies

Formalise the business

- SMMEs should do things correctly.
- SMMEs should take things step by step, following the procedures.
- Sign contracts for the orders because sometimes customers say they no longer need the products.
- Partner and shareholder agreements should be put in place so that if a conflict arises, there will be a reference document.
- Always have funds like we kept 500USD on the side. Once the problem becomes financial, that's how businesses fail.

SMMEs need to be resilient and passionate.

- SMMEs need to believe that they can do it. They need to be persistent and try to push it for three years and not give up because of financial hindrances; most companies give up too early.
- SMMEs need to be resilient and passionate to grow to higher levels and be cognisant of the environment in which we are doing business in the long run; we can still produce, not harming the environment and the customer; that is sustainability.
- Be driven by passion; if the enterprise is not passion-driven, it may struggle to go.

The study also suggested recommendations for other SMMEs to adopt sustainable entrepreneurship. The researcher summarised them as follows.

- SMMEs should create associations, collaborations and working groups. Pull resources together, approach financial institutions together, support each other and grow together. Serving as a sole sustainable business can be exhausting—partner with local, sustainable entrepreneurs to build a sustainability-focused community. You will also be more capable of finding sustainable suppliers, buyers, manufacturers, funders and other strategic partners.
- SMMEs should adopt sustainable practices and implement climate-smart technologies. Protect the natural resources and care for the community. Educate people about your projects; the more they understand, the more they support your innovations.
- Create strong networks as SMMEs in the agricultural sector. Sharing ideas reduces the chances of making costly mistakes. You get opportunities through networking. Do not compete with each other; instead, complement each other.
- Be innovative and embrace change. Research, develop and implement new sustainable technologies. Attend farmer's forums, training and seminars to learn new things.
- Formalise your business. Do all the necessary registrations and adhere to laws and regulations.

- Seek expert help. Look for guidance to learn the best way to solve strategic business challenges. Sign contracts for business transactions and avoid verbal agreements.
- Have mentors, role models or coaches. They can help you model yourself into a successful businessperson.
- Make savings and investments. Sustainable entrepreneurship profits in the early stages can be low; keeping expenses low and reinvesting in the business is vital.
- Be resilient, passionate and determined. Be focused. Have a passion for sustainability.

6.3.7.3 Recommendations to the general populace

Below are the recommendations made by the research participants and the researcher:

There is a need for change.

- People need to focus on the 3Rs: reduce our waste, recycle and reuse; that is the circular economy.
- Communities should not cut trees indiscriminately as well as starting fires willy-nilly.
- The general public needs to embrace change and adopt sustainable practices.

Sustainability should be part of everyday conversation.

- People should have sustainability issues in their everyday conversation in Zimbabwe; whether it is your friend, brother, or work colleague, there should be some sense of what we are doing for the environment.

The empirical study suggested few recommendations for the general populace; however, they are essential to sustainable business success. The researcher made the following recommendations to the available people.

- Adopt sustainable practices and a circular economy and embrace change.
- Be supportive; this can be through providing their skills, employment, buying products, supplying labour and raw materials for training, and practising what would have trained.
- Be cooperative, participate in SMMEs' training, and implement new technologies.
- Spread the word of sustainability to the whole neighbourhood, protect the environment and take care of society.
- Let sustainability be part of the family community culture.

6.3.7.4 Recommendations to the business world

The empirical study revealed the following recommendations, and the researcher also summed up the recommendations.

Provide affordable financial assistance.

- Financial institutions should be lenient when giving a loan to SMMEs. May there be reasonable interest rates so that it will not be too heavy for SMMEs to repay?
- Financial institutions should develop smaller funds loan facilities to allow the running of a pilot project and then give more funding after verification of the small budget.
- Create new financial models that support green initiatives; there is a need to relook at the skills of different financial institutions focusing on sustainability.
- There is a need for the financial sector to have credit lines for a green industry like what is done for any other industry. We can go far in a short time.

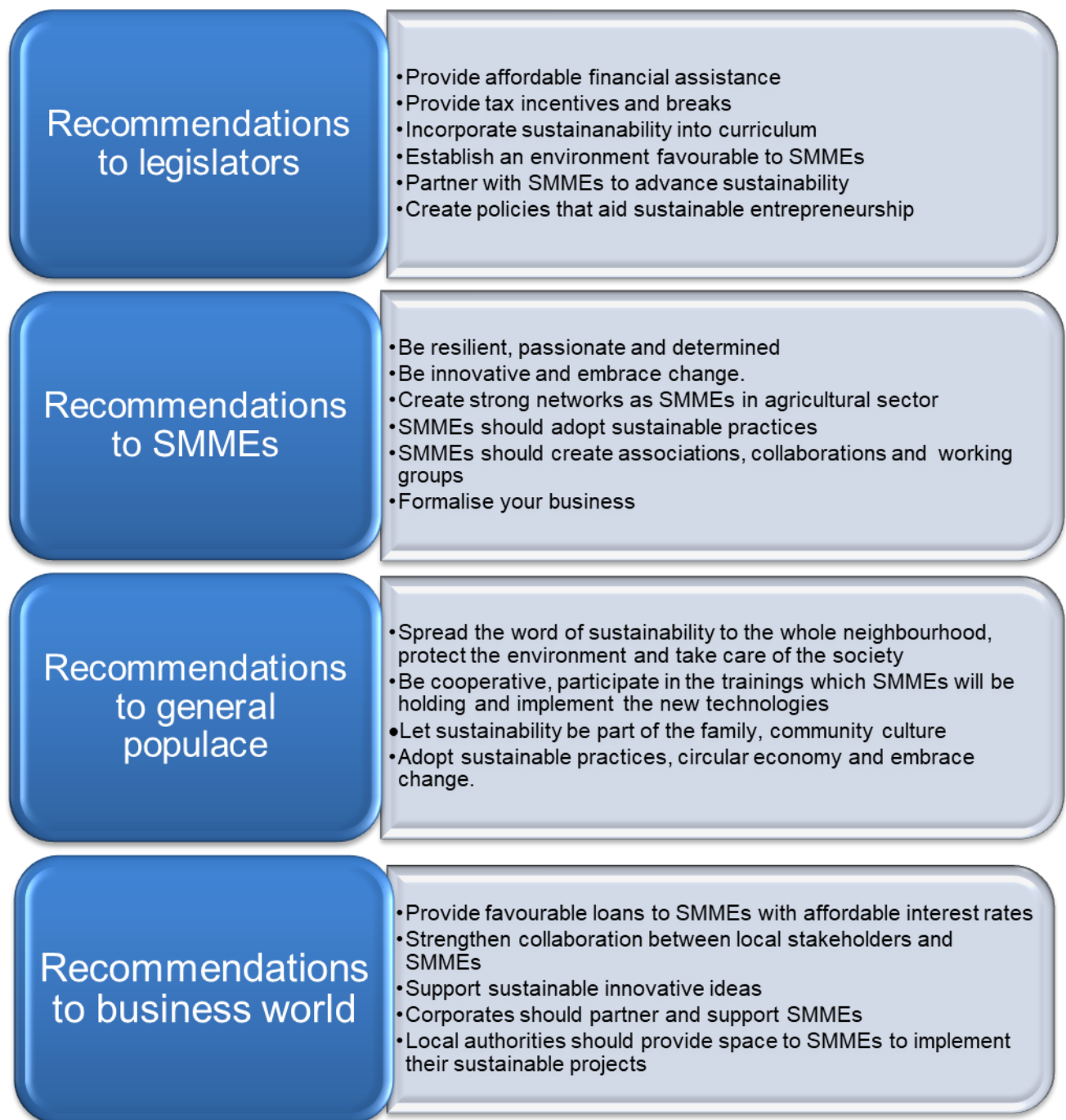
Partnerships between SMMEs and prominent organisations

- SMMEs can also partner or collaborate with other prominent organisations with collateral and approach banks together.

The business world also contributes to the success of SMME's sustainable business; hence, they suggested the above recommendation and the researcher also proposed the following suggestions:

- Provide favourable loans to SMMEs with affordable interest rates and long repayment periods.
- Support sustainable, innovative ideas by providing loans to cater for those requests.
- Have credit lines for sustainable projects.
- Corporates should partner with and support SMMEs.
- Local authorities should provide space for SMMEs to implement their sustainable projects and give SMMEs access to their infrastructure.
- Encourage residents to promote and support SMMEs through the shop's local initiatives.
- Strengthen collaboration between local stakeholders and SMMEs.

Figure 6.5 Summary of recommendations



6.4 THEORETICAL BASIS FOR THE STUDY

This study has three theories that help develop the key constructs and the interrelationship between the proposed themes. The study adopted the Triple Bottom Line, institutional, and legitimacy theory as its foundation.

6.4.1 The Triple Bottom Line (TBL)

It is a well-documented and widely recognized truth that businesses play an essential role in demonstrating a commitment to society, the environment, and the economy. TBL serves as a context-dependent tool for assisting them (Mark-Herbert *et al.*, 2010). This was evident in this empirical study; all the participants indicated that they are managing to balance the three facets of sustainability. P1, P12 and P13 gave a complete description of how they incorporate TBL in their businesses:

“In sustainable entrepreneurship, we are supposed to be able to make profits while taking good care of our planet and the people; we must make sure we are living in harmony with the people and the environment and plough back to the community.” (P12)

“I am balancing all three; I am making a profit. My products are environmentally friendly, and I am also helping the farmer with more sustainable farming” (P13)

“The company is profitable, and at the same time, I take the initiative to impart my knowledge to other people for free, and sometimes I get paid for it. In the community or at church, I have taught many people about hydroponics. I sell healthy vegetables to them. So, I am balancing profit and social enterprise. My project does not use soil, so it preserves and recycles water to save the scarce water.” (P1)

TBL's economic dimension asserts that although profit should not be the sole goal of sustainable entrepreneurship, any company's ability to survive and develop depends on its ability to be economically viable (Dixon & Clifford, 2007:327). This assertion was

testified by all the sustainable entrepreneurs in the study; their businesses are making a profit for them to be able to survive and grow their businesses.

