ANALYSIS OF THE EFFECTS OF ENVIRONMENTAL ENTREPRENEURSHIP ON SUSTAINABLE DEVELOPMENT AMONG SMALL MEDIUM ENTERPRISES IN ZAMBIA: A CASE OF LUSAKA CENTRAL BUSINESS DISTRICT (CBD)

BY

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A Dissertation submitted to the University of Zambia in partial fulfilment of the requirements for the award of the Degree of Masters of Business Administration in Management Strategy.

THE UNIVERSITY OF ZAMBIA

LUSAKA

2024

DECLARATION

I, ***Sepo Kazhila***, do hereby declare that this work is my original work achieved through personal reading and research. This work has never been submitted to the University of Zambia or any other Universities. All sources of data used and literature on related works previously done by others, used in the production of this Dissertation have been duly acknowledged. If any omission has been made, it is not by choice but by error.

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APPROVAL

This Dissertation by ***Sepo Kazhila*** is approved as a partial fulfilment of the requirements for the award of the Degree of Master of Business Administration in Management Strategy.

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ABSTRACT

These challenges have emerged due to the profit maximization motive of the SME owners at the expense of conserving the environment and the values of society. Currently, there is a pressing need for entrepreneurs to adopt environmentally friendly strategies, technologies, and products that will result in sustainable solutions to problems of the day. A study was adopted to analyze the effects of environmental entrepreneurship on sustainable development among small and medium enterprises in Lusaka's CDB. A sample of 278 respondents was selected using the Cochran formula which resulted in a response rate of 91% with 252 respondents. A mixed methodology approach was used and data was analyzed through the use of SPSS from which correlation and a summary of coefficient were used to measure the relationship among variables. The overall coefficient of correlation of 0.947 from the SPSS results suggests that there is a strong positive relationship between the variables under observation in relation to sustainable development among SMEs with regard to environmental entrepreneurship strategies which are: environmental efficacy, and environmental innovation. The R-Square (coefficient of determination) of 0.897 suggests that sustainable development is influenced 89.7% by the independent variables observed.

Keywords*:* *Environmental, Entrepreneurship, Sustainable, and Development, Small and Medium Enterprises*

DEDICATION

Dedication to my family, whose unwavering support and encouragement have been my pillars of strength throughout this academic journey. To my children, your boundless curiosity and unending belief in me inspired me to reach new heights. Lastly to my husband for your enduring patience and unwavering faith in my abilities have been the driving force behind my pursuit of knowledge. This dissertation stands as a testament to the love and dedication of my family, without whom this achievement would not have been possible.

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LIST OF ACRONYMS

ANOVA:	Analysis of Variance
BS:	Business Style
CBD:	Central Business District
CO2:	Carbon dioxide
EKC:	Environmental Kuznets Curve
FMOLS:	Fully Modified Least Squares
GS:	Government Support
NAT:	Norm Activation Theory
OECD:	The Organization for Economic Cooperation and Development
SCT:	Social Cognitive Theory
SLT:	Social Learning Theory
SME:	Small and Medium-Sized Enterprise

CHAPTER 1
INTRODUCTION

1.1 Introduction

This chapter provides the background of the study covering the importance of sustainable environmental entrepreneurship, environmental entrepreneurship practices, motives and challenges, followed by the research problem based on the background, main objective, specific objectives, research questions, and significance of the study, scope, organisation of the study and the chapter summary. The study is aimed at establishing the effect of environmental entrepreneurship on sustainable development among SMEs in Lusaka district.