“We are not only targeting cash from selling maggots for stock feed.” (P9)

“We are making a profit from our business” (P12)

“We are also making a profit.” (P14)

According to Shepherd and Patzelt (2011:139), economic gains are fundamental viewpoints that must be diligently established in sustainable business. Furthermore, Richomme-Huet and De Freyman (2011:5) have emphasized the need for sustainable enterprises to create ideals that promote economic development, social justice and environmental conservation. As a result, the economic dimension, like other sustainable elements such as social, ecological, and cultural, should be given equal weight (Majid & Koe, 2012:303).

The second dimension of TBL is social. The social dimension of sustainable entrepreneurship comprises developing persons, communities, and cultures to help them reach a meaningful life by utilizing good healthcare, education, gender equality, peace, and stability worldwide (Saith, 2006:1168). The study revealed that sustainable entrepreneurs provide healthy food to the community and make their environment clean,

“We make profits, and after the system is installed, it offers the client the waste management system and deals with the problem of waste. We employ unskilled labour, thereby providing employment.” (P11)

“Providing healthy products for the society.” (P12)

“We monitor that the surrounding is clean” (p15)

“We value people, so we are concerned with what gets into their bodies and their health.” (P2)

The idea is to create a system that alleviates poverty and protects the environment (Farazmand, 2016:3; Littig & Griebler, 2005:66). P7 and P14 below indicate that they are improving the community's livelihood through employment and reducing production costs to maximise profits.

“I am working with six farmers producing 6 tonnes of mushrooms a month. They will also employ 2 or 3 people and will cascade like that. We are targeting wealth creation and mechanisation, and it is sustainable” (P7)

“The product is an economically sustainable product for ordinary small-scale farmers making a positive contribution to improving their livelihoods as they can produce at a relatively low cost” (P14)

In this context, the notion of social sustainability asserts that reducing poverty should not result in unjustified environmental devastation or economic instability. However, it should try to reduce poverty within the society's existing natural and economic resource base (Kumar *et al.*, 2014:6; Scopelliti *et al.*, 2018:971).

The third dimension of TBL is environmental, which advocates for SMMEs to protect the planet. Businesses must employ environmentally friendly technology and materials (Branzei & Vertinsky, 2002:86), use fewer traditional fuels (Lindgreen *et al.*, 2009:450), and minimize negative impacts on animal species and natural environments (Rueda-Manzanares *et al.*, 2008:186). P9 revealed that he is cleaning the environment, and P11 provides renewable energy that saves trees.

“We are getting our environment clean and safe for generations to come. When we recycle this organic waste, we do away with filthy flies and odorous smells, dealing away with landfills. Our company can recycle 500kg of degradable waste, which is a significant impact.” (P9)

“They also get biogas as a renewable resource; there is no cutting down of trees, and the effluent that is produced is an excellent organic fertiliser for their crops.” (P11)

To be less harmful to the natural environment, businesses should monitor and control their environmental impacts based on environmental sustainability (Roxas & Chadee, 2012:209). P2 indicated he is a steward of the environment, and P12 saves water.

“Environment, we are not impacting the environment the wrong way; we are stewards of creation; that's our motto. In as much as we are doing business, we are stewards of the environment.” (P2)

“We use hydroponics, which saves water and the environment.” (P12)

A firm should invest in activities such as reducing water usage (Enrol *et al.*, 2009:51), purchasing green products (Zsidisin & Siferd, 2001:62) and adopting waste reduction and recycling policies to reduce air pollution to be ecologically sustainable (Keijzers, 2002:350). The study revealed that sustainable entrepreneurs strive to protect the environment through recycling, reducing waste and producing sustainable products.

“We are environmentally friendly in the sense that we are reducing the number of greenhouse gases that are emitted into the environment. As far as we feed our larvae, we recycle biodegradable waste, which produces many greenhouse gases that affect the ozone layer and trigger climate change when left to decay and decompose.” (P9)

“We use modern sustainable farming practices that ensure we reduce negative effects on the environment. We use greenhouse and drip irrigation, meaning we are using less water, therefore, taking care of the environment.” (P16)

Furthermore, a TBL entity conducts business in an environmentally responsible manner; it does not manufacture environmentally hazardous or destructive items that endanger the natural environment or biodiversity (Bell & Stellingwerf, 2012:265). Similarly, Goodland and Daly (1996:1003) emphasized the need to exploit natural capital sustainably and use it as a source of economic inputs and a waste sink wherever it occurs.

The researcher concludes that sustainable entrepreneurs are balancing all the dimensions of TBL very well. They are making a profit from their business to facilitate its continuity while protecting the environment and looking after natural resources. Their trades are also benefiting society.

6.4.2 Legitimacy theory

Society has expectations of every business organisation in their environment (Guthrie *et al.*, 2006:21). When these expectations, which are strategically improvised for the operations of the organisation, are not met or are perceived as inadequate or inappropriate, stakeholders lose confidence in the organisation, which can threaten its existence, survival, and performance (Guthrie *et al.*, 2006:21). P5 met society's expectations, and they started having confidence in his service, and the demand increased. He said:

“They are beginning to support and to realise the impact. For instance, a lot of households and companies pay the local authorities. Still, because of the services we are providing now, they are beginning to appreciate that they should pay for the services, and we believe there will be massive growth if we keep on being efficient.”
(P5)

Guthrie *et al.* (2006:22) argue that there is a social contract between the organisation and the society and that when a perceived violation of this social contract is perceived, the organization's survival is threatened. This implies that the system will not permit any contract violation. This social contract was elaborated by P2, who is getting money from overseas and supplies to their local relatives.

“Many people demand my product because I am organically growing these things. So, whenever I advertise on Facebook, people start putting in orders. People are now shifting to organic products because they are healthy. I am looking at increasing my supply to meet the demand. These people are from Zimbabwe, so they will buy them online, and I will supply them to their relatives in Zimbabwe. They appreciate the way I farm” (P2)

Customers have trusted P2 even though they are far away. Still, if P2 fails to supply or supplies poor quality, they will question his legitimacy. Some will even stop buying from him. Vishwanathan *et al.* (2020:6) also confirmed that when legitimacy is lost, the supplier may stop supplying, the customer may stop patronising, the host community may become hostile, and numerous lawsuits may be filed to compel the organisation to return to the performance of its social contract or go bankrupt.

Organisations should turn their words into action by implementing a sustainability policy (Idowu, 2014:25). P6 walk the talk; he practices what he teaches. He has trained many marginalised people in his community and has worked with many higher education institutions; he is planting trees and preventing fire. All these are in the community's eyes, seeing that he walks the talk, and it increases his legitimacy. He stated:

"We raise awareness in the various communities at different platforms and gatherings. We plant trees as beekeepers, prevent, protect and control fires and educate on the same." (P6)

"We were awarded for working with the Africa University and MSU in the Applied Science Department and the Magamba Training Centre." (P6)

"Getting partnerships, especially with women who have been marginalised, we have partnered with three groups in Makoni District and a UK organisation called Bees for Development, where we got the opportunity as we had the experience of managing a grant since we got 1st prize under the Agribusiness." (P6)

Due to his demonstration of sustainability policy in action, he received many awards, grants and partnerships with international organisations, and the community supports his business.

The social issues involve the simultaneous incorporation of the organization's, society's, and all stakeholders' interests into business operations (Yoon & Chung, 2018:94). The environmental component of our definition entails avoiding any damage

to the environment and, if any harm does occur, taking care of it responsibly to ensure ecological sustainability (Campbell, 2019:7). P15 collects waste from dumpsites and helps the community with pollution; she provides dust bins, facilitates waste collection, and participates in cleaning campaigns. His visibility in sustainability activities, which benefit the community, is high; hence, when she wants waste pickers, the society will be willing to help her because they know it will help them. She provides a livelihood for the picker, whom she pays for the waste. When the dumpsites are cleaned, their animals will be saved because they died from eating garbage like plastics.

“For cattle and goats, livestock were now feeding from the dumpsites, so we are clearing those dumpsites, helping with the waste management. Regarding the environment, we monitor whether the surrounding area is clean and whether enough bins on the highway are being collected in the town. The collectors did not know where to take the stuff they were picking around. Clean Campaign on the first Friday of every month, so we work hand in hand with EMA and Town Council.” (P15)

In addition, the legitimacy theory asserts that businesses convince society of the legitimacy of their organisational activities by disclosing information such as community involvement and environmental impact (Hahn & Kühnen, 2013:17). Due to the increased demand for social media and stakeholder attention, companies are publishing sustainability data to raise awareness, motivate employees, strengthen their brand, and avoid market stigmas associated with environmental irresponsibility. P9 acted on the assertion of Hahn Kuhn (2013:18) to protect his innovation. To remove the stigma associated with his project, P9 attended farmers' forums to explain the importance of using black soldier flies for stock feed. This was necessary because it is unacceptable to keep flies in our society, so to clear the air, it is essential to explain it to the community. He also gives information about his project on social media to reach a big audience. He stated:

“People were not aware of our product. There were a lot of misconceptions. To counter this, there is a need for proper information dissemination. So, I attend various farmers' forums and on social media, where we share with farmers and farm organisations the good aspects of a fly so that they get basic information

on the feed that we produce so that they can adopt it quickly without any hesitation.” (P9)

Legitimacy theory posits that organisations will continue to strive to develop positive perceptions of themselves by ensuring that their behaviour is consistent with the norms and ties of the society in which they operate (Deegan, 2002:286).

The researcher concludes that sustainable entrepreneurs' business conforms to the community's expectations in which they operate. This is testified by the continued support they have from society. In the empirical study, when asked if the community supports their projects, they all agreed they are being supported. However, the support comes from different angles.

6.4.3 Institutional theory

Entrepreneurs committed to sustainability are committed to bringing user-friendly innovations to society and organisations. For institutional values to succeed, it has been emphasised that sustainable entrepreneurs must consciously transform current settings, market regulations, and corporate environments (Dean & McMullen, 2007:51). In the empirical investigation, the desire of sustainable entrepreneurs to alter the current environment was revealed. P4 replaced the traditional charcoal and paraffin with renewable energy (biogas) and modernised the appliances. He stated,

“We are trying to modernise the appliances our customers can use. Traditionally, what has been happening is people build a biogas digester, and they put together a very fun stove. Biogas was mainly for cooking and lighting, but now we are saying it is possible to use biogas with modern LP gas cookers. We want our customers to enjoy the same comfort level as LP gas users.” (P4)

Institutional theory has three pillars: the regulative, the normative, and the cognitive. The regulative pillar is based on punishments, regulatory procedures, submissiveness, and conformity; therefore, it represents a rational actor model of behaviour (Bruton *et al.*, 2010:422). P6 disclosed that he complies with all applicable laws and regulations for his business. He declared:

"We operate in a country with legislation; therefore, we must comply, which comes with challenges. I talked of formalising at the start, which makes us different from others; we have our SAZ certificate, we went through the NSSA safety procedures, and we have a person doing our Zimra. We abide by the Bee, Environmental Management, and Rural and Urban Councils Act." (P6)

P1 also confirmed that he complies with the bylaws and environmental laws, which was shown by the certification of his project by the representatives from the regulatory bodies.

"I got some visitors from EMA, City Council and Agritex. They came over to certify my project, and I did not get any complaints from them because I would love to believe that my project is environmentally friendly. I am not using too much water. I recycle the water, so I do not have a problem with authorities." (P1)

Rivera (2006:783) argues that imposing mandatory environmental bylaws and supervisory and unambiguous compliance standards with penalties for noncompliance are well-grounded methods for encouraging businesses to better their environmental policies. As indicated by P13, the empirical study revealed that regulatory bodies lack a supervision department.

"I was working in smaller towns; you cannot hide; you get a lot of regulators who line up from EMA, City Council, among others, as compared to Harare, you can hide or get away with avoiding some of the regulatory requirements when you are still new in the business." (P13)

The study also reviewed SMMEs face challenges when they want to be compliant. P11 attributed the difficulties to corruption; he stated:

"Corruption more than anything else. We once did a project with the city council when we needed police clearance; it was difficult. We had to pay some money, and even the company registration took a long time; you get slowed down, and

you will face obstacles if you follow the proper channels because of someone who will want to be paid.” (P11)

Soto (2000:12) also confirmed the difficulties immigrants experience during regularisation; they must report to numerous institutions and spend a substantial amount of time and money completing the necessary paperwork.

The second pillar is the normative pillar, which is responsible for directing and influencing the actions and conduct of SMME actors. The normative pillar is accountable for addressing more specific questions, such as "What is deemed appropriate?" and "How are things to be conducted following the values?" (Brunton *et al.*, 2010:423). P14 discovered a problem with fertiliser, so he decided to be inventive and create an organic and inexpensive fertiliser, which was deemed appropriate as he was solving a pertinent issue.

“We looked at the environmental challenges and how we could provide solutions to address them. We saw a fertiliser challenge in our country's agricultural sector, so we took the opportunity to research to see how best we could solve this.” (P14)

P4 identified a problem of waste management and electricity shortages and constructed a biogas digester that uses biodegradable waste to produce renewable energy, which helps with electricity scarcity.

“Zimbabwe is an agri-economy, and we have realised that unutilised organic waste is abundant, which is what we need for biogas. We know they have problems with waste management, and we also know that the energy scarcity and those opportunities give significant reasons to go into this particular business.” (P4)

Meek *et al.* (2010:494) discovered that state-level incentives, environmental consumption norms, and familial interdependence norms all foster the growth of sustainable businesses.

The cognitive pillar is the third and final pillar; it represents individual behaviour models based on subjective and artificial rules and meanings that limit permissible beliefs and actions (Scott, 2008:57). The cognitive pillar appears to operate on a more linear level in terms of culture and language, as well as other behaviours that are rarely consciously considered by society.

P1 wants people to change their conventional way of farming and adopt sustainable smart agriculture, which saves water, land, time, and labour and produces more on a small piece of land. He stated:

“Let me start with culture; many people I meet are not bold enough to abandon the old to take up the new. Surely hydroponics is the future of farming, in the sense that there is zero land degradation, you recycle water, the produce is of better quality compared to the ground, and it grows twice the quantity and twice the rate, so I think people should change, should be open enough to new possibilities, instead of sticking to what they know and what they used to do.”
(P1)

P12 faced difficulties making her product acceptable; people were not used to it.

“The products are not well appreciated except by people who have travelled or have interacted with white communities to know the importance of vegetables in the diet. Microgreens are considered a luxury, and edible weeds are poverty-related, so getting clients is difficult.” (P12)

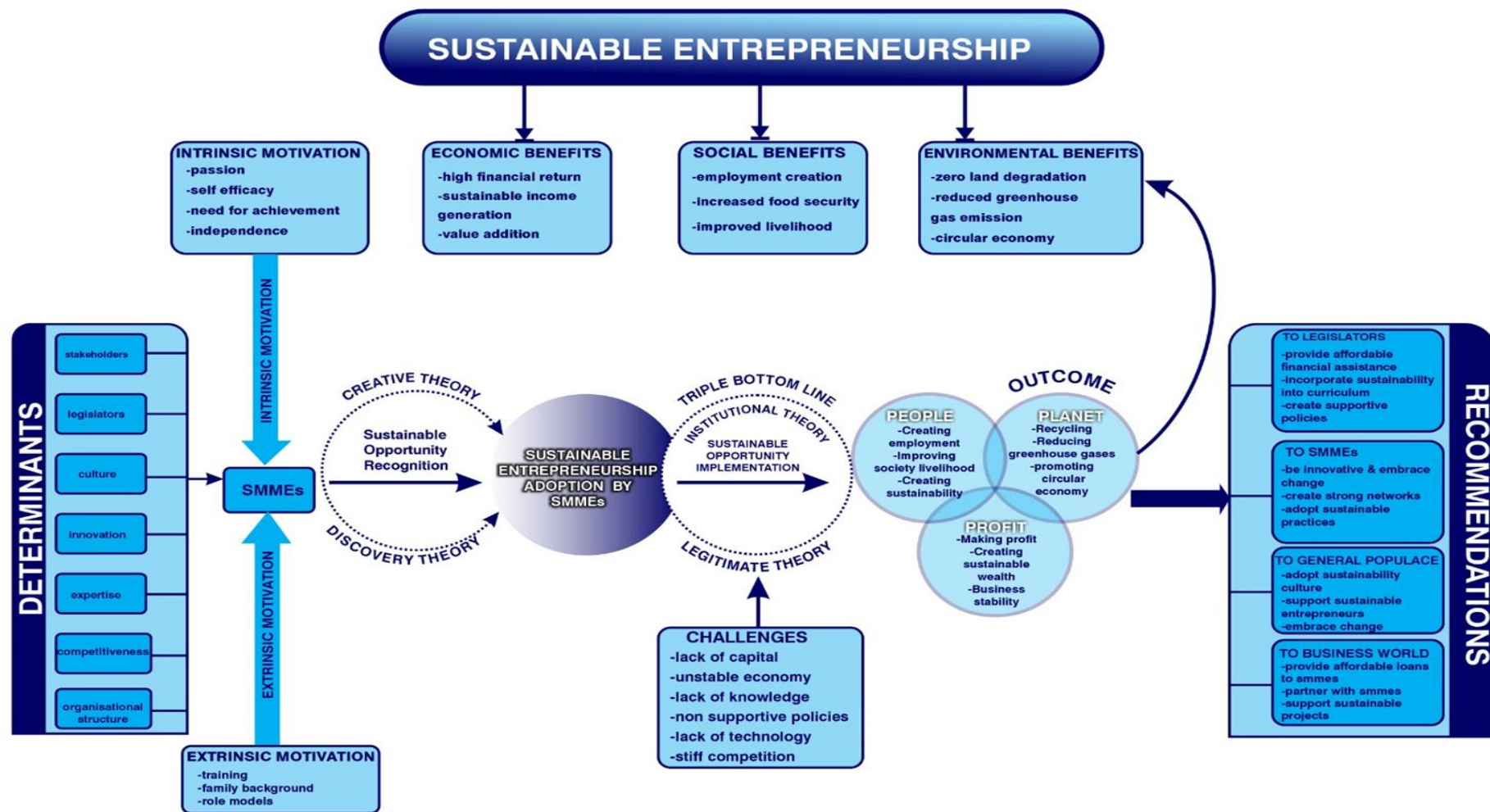
This pillar is becoming increasingly essential to entrepreneurship studies regarding how societies accept entrepreneurs, instil principles, and even establish a cultural milieu where entrepreneurship is welcomed and supported (Bruton *et al.*, 2010:423).