1.2 Background of the study

Sustainable entrepreneurship refers to the development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs (Abdissa et al., 2022; Annals-xxi et al., 2021). Currently, there is a pressing need for entrepreneurs to adopt environmentally friendly strategies, technologies and products that will result in sustainable solutions to problems of the day. It is common knowledge that over the past 20 to 30 decades, environmental problems and sustainability has become a serious concern to the society. Hence the need to promote entrepreneurs that utilize the environment and its resources without harming them. Globally, Environmental problems and sustainability is a serious issue not just in Businesses but also in our day to day society activities (Abdissa et al., 2022; Annals-xxi et al., 2021;United Nations, 2020; Sobir, n.d.; Soto-acosta & Cismaru, 2016). Many Busineses that happen to have any beneficial effect to the environment, it's coincidental to the pursuit of money and profit maximisation (Ogujiuba et al., 2022; Pascucci et al., 2022; Patriarca & Magnusson, 2007; Sendawula, 2018). Environmental protection is an expensive venture to business that is considered to yield little or no profits and hence some businesses resorts to maximising profits at the expense of the environment (Ibid). Environmental entrepreneurship is closely related to the development and use of environmental technologies, but it also embraces several non-technological dimensions (Dzomonda, 2022; Matinaro et al., 2019). Based on the conventional understanding of innovation, as outlined in the Oslo Manual, The Organization for Economic Cooperation and Development (OECD) which argues that establishment and adoption of environmental entrepreneurship significantly improved, products (goods or services),

organizational structures, processes, marketing methods and institutional arrangements which, with or without intent, also leads to environmental improvements compared to relevant alternatives (OECD, 2019).

Environmental entrepreneurship has a vital role in the formation of domestic industries, systems, and networks as a driving force for institutional growth (Bajdor & Pawełoszek, 2021; Ogujiuba et al., 2022). Due to systemic pressures and institutional differences, the degree of influence exerted on the overall sector varies across national borders (Urbano et al., 2019). Even though studies of the relationship between institutional factors, entrepreneurship, and development are flourishing, the majority of the literature continues to be dominated by classic perspectives such as endogenous growth and Schumpeterian theory (Urbano et al., 2019). Consideration of green entrepreneurial activities within the (sustainable) development process necessitates a broader view, since green entrepreneurs are part of complex sociotechnical networks and are influenced by other players, social institutions, and laws and regulations. Zahraie et al. (2016) observed that green entrepreneurs struggle to overcome prevalent patterns; yet, regulatory assistance at opportune times may facilitate this transformation by fostering a vision for collaborative action. According to Demirel et al. (2019), governments play a significant role in legitimizing green business through issuing contracts, enforcing environmental regulations, and facilitating funding. Yi (2020) noted that university assistance for green entrepreneurship generates an atmosphere favourable to green firms. Such prior studies demonstrate a positive link between green entrepreneurship and green enterprise, which is systematically related to government control in developing countries. Other studies have argued that, although environmental entrepreneurship is important education is crucial for increasing the adoption of sustainable business. Gast et al. (2017) suggest that it is essential for SME owners-managers to tell their consumers about their green products and services in terms of their characteristics, advantages, and how they contribute to environmental conservation and the preservation of the social value system.

Shepherd and Patzelt (2011), observed that sustainable entrepreneurship is focused on the protection of nature, life support and group, and its objective is to utilize seen opportunities to bring into reality future products, processes, and services for benefit, where benefit is extensively characterized to incorporate economic and non-economic advantages to people, the economy, and society. Through this lens, we can see that "Sustainable entrepreneurship is thus not only

associated with the promise of more traditional concepts of entrepreneurship but bears additional potential both for society and the environment" (Choongo, Van Burg, Paas and Masurel, 2016).

According to some several studies done in many of the developing and middle-income countries in Africa, it has been argued that SMEs have contributed greatly to the environment and social challenges such as environmental degradation, exhaustion of natural resources, poverty, diseases, poor in- restructure, unemployment and emission of dangerous gases (Choongo, Van Burg, Paas and Masurel, 2016). These challenges have emerged due to the profit maximization motive of the SMEs owners at the expense of conserving the environment and the values of the society.

Many businesses such as SMEs represent majority of businesses in developing economies and are therefore, globally recognized for enhancing economic and social growth, job creation, poverty reduction and enhancing income distribution (Hosseininia and Ramezani, 2016). However, in Africa and Zambia specifically there is anecdotal evidence that SMEs have caused environment and social challenges such as environmental degradation, exhaustion of natural resources, poverty, diseases, poor infrastructure, unemployment and emission of dangerous gases (Choongo, Van Burg, Paas and Masurel, 2016). These challenges have emerged due to the profit maximization motive of the SMEs owners at the expense of conserving the environment and the values of the society. Although some scholars in this field have provided evidence supporting the link between environmental entrepreneurship and sustainability in developed economies (Zahraie et al., 2016 and Fernandez et al., 2021). A lack of evidence and academic emphasis on third world developing countries such as Zambia raises questions regarding the effectiveness and transferability of such developmental propositions. It is therefore, it is against this background that this study was developed in quest to establish the effect of environmental entrepreneurship on sustainable development among SMEs in Lusaka district.

1.3 Statement of the problem

Environmental problems and sustainability have continued to increase in the past decade, reports reveal that in 2006 the total amount of municipal solid generated globally reached 2.02 billion tones, representing a 7% annual increase since 2003 (Abdissa et al., 2022), therefore, entrepreneurs that utilize the environment and its resources without harming them are the answer to business sustainability (Abdissa et al., 2022; Bajdor & Pawełoszek, 2021). Currently there is great concern that most SMEs in Lusaka are not doing their job in taking care of the environment

they operate from to ensure environmental sustainability. Many businesses including majority of SMEs have been reported to practice environmental sustainability only when they anticipate profit maximisation (Sendawula, 2018; Soto-acosta & Cismaru, 2016). Several studies in developing countries including Zambia have demonstrated that SMEs have also caused environment and social challenges such as environmental degradation, exhaustion of natural resources, poverty, diseases, poor infrastructure, unemployment and emission of dangerous gases (Choongo et al., 2016). These challenges have emerged due to the profit maximization motive of the SMEs owners at the expense of conserving the environment and the values of the society (Ibid).

Despite the awareness of the benefits of environmental entrepreneurship on sustainable development among SMEs, there still remains a low level in the adoption of environmental entrepreneurship among SMEs. Several studies in developing countries including Zambia have demonstrated that SMEs have also caused environmental and social challenges such as environmental degradation, exhaustion of natural resources, poverty, diseases, poor infrastructure, unemployment, and emission of dangerous gases (Choongo et al., 2016).

The study is relevant in helping SMEs manage their waste in Zambia as it brings awareness of the importance of environmental entrepreneurship in achieving sustainable development in the country. It is against this problem that the study endeavoured to investigate the effect of environmental entrepreneurship and sustainable development among SMEs in the Lusaka district.

1.4 Aim of the study

The aim of this study is to establish the effects of environmental entrepreneurship on sustainable development with the view of enhancing the adoption of environmental entrepreneurship for sustainable development.

1.5 The objectives of the research

The research was guided by the following objectives:

1.5.1 Main objective

To assess the effect of environmental entrepreneurship on sustainable development among SMEs in Lusaka district: a case of the Central Business District (CBD).

1.5.2 Specific objectives

i. To determine the current level of environmental entrepreneurship that encourage sustainable development among SMEs in Lusaka CBD.
ii. To establish the effect of sustainable strategies through environmental entrepreneurships among SMEs in Lusaka.
iii. To determine the effect of environmental enterprises on sustainable development among SMEs in Lusaka.

1.6 General question

What is the effect of environmental entrepreneurship on sustainable development among SMEs in Lusaka district?

1.6.1 Research questions

i. What are the current levels of environmental entrepreneurships that encourage sustainable development among SMEs in Lusaka CBD?
ii. What sustainable strategies have been established through environmental entrepreneurship and what are the effect among SMEs in Lusaka?
iii. What is the effect of environmental entrepreneurship on sustainable development among SMEs in Lusaka?

1.7 Significance of the study

Firstly, the study is significant in that, it will inform SMEs on the perceived low environmental entrepreneurship for sustainable development by resolving problems attributed to environmental degradation such as waste management, recycling, low carbon emission, and waste discharge through the adoption of environmental entrepreneurship strategies.

Secondly, it will offer perceptions of the obstacles that small and medium-sized enterprises (SMEs) might face when embracing environmental entrepreneurship and suggest solutions.

The Study will also help researchers, policymakers, and owners of small and medium sized enterprises (SMEs) create strategies and policies that encourage environmental entrepreneurship, which promotes sustainable development.

Finally, the study will contribute to the existing body of knowledge in the area of environmental entrepreneurship and sustainable development among SMEs.

1.7 Scope and delimitation of the study

The study focused on environmental entrepreneurship, sustainable development, and the SMEs. The study focused on the strategies that can be employed by SMEs to embrace environmental entrepreneurship. The research participants where involved SMEs in Lusaka's Central Business District (CBD) collected from town center market.