The researcher concluded that the three pillars of institutional theory should be regarded as mutually reinforcing and enhancing one another because they are interconnected and mutually reinforcing. Confident entrepreneurs were influenced by the regulative, normative, and cognitive pillars, respectively. Consequently, they complement one another.

6.5 CONTRIBUTION OF THE STUDY

The study's primary contribution was the development of a framework for sustainable entrepreneurship for small, medium, and micro-enterprises in Zimbabwe's agricultural sector, indicated in Figure 6.6. The framework components are the practical contribution of the study, a summary of the study's objectives and themes that emerged from the findings.

Figure 6.6: Framework for sustainable entrepreneurship for SMMEs in the agricultural sector in Zimbabwe



Owner's own compilation

6.5.1 Practical Contribution

The researcher compiled the framework from the responses from the sustainable entrepreneurs' lived experiences. The framework made a practical contribution to the study.

- **Determinants of sustainable entrepreneurship**

The framework assisted in pointing out the determinants that need to be addressed to increase the adoption of sustainable entrepreneurship by SMMEs. Different stakeholders were shown their role towards improving sustainability in the sector. The study revealed that role models, suppliers, staff, and successful entrepreneurs are major stakeholders influencing the adoption of sustainable entrepreneurship. SMMEs need access to the Internet because the study showed that many sustainable opportunities are available on the Internet. The framework also showed that the network is crucial to the success of SMMEs. The government or corporations can strengthen these networks to enhance sustainability. The framework also indicated that SMMEs respond to intrinsic and extrinsic motivations for adopting sustainable entrepreneurship. The study revealed that sustainable entrepreneurship can be effortlessly adopted if sustainability is part of SMMEs' culture.

The study also motivates SMMEs, who frequently view the path to sustainable development as an expensive endeavour. In addition, the study's unique perspective on the factors influencing the adoption of sustainability has important implications for sustainable development, which has become a requirement for many SMMEs to remain competitive. This study can serve as a foundation for fostering the social and environmental consciousness of agricultural SMMEs.

- **Sustainability balance/outcome**

The framework showed the sustainable entrepreneurship balance, which is the outcome of recognising and implementing the opportunities. It encourages using sustainable farming practices, environmentally friendly products, recycling, saving

resources, and reducing greenhouse gases. It shows that SMMEs should educate communities to create awareness, create employment, improve farmers' livelihoods and provide health products. Society will also support and see their businesses grow when all these are met. Sustainable entrepreneurs should make a profit for their business to be sustainable. However, it is not their sole objective.

The framework also illustrated the balance between the sustainable entrepreneurship process's economic, social and environmental outcomes. These outcomes also attract other conventional entrepreneurs to incorporate sustainability into their businesses. The positive results which cover the three dimensions of TBL

- **Benefits of sustainable entrepreneurship**

It also highlighted the importance of sustainable entrepreneurs to attaining a sustainable economy through the benefits spelt in the framework. Literature is saturated with the advantages of Corporate Social Responsibility (CSR) by large corporations, and the contribution of sustainable SMMEs is very scarce. This study seeks to fill that gap by showcasing the benefits accumulated in the economy, society and environment when SMMEs adopt sustainable entrepreneurship. This will prompt investors, the government, and the community to support sustainable SMMEs after discovering that SMMEs are a significant player in a sustainable economy.

The study showed that sustainable entrepreneurs produce health products, create employment, increase food security, improve livelihoods, and raise awareness of climate change. This will benefit the SMMEs, their families and the whole of society. The framework revealed that sustainable entrepreneurship reduces land degradation, produces more in small spaces, reduces greenhouse gases, uses renewable energy and recycles. Besides looking after the environment and society, the framework showed that sustainable entrepreneurs can profit from their businesses.

Sustainable entrepreneurship research in Zimbabwe is still relatively new, and this study will raise awareness of the benefits and importance of sustainable entrepreneurship among policymakers and business management. It can influence several stakeholders, including the Ministry of Lands and Agriculture, Women, Small

and Medium Enterprises, and the Government of Zimbabwe to support SMMEs in the agricultural sector.

- **Strategies to increase the adoption of sustainable entrepreneurship**

The framework guides how to contribute to implementing sustainable practises and assist SMMEs in recognising sustainable opportunities and comprehending that they can engage in sustainability entrepreneurship. The study revealed that this could be accomplished by establishing a forum for sharing experiences and exchanging ideas, informing SMMEs about the business benefits of being sustainable, and disseminating information about the initiatives and technologies that SMMEs can use to become sustainable.

Considering that diversity is a characteristic of SMEs, a "one-size-fits-all" approach to engaging SMEs in the sustainability agenda will not be practical (Yu & Bell, 2007:26). According to Yu and Bell (2007:26), any strategies for encouraging SMEs to engage in social and environmental practices must be proportional to the operation's scale and complexity. This study contributes to the assertion by providing different strategies that can be used by SMMEs to increase sustainable entrepreneurship at various stages of growth, in different environments, and at varying levels of the agricultural value chain.

The framework indicated that SMMEs need a favourable economic and political environment, ministerial support, supportive policies, and innovative incentives to increase their adoption of sustainable entrepreneurship. Partnering and collaborating with SMMEs can also increase the adoption. The study revealed that training and awareness are crucial in spearheading sustainable entrepreneurship. Educate SMMEs and other stakeholders on the importance of sustainable practices, the available technology and techniques and the effects of unsustainable practices.

- **Challenges**

The framework exposed the challenges which SMMEs face as sustainable entrepreneurs. The main challenge highlighted in the framework is the lack of capital. They indicated that most sustainable projects are dying at the ideology stage without

implementation due to a lack of money. The framework contributes well by summarising SMMEs' challenges due to an unstable economic environment. It cited volatile Zimbabwe currency, high cost of exporting, high-interest rates and high unemployment, which means low disposable income, affecting their sales. All these challenges affect the adoption of sustainable entrepreneurship by SMMEs.

Lack of technology, infrastructure, machinery and technology not entirely accepted locally causes SMMEs not to continue with their sustainable businesses. The study revealed that legislation has a more significant role in influencing SMMEs to adopt sustainability. However, SMMEs also announced many problems emanating from the legislation. The study indicated that they do not have financial support from the government, no help from the parent ministry (agriculture), opportunities are politically aligned, they are being affected by volatile policies, there are too many counterfeit raw materials in the market because the sector is not being closely monitored and regulated, there is little encouragement or incentives for sustainable SMMEs. Hence, the framework helps the government know the areas that need to be addressed for SMMEs to increase the adoption of sustainable entrepreneurship.

The framework also indicated that sustainable entrepreneurs' prices are not competitive since their production costs are high; hence, their prices will consequently be higher, so their market is being taken by conventional SMMEs whose costs are low due to unsustainable processes. This gives a drawback to the sustainability agenda.

- **Recommendations**

The framework also showed the recommendations to legislators, SMMEs, the general populace, and the business world since they all influence the increase of sustainable entrepreneurship by SMMEs. The framework indicated that more work is expected from the legislators. They have the ball in their hands to make Zimbabwe a sustainable economy. The framework designated that the government is expected to create new financial policies that support sustainable initiatives should have tailor-made solutions for SMMEs in agriculture. It should not give a blanket solution to all agricultural players because solutions for large companies might not be compatible with SMMEs.

The study indicated that the government should conduct training to create sustainability awareness. There is a need for proper information dissemination because some SMMEs are avoiding sustainable practices due to inappropriate information. The study emphasised that sustainability should be included in the educational curriculum so that people will know and acknowledge sustainability from a tender age and will not depart from it. The framework also indicated that sustainable entrepreneurs expect incentives and subsidies for their initiatives since their projects benefit society and the environment.

The framework also revealed the role of SMMEs towards a sustainable economy. SMMEs were encouraged to create associations and network with SMMEs in the agricultural sector. This will help them increase their bargaining power, share ideas, and support each other. SMMEs should adopt sustainable practices and implement climate-smart techniques. SMMEs should be innovative and embrace changes. There is a shift in the way things are done. Sustainability is taking over, so SMMEs should research new sustainable technologies. The study also advised SMMEs that sustainable business take time before realising profits, so they should be resilient, passionate and determined. They should save and invest in the company to grow their business.

The framework highlighted that people should adopt sustainable practices and embrace change. Sustainable entrepreneurs also do it for them; hence, they should support them by offering their skills and labour and buying their products. Society should embrace sustainability and make it part of their culture. The whole family should be obliged to look after the environment and society.

The framework significantly contributed to the increase in adopting sustainable entrepreneurship by SMMEs in Zimbabwe's agricultural sector.

6.5.2 Contribution to the theory

This study's theoretical contribution is that it provides a framework for empirical investigation of the factors affecting the sustainability of SMMEs. It contributes to identifying internal and external stakeholders that influence SMMEs' adoption of

sustainable practices in the agricultural sector. Chapter Two constructs and presents a conceptual framework from the literature review. This conceptual framework is supported by a practical perspective that enables the accumulation and analysis of data to investigate the social and environmental practices adopted by SMMEs and the factors influencing their adoption.