1.8 Definition of key terms

Development: a process that creates growth, progress, positive change or the addition of physical, economic, environmental, social and demographic. Development means "improvement in country's economic and social conditions". More specially, it refers to improvements in way of managing an area's natural and human resources. In order to create wealth and improve people's lives. While elaborating on the meaning of development suggests that while there can be value judgments on what is development and what is not, it should be a universally acceptable aim of development to make for conditions that lead to a realization of the potentials of human personality.

Entrepreneurship: the activity of setting up a business or businesses, taking on financial risks in the hope of profit. Entrepreneurship is the ability and readiness to develop, organize and run a business enterprise, along with any of its uncertainties in order to make a profit. The most prominent example of entrepreneurship is the starting of new businesses. In economics, entrepreneurship connected with land, labour, natural resources and capital can generate a profit. The entrepreneurial vision is defined by discovery and risk-taking and is an indispensable part of a nation's capacity to succeed in an ever-changing and more competitive global marketplace. According to Allen, (2016), entrepreneurship is one of four resources identified by economists as essential to production: land, natural resources, labour, and capital. The first three of these are combined by an entrepreneur to produce items or deliver services. Entrepreneurship is not always an easy route, and it is not for everyone, but when approached correctly, it can be one of the most satisfying and beneficial career choices.

According to Kotler and Keller (2014), the entrepreneur is someone who has the ability and desire to establish, administer and succeed in a start-up venture along with risk entitled to it, to make profits. The best example of entrepreneurship is the starting of a new business venture. The

entrepreneurs are often known as a source of new ideas or innovators, and bring new ideas in the market by replacing old with a new invention.

Environment: the surroundings or conditions in which a person, animal, or plant lives or operates. Environment can be defined as a sum total of all the living and non-living elements and their effects that influence human life. While all living or biotic elements are animals, plants, forests, fisheries, and birds, non-living or abiotic elements include water, land, sunlight, rocks, and air.

Environmental Entrepreneurship: the process of entrepreneurship applied in order to create businesses that solve environmental problems or operate sustainably. Environmental entrepreneurship can be defined as the process of entrepreneurship applied in order to create businesses that solve environmental problems or operate sustainably. The term began to be widely used in the 1990s. Ecopreneurs are "entrepreneurs whose business efforts are not only driven by profit, but also by a concern for the environment (Pacheco et al., 2014).

Small and Medium Enterprises: are non-subsidiary, independent firms which employ less than a given number of employees. SMEs are firms with revenues, assets, or a particular number of employees that fall below a certain threshold. Each country has its own definition of a small and medium-sized business. Certain size criteria must be met, and the industry in which the company works is occasionally considered (OECD, 2019).

Sustainability: is a societal goal that broadly aims for humans to safely co-exist on planet Earth over a long time. Specific definitions of sustainability are difficult to agree on and therefore vary in the literature and over time.

Sustainable Development: Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs. According OECD (2019), Sustainable development is a social, economic, and environmental planning approach that seeks to reconcile the social and economic requirements of current and future human generations with the need of maintaining or preventing irreversible damage to the natural environment. There is no single clear and widely acknowledged definition of sustainable development. It is commonly considered to include most, if not all, of the following goals, beliefs, and values as a general approach to human growth.

1.9 Outline of the dissertation

The research proposal consists of six chapters. Chapter One provides the introduction and background of the study highlighting the importance of sustainable environmental entrepreneurship, environmental entrepreneurship practices, motives and challenges, followed by the research problem based on the background, main objective, specific objectives, research questions, significance of the study and the scope. Chapter two is the literature which discusses the theoretical and empirical aspects of environmental entrepreneurship and sustainability. The chapter also discusses theoretical and conceptual framework to bring out issues relating to environmental entrepreneurship and sustainable development. Finally, the chapter provides a brief description of the operationalization of conceptual framework variables. And thereafter chapter three will outline the research methodology by clearly stating the research philosophy, approach, study design, target population, sample size and sampling techniques. Chapter four, presents Data analysis and presentation: This chapter will present the obtained results and provide analysis as set out in chapter three. Chapter five, outlines the discussion of results and the findings Chapter six discusses the conclusions and recommendations.