Due to a paucity of empirical data, little empirical research has been conducted on the orientation of SMMEs towards sustainable entrepreneurship, despite the importance of SMMEs to sustainable development (Ayyagari *et al.*, 2007). This study makes numerous contributions to sustainable development-related knowledge. The findings of this study have enhanced the data relating to sustainable entrepreneurship in the agricultural sector as a starting point. Such data has been extremely scarce. This research goes beyond merely presenting data on the sustainability practises adopted by SMMEs in the agricultural sector. It evaluates the factors that influence such adoption and the benefits, outcomes, and obstacles and makes recommendations to various stakeholders. By assessing specific factors that influence the sustainability of SMMEs, this study transcends the inert and isolated image of SMMEs. It evaluates the environmental and social dimensions of the SMME sector.

The study theoretically fills a conceptual vacuum in the literature because there has been relatively little research on sustainable entrepreneurship among small and medium-sized firms in the agricultural sector. Understanding this aspect of sustainable entrepreneurship will be a foundation for future research in this sector. This study's findings substantially contribute to current theories and significantly improve the practice of sustainable entrepreneurship in Zimbabwe.

6.6 WHAT IS NEW IN THE STUDY

The study showed that young people below the age of 40 are also taking entrepreneurship seriously. Instead of looking for employment as was the norm, they would look for a job after finishing their tertiary education. They are now resorting to starting their own business. This is a new dispensation which they are showing. From the study, only two participants out of 16 were above 40 years. Significantly, there has been a growing emphasis on addressing the needs of young individuals through

various initiatives and governmental measures (Burchell & Coutts, 2019:149; Glover & Sumberg, 2020:5; Sumberg & Hunt, 2019:131). One approach adopted to combat youth unemployment and promote youth empowerment is allocating resources towards the agricultural sector (Turolla *et al.*, 2022:181).

Agriculture has always been associated with older adults; the young would shun the sector. Despite the numerous benefits associated with engaging in or pursuing a career in agriculture, it is noteworthy that this sector is often perceived as a less desirable option among young individuals when making career decisions (Gandure, Walker & Botha, 2013:41). It has been observed that youth display a lack of willingness or interest in actively participating in agricultural activities (Ouko *et al.*, 2022:6; Sumberg *et al.*, 2017:152; Yeboah *et al.*, 2017:425). The situation above is a matter of worry, particularly in light of the employment prospects offered by the agriculture industry (Henning *et al.*, 2022:2). Contrary to prevailing perceptions about youth reluctance or lack of interest in engaging with the agriculture sector, this study presents evidence that challenges such assumptions. Young people (youths) are taking up business opportunities in the agricultural sector. The agricultural sector should prioritise attracting and engaging young individuals who demonstrate a genuine interest and willingness to participate in agricultural activities (Adeyanju *et al.*, 2021:3; Glover & Sumberg, 2020:6). Youths usually dominate the service and information technology sectors, but this study revealed they are taking new technology into the agricultural sector. People below 40 were the active working age, which many companies relied on, but have become the active entrepreneurial age.

Regarding gender, agriculture has long been perceived as male dominated. Still, this study revealed that women entrepreneurs are now pursuing agriculture. This is a unique phenomenon because women were mainly dominant in support services like secretarial or light businesses like salons, which are primarily feminine. However, this study showed a different scenario: women are venturing into male-dominated sectors like agriculture and doing well.

The study also discovered that SMMEs are resistant and persistent and see opportunities amid a storm/disaster. With the ravage caused by COVID-19, some sustainable entrepreneurs saw an opportunity and started sustainable businesses like

P2. During that pandemic period, SMMEs found other means of selling their products. They started advertising and selling their products online, which was new, especially in the agricultural sector, where people were used to physically selling at the market.

It revealed that sustainable entrepreneurs are willing to share their knowledge and skills about their sustainable projects. They are prepared to collaborate and partner with corporations, governments, and other SMMEs to spearhead sustainability. P1, P2, P6, P4, P9 and P14 indicated they are willing to collaborate. This is against the norm that SMMEs want to compete rather than join forces and complement.

The study revealed that SMMEs have many innovative ideas. Still, most are dying at the ideology stage due to a lack of capital for implementation. Some are forced to leave the country to implement projects where they get financial assistance, and this brain drain costs the nation. There is a need to assess an innovation's viability and fund it rather than just disregarding it because it has not yet been implemented and has no track record.

The number of sustainable entrepreneurs in the agricultural sector is still minimal. Many participants indicated they are the sole players in their region; hence, the rate at which they will make their innovation known and accepted is low since few players advocate for the same invention.

Another observation is that some SMMEs pursue opportunities different from their study area. This is against the assertion of Shane *et al.* (2003:275) that cognitive factors like knowledge, skills and abilities influence the adoption of sustainable entrepreneurship. This implies that SMMEs implement what they could have learnt at higher institutions. Still, in this study, 50% had no agricultural qualification or experience.

Table 6.7: Participants' qualifications and business ventures

Participant	Qualification	Business
P2	Diploma in Bookkeeping	Regenerative farming
P5	Degree in Theatre and Administration	Waste management
P7	Diploma in Business Studies	Mushroom farming
P12	Degree in Economics	Microgreens farming
P13	Degree in Psychology	Distributor of organic fertiliser
P14	Degree in Commerce	Production of folia fertiliser
P15	Degree in Veterinary Science	Waste management
P16	Diploma in Business Administration	Farming and value addition

The unrelatedness of the participants' qualification and their business ventures shown in Table 6.7 above leads to the conclusion that SMMEs are not confined to their study area for business opportunities. However, knowledge and skills reduce the time spent learning and knowing a technology in a related field.

The researcher also observed that the Internet has opened unlimited opportunities for SMMEs. Most sustainable entrepreneurs indicated that they had no agricultural experience/ knowledge. Still, they researched and ventured into viable, sustainable businesses because of the Internet. They are transferring technologies they would have researched and seen successfully implemented in other countries and bringing them to Zimbabwe, like P4. Some face the challenge of raw materials or machinery. Still, because they are innovative, they are improvising what they are getting locally, as stated by P1, P4, P7, P9 and P12. There is a need for an open mind, which can help you learn new things, have a passion for what you are doing, and be determined to succeed.

6.7 LIMITATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

The research was conducted in Zimbabwe, and the sample was comprised solely of entrepreneurs from that country. Consequently, this can be considered a limitation given that the study's results are context-dependent and cannot be entirely extrapolated to other contexts. Similarly, the limitation suggests a potential future

research topic, as comparable studies could be conducted in a different geographical location or institutional setting. Again, the sample was composed of interviewees from a particular industry, which further restricts the context-specific generalizability of the study's findings. Future research could examine motivations in various sectors to strengthen generalisation.

The process of collecting data revealed additional sample-specific limitations, which pertain to the personal histories of the study sample. The study does not account for individual background differences, which can influence how individuals perceive entrepreneurial opportunities and recognise sustainable agribusiness opportunities. For instance, an entrepreneur with agricultural qualifications and experience will recognise an opportunity differently than one with a background in business administration; their determining factors will also be distinct. Likewise, the study did not account for disparities in personal resources, which, according to the findings, can affect the motivation of sustainability-driven entrepreneurs.

Interviewees struggled to provide motivational and interactive factors regarding the opportunity-forming phase during the data collection procedure. This was because the age factor was left somewhat ambiguous when delineating the sample, which prevented interviewees from providing motivational factors. Sometimes, the opportunity was discovered or created years ago, making it difficult for the interviewee to offer precise motivational factors. Future research could investigate sustainability-driven entrepreneurial firms still in the startup phase to provide more accurate information on these motivational factors early in the opportunity process. These studies would also provide a fertile ground for comparative studies, which could contribute similarly to the existing body of knowledge.

The research was conducted in English, but some SMMEs responded in their native tongue, necessitating a translation. This can result in the translator employing language with different underlying meanings, which is a limitation of this study. In addition, the researcher collected the qualitative data individually, and their evaluation was based on the researcher's own comprehension. This is a study limitation that may have led to bias. In addition, it can cause bias between the researcher's and the interviewee's understandings of the topic due to the researcher's greater familiarity

with it. This can be reflected in the study's data analysis, as the interviewees' responses regarding their businesses were minimal in some instances, requiring the researcher to understand the phenomenon from limited data. Future research could avoid a comparable issue by employing quantitative data collection techniques that exclude the researcher's understanding of the subject.

6.8 REFLECTIONS AND LEARNING BY THE RESEARCHER

My PhD came due to the difficulty of looking for soya meals, which we use as a raw material for manufacturing soya chunks. Soya meal is the by-product after extracting cooking oil from soya beans. We are currently importing the soya meal from Malawi and Zambia. This made me ponder that Zimbabwe is an agro-economy. Still, it fails to produce enough soya beans for the market. Zimbabwe used to be the breadbasket of Southern Africa, but it is now importing agricultural produce. When I analysed the agricultural sector, I saw that most players are SMMEs, so I challenged myself to find ways to help the situation. I thought of pursuing sustainability, and I want to advocate for it. My passion for sustainability landed me an opportunity to participate in the International Sustainability Academy in Hamburg, Germany, in 2022. This was a great opportunity; however, it exerted too much pressure on me when I returned to try to catch up with my thesis timeline. Because of determination and hard work, I managed to meet the deadlines.

My PhD journey was not an easy road. Balancing the business (I am an entrepreneur) and being a mother and a wife was difficult. I had to forgo many social activities, which I used to do, because of time constraints. I spent sleepless nights and took time off from work to go to the library and work on my thesis, trying to beat the deadlines. However, all the hard work paid off, and I finished my thesis on time.

Throughout my bachelor's and master's degrees, I utilised quantitative analysis. Therefore, I presented myself with the challenge of doing things differently for my PhD and employed qualitative research. Without a doubt, qualitative research studies reveal the complexities of the phenomenological experiences of the research participants (subjects). While this methodological approach attempts to provide a comprehensive picture of the complexities of reality, I found the process to be

laborious and time-consuming. I needed to become emotionally invested in the study and the research participants to obtain more profound and meaningful insights. Both the data acquisition and analysis processes were intertwined, resulting in physical and emotional exhaustion. These experiences have enabled me to fully appreciate qualitative research's significance and complexities.

I was further exhausted by the data analysis being performed manually. The data coding and theme development were laborious. After creating the codes, I was required to place them in various themes on the wall, rearranging them to find the best suit. After completing the task, I reorganized the codes according to their themes. This was time-consuming but enhanced my data comprehension, allowing me to conduct a more thorough analysis.

On a personal level, this study has increased the researcher's understanding of the significance of sustainable entrepreneurship and its significance to sustainable development and, more specifically, the preservation of overstretched natural resources. The study of entrepreneurship has taught me that although SMMEs are collectively blamed for contributing to the depletion of natural resources, some are running sustainable projects, implementing successful agricultural innovations, and working to correct the unsustainable status quo. For other SMMEs to adopt sustainable entrepreneurship, I look forward to disseminating the new technology I discovered in the study.

6.9 SUMMARY

SMMEs are the backbone of an economy, but when they are operating unsustainably, the economy suffers. The study's primary objective was to develop a framework for sustainable entrepreneurship for SMMEs in the agricultural sector. This was achieved. Through providing a framework explaining the determinants, challenges, benefits and recommendations, we look forward to an increase in the adoption of sustainable entrepreneurship by SMMEs. Hopefully, this study will help all stakeholders understand their roles in transforming Zimbabwe into a sustainable economy.

In this chapter, the study was summarised and completed. The framework was developed, illustrated and explained. The recommendations were spelt out, the study's contribution was elucidated, the researcher reflected on her PhD journey, and suggestions for further research were made to mark the end of the study.

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APPENDIX A: SUSTAINABLE ENTREPRENEURS' SEMI-STRUCTURED INTERVIEW GUIDE

Ethics clearance number: NWU-01897-22-A4

Topic: Developing a framework for sustainable entrepreneurship for Small, Medium and Micro Enterprises (SMMEs) in the agricultural sector in Zimbabwe.

Introduction

My name is Tatenda Chitaka from North-West University Business School. I want to thank you for agreeing to participate in this interview. The interview explores the strategies, motivation, challenges and opportunities for sustainable entrepreneurship in Zimbabwe's agricultural sector. SMMEs in agribusiness are being affected by climate change, which some are also contributing to and affecting agricultural productivity. There is increasing demand to incorporate sustainability in their operations to contribute to economic growth, protect the environment and benefit society. Hence, as an award-winning sustainability entrepreneur, your experience and views are essential for this research. Ultimately, the study will develop a framework to show the opportunities and strategies that conventional entrepreneurs can implement to adopt sustainable entrepreneurship.

The interview will take approximately 90 minutes, depending on the information you are willing to share. All responses are for academic purposes only and will be treated with high confidentiality. I will ask your permission to make an audio recording of the interview to capture all your comments.

Do you have any questions about what I have explained? Can I proceed to turn on the recorder?

Participants: Sustainable agricultural entrepreneurs

Section A: Demographical aspects

Q1: As we start, I think it would be good if you could tell me a little about yourself.

- P: How old are you?
- P: Highest educational level?
- P: How many years have you been in this business?

Section B: Opportunity Recognition and Formation

In this section, we want to discuss how you started the business and determine how the business idea was discovered or created.

Q3: To start the conversation, please give me some background about your business.

- P: how did you come up with the business idea?
- P: how you started the business, what key events, the primary products/services
- P: how many employees do you have? Are they skilled personnel or have on-the-job training?

Q4: What driving factors (determinants) motivated you to develop the idea into a business?

- P: who/what encouraged or discouraged you?

Q5: Did you form a new company to pursue your business idea, or was the company already in existence?

- P: is the business registered?

Q6: When you came up with the idea, were there SMMEs on the market doing the same business?

- P: was there customer demand for the product/service?
- P: was the product/service readily accepted in the market?

Q7: Do you feel that society supports sustainable entrepreneurship?

- P: what was the attitude of the people around you when you started the venture?

Q8: Do you have any role models/examples of entrepreneurs in your family or community?

- P: who are they, and what business do they do?
- P: how did they influence you?

Q9: Can we talk about the business environment in the country?

- P: What challenges do you face as a result of the environment? (political, legal, economic, technological, ecological, global and demographic)?
- P: What opportunities are available to your business due to the environment?

Q10: How did you deal with risk when setting up your business (future risks like failure or unexpected events)?

- P: how comfortable did you feel with this uncertainty?

Section C: Opportunity Exploitation

In this section, may you take me through your journey from a business idea to a fully-fleshed sustainable business?

Q11: After the decision to start the venture, can you explain the challenges in setting up the business?

- P: how were these challenges overcome?
- P: if not, how are you coping with these challenges?
- P: If you had your time over again, what would you have done differently, and why?

Q12: What skills did you have to utilise to operate your startup?

- P: How did you acquire these skills?
- P: How essential were these skills when starting this business?

Q13: What is the role of innovation in your company?

- P: Is it a gradual improvement on an existing innovation or a radical new idea?
- P: How do you make sure that the company is continually innovating?
- P: Do you use new technology in your venture (new product, innovative business model)?

Q14: How did you finance the business? (savings, family, friends, banks, sponsors).

- P: In your opinion, do you think SMMEs have enough financial support?
- P: what could be done to alleviate the challenges?

Q15: Are there any environmental laws that you have to follow?

- P: do you have any problems or difficulties due to the regulations?
- P: does it support your business?

Q16: Did you encounter any entry regulations to the market?

- P: Did the national/local government regulations encourage or discourage you?
- P: In your opinion, what can be done to alleviate these barriers?

Q17: Do you receive any support from the Ministry of Agriculture or Small and Medium Enterprises?

- P: may you explain the kind of support you receive?
- P: what kind of support do you expect from the Ministries?

Q21: What possible strategies can you identify to encourage sustainable entrepreneurship adoption by SMEs in the agricultural sector?

- P: Policy, finance, culture, support, human capital, markets

Section D: Opportunity Outcome

In this section, we will discuss the end product of your business, its impact, and its sustainability balance.

Q18: In your opinion, how do you understand sustainable entrepreneurship? In literature, it is a business that balances profit, people and the planet.

Q19: How would you describe the company's sustainable entrepreneurship balance?

- P: is your business a social enterprise, or are you making a profit? (*profit*)
- P: how does your business conserve and protect the earth's limited resources? (*planet*)
- P: how does society benefit from your business? (*people*)

Q20: How does your business mitigate or adapt to climate change?

**Q21: Can you explain the critical elements of being a successful entrepreneur?
(Leadership, passion, skills, strong networks**

**Q22: Do you consider the market you are operating in a niche (untapped)
market with plenty of growth?**

- P: Where do you see your business in 5 years?
- P: What business support opportunities are available to you as an entrepreneur?

Q23: What impacts has the company had in the Zimbabwe agricultural sector?

Section E: Conclusion

As we conclude our interview:

**Q 24: In your opinion, what do you think should be done to support
sustainable entrepreneurs?**

**Q25: Do you have other suggestions regarding sustainable entrepreneurship
by SMMEs in the agricultural sector?**

Q26: Is there something you want to ask me about the study?

END OF INTERVIEW

Thank you so much for your time and the critical information you shared.

Researcher: Tatenda Chitaka (+263 773 954 364)

Supervisor: Prof. SP van der Merwe (+27 082 335 0578)

APPENDIX B: CONSENT FORM



NWU Business School
North-West University
Private Bag x6001
Potchefstroom, 2520

<http://commerce.nwu.ac.za/business-school>

20 November 2023

To: Potential interview participant

From: Tatenda Chitaka

INFORMED CONSENT TO PARTICIPATE IN AN INTERVIEW

Date: _____

Participant code: _____

My name is Tatenda Chitaka from the North-West University Business School. I would want to thank you for accepting to participate in this interview. The interview explores the strategies, motivation, challenges and opportunities for sustainable entrepreneurship in Zimbabwe's agricultural sector. The discussion will enable the study to develop a framework for sustainable entrepreneurship for Small, Medium and Micro Enterprises (SMMEs) in the agricultural sector in Zimbabwe.

The research will contribute to the corpus of knowledge about sustainable entrepreneurship. The success stories of the participants will inspire conventional entrepreneurs to pursue sustainable entrepreneurship and incorporate sustainability into their operations. SMMEs will be able to produce economic, social and environmental value concurrently. The research will also assist policymakers in creating policies promoting and encouraging SMMEs to contribute to a green economy. The study will directly benefit SMMEs in the agricultural sector, who will be empowered to mitigate and adapt to the effect of climate change.



The study has been approved by the Scientific Committee of the NWU Business School. The Chair of the Scientific Committee is Prof. Christoff Botha. He can be reached at 018 299 1672, and his email address is christoff.botha@nwu.ac.za

Ethical clearance was obtained by the Faculty of Economic and Management Sciences Ethics Committee (EMS-REC), and an ethical clearance number was allocated [Insert number here:]. The Chair of the Ethical Committee is Prof. Mark Rathbone. He can be reached at 018 299 1356. His email address is mark.rathbone@nwu.ac.za

The supervisor of the thesis is Prof. Stephan Van der Merwe. He can be reached at 018 299 1414 (Email address: stephan.vandermerwe@nwu.ac.za) for further questions or concerns about the research project.

Your input is of great value to this research, and I appreciate your help in providing this information.

Take note that strict COVID-19 protocols will be observed during the interviews.

Yours sincerely,

TATENDA CHITAKA

37073834

NWU Business School

North-West University, Potchefstroom Campus

Contact No. +263 773954364

The experiences and perspectives of sustainable entrepreneurs are essential for this study. The interview will take approximately 90 minutes, depending on the information you are ready to share. Since the interest is in your lived experiences, there are no right or wrong answers to the questions. Your participation in this interview is entirely voluntary, and you are free to withdraw at any point without any explanation.

I will request your permission to make an audio recording of the interview to capture all your comments, as I will also be taking notes during the interview. No names will be mentioned in any of the documents to ensure confidentiality, anonymity and protection of personal identities. The data transcripts and audios will be used for data analysis and kept under lock and key for three years. Electronic copies will be password protected, and they will also be deleted or shredded after three years. To safeguard your identity, codes will be used in the final report. Informed consent forms will be kept separately from the data. Although interview extracts may appear in the report and publications, no names will be revealed.

A limited amount of demographic information will be collected to create a profile of the participants, but it will not be used to make comparisons between groups or for further statistical analyses. Let me stress that you are free to refuse to answer any questions or stop responding to the interview questions anytime and for any reason without explanation.

Your contribution to the research is invaluable, and I appreciate your assistance in providing the information. Please sign the form on the line below to indicate that you have read and agreed with the contents. An electronic signature is also acceptable. Please email it back to me at tatchitaka@gmail.com

Place your signature above (electronic signature accepted).

APPENDIX C: ETHICS APPROVAL LETTER



Private Bag X1290, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Fax: 018 299-4910
Web: <http://www.nwu.ac.za>

Senate Committee for Research Ethics
Tel: 018 299-484
Feziwe.Mseleni@nwu.ac.za

28 November 2022

ETHICS APPROVAL LETTER OF STUDY

Based on approval by the **Economic and Management Sciences Research Ethics Committee (EMS-REC)** on 28/11/2022, the Economic and Management Sciences Research Ethics Committee hereby **approves** your study as indicated below. This implies that the North-West University Senate Committee for Research Ethics (NWU-REC) grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Developing a framework for sustainable entrepreneurship for Small, Medium and Micro Enterprises (SMMEs) in the agricultural sector in Zimbabwe
Study Leader/Supervisor (Principal Investigator)/Researcher: Prof SP van der Merwe – PhD in Business Administration
Student: Chitaka, T (37073834)

N	W	U	-	0	1	8	9	7	-	2	2	-	A	4

Institution Study Number Year Status
Status: S = Submission; R = Re-Submission; P = Provisional Authorisation, A = Authorisation

Application Type:

Commencement date: 28/11/2022

Risk:

Low

Expiry date: 28/11/2023

Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt and review of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.

Special in process conditions of the research for approval (if applicable):

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply:

- The study leader/supervisor (principle investigator)/researcher must report in the prescribed format to the EMS-REC:
 - annually (or as otherwise requested) on the monitoring of the study, whereby a letter of continuation will be provided, and upon completion of the study; and
 - without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.
- The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the study leader/researcher must apply for approval of these amendments at the EMS-REC, prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited.
- Annually a number of studies may be randomly selected for an external audit.

- The date of approval indicates the first date that the study may be started.
- In the interest of ethical responsibility, the NWU-SCRE and EMS-REC reserves the right to:
 - request access to any information or data at any time during the course or after completion of the study;
 - to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process;
 - withdraw or postpone approval if:
 - any unethical principles or practices of the study are revealed or suspected;
 - it becomes apparent that any relevant information was withheld from the EMS-REC or that information has been false or misrepresented;
 - submission of the annual (or otherwise stipulated) monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and / or
 - new institutional rules, national legislation or international conventions deem it necessary.

The EMS-REC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the EMS-REC or the NWU-SCRE for any further enquiries or requests for assistance.

Yours sincerely,

**Mark
Rathbone**

Digitally signed by Mark
Rathbone
DN: cn=Mark Rathbone, o=North-
West University, ou=Business
management,
email=mark.rathbone@nwu.ac.za,
c=ZA
Date: 2022.11.30 11:22:46 +02'00'

Prof Mark Rathbone

Chairperson: NWU Economic and Management Sciences Research Ethics Committee

APPENDIX D: INTERVIEW EXTRACT

Key

Red- Motivation/determinants of sustainable entrepreneurship

Turquoise –SMME's sustainable balance

Bright Green- Opportunities

Blue- Strategies that encourage the adoption of sustainable entrepreneurship

Pink- Benefits of sustainable entrepreneurship

Grey- Challenges

Yellow- Recommendations

Interview with Participant 9		
Notes	Transcription	Codes
	Notes The interview occurred on 10 February 2023 at 11.47 am over the phone. The interviewer went to the participant's project site. She was given their protective clothing as a requirement to get into their site. Unfortunately, the participant had just left to attend to an emergency. The interviewer toured the project site for observation. The interviewer waited for 2 hours, but the participant did not	

	come. The interviewer called the participant, who adjourned the interview for the following day. Unfortunately, because of the distance between where the interviewer stays and where the participant operates, it was not feasible to return for a physical interview. The following day, the interviewer called the participant and interviewed him over the phone. The interviewer sent a message 15 minutes early to alert the participant that it was almost time up since the interview was scheduled for 11 am. However, the participant suggested we start immediately; hence, the interview started 13 minutes earlier than the scheduled time.	
	Transcription	
	Interviewer: Good morning, Participant 9 (P9). Welcome to this interview that aims to develop a framework for sustainable entrepreneurship for Small, Medium and Micro Enterprises (SMMEs) in the agricultural sector in Zimbabwe. As we are starting, please let me record our interview?	
	Participant 09: Yes, you can	
	Interviewer: How old is P9?	
	Participant 09: 38years	
	Interviewer: Highest educational level.	
	Participant 09: Honours Degree in Agriculture	
	Interviewer: What business are you into?	

	Participant 09: I am into insect farming, specifically maggot farming. It is a project of keeping flies, and then the flies will produce some larvae, which will be harvested to feed fish, poultry and pigs. The larvae are protein-rich.	
	Interviewer: How many years have you been in this business?	
	Participant 09: 4 years	
	Section B: Opportunity Recognition and Formulation	
	Interviewer: How did you come up with this business idea?	
	Participant 09: I was trying to solve problems faced by smallholder farmers, especially in stock feed, because most of their production cost lies in the stock feed, so this is an alternative source of stock feed for SMMEs in agribusiness.	Solving stock feed shortage Reducing production cost Provision of alternative sources of stock feed.
	Interviewer: How many employees do you have in your organisation? Are they skilled personnel or have on-the-job training?	
	Participant 09: 4, they have on-the-job training	
	Interviewer: What driving factors (determinants) motivated you to develop the idea into a business?	
	Participant 09: Income generating: It is a sustainable way of generating income.	Sustainable income generating
	Interviewer: Did you form a new company to pursue your business idea, or was the company already in existence?	
	Participant 09: I formed a company to tackle this business	Formed a new company

	Interviewer: When you came up with the idea, were there SMMEs on the market doing the same business?	
	Participant 09: By then, in Zimbabwe, there were not; I wasn't aware of any.	No competitors-pioneer
	Interviewer: Was there customer demand for your products?	
	Participant 09: Yes, but initially, the customer demand was not from within Zimbabwe but from abroad. The local market started to rise in 2022. Until now, those domestic clients are people living in the diaspora investing back home. I was exporting for the more significant part of 2020, and in 2021, I was concentrating on exporting.	Customers from abroad Local market growing Available export market
	Interviewer: Do you feel that society supports sustainable entrepreneurship?	
	Participant 09: Yes, it is being supported	Supported by society
	Interviewer: Do you have any role models of entrepreneurs in your family or community? How did they influence you?	
	Participant 09: Yes, I have entrepreneurs in farming who are my role models. They influence me because they treat their projects as a business. They follow business ethics in whatever they do.	Treat their projects as a business. Follow business ethics always.
	Interviewer: What challenges or opportunities do you face due to the environment? (political, economic, technological)	
	Participant 09: Our currency is not stable. You are supposed to charge our products and services in local currency. A client pays using the local currency	Unstable currency High taxes Machinery not available locally

	in the bank account. Still, it will be less than the expected value when you want to withdraw the particular money. High Taxes and ZIMRA registrations The machinery we use is not locally available; if we are to get them locally, we have to improvise- so you will not get the exact tool you need. Hence, technology-wise, there is still a technology gap. There is a misconception like the new project, which involves looking after flies; people will give you many names. Yes, the opportunities are there. For example, when people give you names related to fly farming, I take those names as pitch lines- you get into a crowd. You introduce yourself using that word people would have given you, which will draw people's attention. They will want to know what it is all about, and it's an opportunity for you to just hit on the nail and tell the people in brief what the project is all about; out of that, you can get one or two clients.	Technological gap Misconception of the project
	Interviewer: How did you deal with risk when setting up your business?	
	Participant 09: What helped me significantly is paying attention to mentorship and advice from seasoned entrepreneurs; if you are not failing, you haven't started. You must not stop; you must continue. Failures do not necessarily mean chicken out; you need to remodel to look into what caused you to fail,	Paying attention to mentorship Keep trying and be persistent Don't be overzealous Leave within your means Let the project grow organically Continue trying even after failure- remodel

	what you can do to improve, and you go again. Keep trying and be persistent, not overzealous, like leaving with the little you have and letting the project grow organically.	
	Interviewer: After the decision to start the venture, can you explain the challenges in setting up the business?	
	Participant 09: I wanted to start the project with the seed for the flies, which was not locally available in Zimbabwe. I had no knowledge of how to rear and breed the flies. So, I had to go to South Africa to acquire the seed. Had no finance. No necessary equipment is needed. To overcome this, I had to go for training in South Africa.	Raw material not locally available No knowledge of the project Lack of capital
	Interviewer: if you had time over again, what would you have done differently and why?	
	Participant 09: Maybe I would fail. If I had to start again, I think the project would fail because I began very well . The way I started my business model was the best I could. Being given a chance to begin again, I will leave the business astray because the mentorship I got was outstanding . I got mentorship from Dr Nigel Chanakira from scratch. I had a chance to start with a more robust backing of business gurus who were coaching me.	Began well-mentored by seasoned entrepreneurs
	Interviewer: What skills did you have to utilise to operate your startup?	

	Participant 09: To be able to network . It would be best if you were flexible in accepting new ideas from others and swift in seeing which to implement and adopt. I am versatile and generous .	Good networker Flexible Versatile and generous
	Interviewer: What is the role of innovation in your company? How do you make sure the company is continuously innovating?	
	Participant 09: At first, I brought a radical new idea in Mashonaland and Zimbabwe. We had to develop the innovation. We started by sensitising the government officials on the importance of maggot farming, from the higher level till we got to the local authority. We are still pushing. Each time, we educate the public on the importance of adopting insect farming to alleviate stock feed shortage among smallholder farmers.	It was a new idea. Sensitised the government Educated the farmers
	Interviewer: How did you finance your business?	
	Participant 09: First, it was through personal savings , using my bonus as a civil servant. I got several grants from SMMEs- innovation challenge of 2019- 5000 USD, followed by CBZ, which was \$10000; ILO, Youth Connect, and the recent one, Net Impact from America-\$5000. The funding helped us to finance company registration, working permits, import and import permits, trade licences, and licences with the Breeder of the Flies. 75-80% of our finances came from grants.	Personal savings Received several grants
	Interviewer: In your opinion, do you think SMMEs have enough financial support? What could be done to alleviate the challenge?	

	Participant 09: No, most of the finances in Zimbabwe which is channelled to SMMEs are in Zimbabwean currency, and if you are to be given a loan like we have the Youth Bank currently, the last time I checked with them, their loan was around 5000RTGs. Then I told myself the procedure for getting this money was too much. The financial institutions are not even taking it up to support the SMMEs to implement their innovation in the country; if it wasn't for these international awards and grants, our project could have been crawling or could have been an idea up to now. To alleviate this challenge, we need to look into the budget of SMMEs, particularly those looking for financial assistance and offering assistance in a competitive currency, say in USD, because currently, no business can run using our local currency. The loan repayment period should be flexible; remember, some of the innovations by SMMEs will be at an ideating stage. Hence, it isn't easy to go to a bank and say I have this idea, which requires 5000 USD to take off. There is no financial institution in Zimbabwe which can finance an idea. They will say they want to see your financial cash flows and three months' bank statements. Still, all these are not there, but there is an idea which can turn the financial situation of young people in the country from ashes to riches. It is not being supported that far. Their interest rates are also very high.	No financial support for SMMEs Only local currency loans are available No support for innovative SMMEs Long loan application process Offer assistance in competitive currency. Flexible loan repayment terms Financial institutions should fund even innovative ideas Interest rates should be reasonable

	Interviewer: Are there any environmental laws that you have to follow? Does it support your business?	
	Participant 09: Yes, they are there. Before COVID-19 started, we were already masking up and using sanitises. So the coming of COVID-19 led to the government subsidising masks and sanitisers, so we began to acquire them at a lower price. Our project site needs protective clothing because we deal with organic biodegradable waste that decays and decomposes. We must also keep our flies enclosed so that filthy or house flies cannot get into our project and breed there. Our flies are unique because of their characteristic, and they are not factors of any disease. Unlike the flies we breed, those flies can spread diseases such as cholera.	
	Interviewer: Did you encounter any entry regulations to the market?	
	Participant 09: People were not aware of our product. There were a lot of misconceptions. To counter this, there is a need for proper information dissemination. So I attend various farmers' forums and on social media, where we share with farmers and farm organisations the excellent aspects of a fly so that they get basic information on the feed that we produce so that they can adopt the feed quickly without any hesitation.	A lot of misconceptions-people not aware of the product Need for proper information dissemination. Giving information through social media Educate farmers during their forums.

	Interviewer: Do you receive any support from the Ministry of Agriculture or Small and Medium Enterprises? What kind of support do you expect from the ministry?	
	Participant 09: Yes, from the Ministry of Agriculture, we even received recognition for outstanding contribution to the agricultural sector in Zimbabwe in 2020. Another support I expect is strong partnerships needed to partner as SMMEs in a group of youth and women. Recently, they were giving women chicken as projects. If we can partner, we will train those beneficiaries on feed formulation using the flies. We set up the cages so they can produce their bird (poultry) relatively cheaper than the traditional way they operate. So, I think collaborations and partnerships are the way to go.	Received recognition from the Ministry of Agriculture Strong partnerships with SMMEs Collaborations with SMMEs
	Interviewer: What possible strategies can you identify to encourage sustainable entrepreneurship adoption by SMMEs in the agricultural sector?	
	Participant 09: Incentivise people who come up with innovative ways in the agricultural sector to give them waiver in taxes. If SMMEs are given at least two years to operate, experimenting with their ideas being exempted from Tax. Even on labour obligations, we cannot keep employees for a year because they will be considered permanent. When you want to fire them, you will be	Incentivise innovative SMMEs Give innovative SMMEs waiver in taxes.

	supposed to give them an exit package; hence, you will be forced to provide short-term contracts, but we will continue training people using our resources. Regarding culture, the government should give incentives to SMMEs that are trying to go green. We provide a significant allocation towards campaigns without incentivising the person who would have come out with the idea.	
	Interviewer: In your opinion, how do you understand sustainable entrepreneurship?	
	Participant 09: It is doing business utilising available resources that will not lead to depletion for future generations. A company that is environmentally friendly and sensitive.	
	Interviewer: How would you describe the company's sustainable entrepreneurship balance?	
	Participant 09: We are not only targeting cash from selling maggots for stock feed. We are environmentally friendly in the sense that we are reducing the number of greenhouse gases that are emitted into the environment. As far as we feed our larvae, we recycle biodegradable waste, which produces many greenhouse gases that affect the ozone layer and trigger climate change when left to decay and decompose. We are getting our environment clean and safe for generations to come.	Get profit from the sale of maggots Environmentally friendly Reducing greenhouse gases Recycling biodegradable waste Cleaning the environment Reducing landfills

	When we recycle this organic waste, we do away with filthy flies and odorous smells, dealing away with landfills . Our company can recycle 500kg of degradable waste, which is a significant impact.	
	Interviewer: How does your business mitigate or adapt to climate change?	
	Participant 09: We mitigate climate change by reducing greenhouse gas emissions in the environment. Adaptation- The effects of climate change cause agricultural output to deplete, especially soya beans, so we are currently facing a shortage. We are adapting by introducing an alternative source of protein for stock feed formulation so that the little soya beans Zimbabwe can produce can be reserved towards human consumption whilst insects will be channelled towards feeding our livestock.	Reduce greenhouse gases Providing alternative sources of protein Little soya beans can be reserved for human consumption
	Interviewer: Can you explain the critical elements of being a successful entrepreneur?	
	Participant 09: You need to be driven by passion; if the enterprise is not passion-driven, it may struggle to go. Leadership and a strong network are also critically important. Leadership is all about being able to solve problems as you encounter them and being able to adapt to new systems of doing business. When you don't have a robust network system, you will miss opportunities because you are disconnected.	Need to be passion-driven Good Leadership adapt to new methods Strong networks to get opportunities
	Interviewer: Where do you see yourself in five years?	

	Participant 09: Yes, it is a niche market. In 5 years, I think we will be able to compete with big names in stock feed like Capital Foods and National Foods.	Niche market
	Interviewer: Is there any support which you might need to achieve your dream	
	Participant 09:	
	Interviewer: What impact has your company had in the Zimbabwe agricultural sector?	
	Participant 09: It has done a lot. We have trained 2500 farmers. We have also set up at least two projects in all ten provinces of Zimbabwe.	
	Interviewer: In your opinion, what should be done to support sustainable entrepreneurs?	
	Participant 09: They need funding for them to scale up their operations.	Funding to scale up operations
	Interviewer: Do you have other suggestions regarding sustainable entrepreneurship by SMMEs in the agricultural sector?	
	Participant 09: Keep on going. It is high time we start greening our projects or enterprises so that they become climate-smart. That is where the ball is going now. We are shifting from the ordinary way of doing business to sustainable methods.	Keep on going It is high time we start greening our business Be climate smart Shift to sustainable methods
	Interviewer: Is there something you want to ask me regarding the study?	
	Participant 09: Thank you for reaching out to me.	