1.10 Chapter Summary

This chapter has given a background and problem statement environmental entrepreneurship and sustainable development. The aim of the study was discussed in this chapter, the aim shows the relevance of the study and what it wishes to accomplish at the end of it all. This chapter also constituted the objectives of the study from which the conceptual framework will be construed in the following chapters and it they were also used to answer the research questions, another sub element which was highlighted in this chapter is the scope of the study which indicated areas of focus for this paper from which the research methodology will be built and lastly the significance of the study was given to define the beneficiaries of the study. The chapter also discussed the statement of the problem in-depth to indicate the importance of this study by highlighting the possible actions that can be taken to cushion the problem at hand.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter has been outlined as follows; theoretical review, Empirical literature review covering global perspective in all six continents regional African perspective covering Southern, eastern and north western African as well as the Zambian perspective. Secondly the chapter discussed theoretical review based on extensive literature review. The chapter further discusses the conceptual and theoretical framework of the study. According to Creswell, (2014), a theoretical framework is a single formal theory. When a study is designed around a theoretical framework, the theory is the primary means in which the research problem was understood and investigated.

2.2 Theoretical Knowledge review

In order to broaden the theoretical knowledge on the effect of environmental entrepreneurship on sustainable development among SMEs. Several studies were revealed under Environmental Enterprise and sustainable strategies.

2.2.1 Environmental Enterprise

An environmental enterprise is an environmentally friendly/compatible business. Specifically, an environmental enterprise is a business that produces value in the same manner which an ecosystem does, neither producing waste nor consuming unsustainable resources (Ogujiuba et al., 2022; Sendawula, 2018). In addition, an environmental enterprise rather finds alternative ways to produce one's products instead of taking advantage of the environment for the sake of human profits. To be closer to being an environmentally friendly company, some environmental enterprises invest their money to develop or improve their technologies which are also environmentally friendly. In addition, environmental enterprises usually try to reduce global warming, hence some companies use environmentally friendly materials to build their stores. They also set in environmentally friendly place regulations. All these efforts of the environmental enterprises can bring positive effects both for nature and people (Sendawula, 2018). The concept is rooted in the well-enumerated theories of natural capital, the eco-economy, and cradle-to-cradle design.

2.2.2 Sustainable strategies

According to Rizos et al., (2016), small and medium-sized enterprises in the United Kingdom that create and execute environmental management systems outperformed their competitors in terms of sales. This is consistent with the findings of Biondi et al. (2002), who found that environmental management systems help Small and Medium-Sized Enterprises (SMEs) to gain a competitive edge over other companies in the same industry. Therefore, Small and Medium-Sized Enterprises (SMEs) should adopt environmental management policies to aid them in implementing sustainable measures.

In addition, consumer education is crucial for increasing the adoption of sustainable business. For example, Gast et al. (2017) suggest that it is essential for SME owners-managers to tell their consumers about their green products and services in terms of their characteristics, advantages, and how they contribute to environmental conservation and the preservation of the social value system.

Globally, the incorporation of sustainability into entrepreneurship teaching at business schools inspires students to launch and operate enterprises (Singhal, Suryawanshi and Mittal, 2017; Gast et al., 2017). However, the maximizing of profits is prioritized at the cost of environmental and social considerations. Therefore, business schools should teach entrepreneurship and sustainability concurrently in order to encourage aspiring entrepreneurs to discover sustainable possibilities and devise creative strategies for exploiting them. This will increase the establishment of more sustainable businesses in the future, since the students who are taught sustainability concepts and activities now are the entrepreneurs of the future.

Additionally, assistance from educational institutions such as colleges can promote sustainable enterprise (de Eyto, Mc Mahon, Hadfield and Hutchings, 2018). According to research conducted by Natarajan and Wyrick (2014), universities may partner with sustainable SMEs to teach students about sustainability. Students can engage in transdisciplinary learning activities from the start of their courses and projects, fostering environmental and social cognition and mindset. This can assist students to engage in sustainable entrepreneurship in their future small and medium-sized enterprises.

Natarajan and Wyrick (2014) found that networking promotes the adoption of sustainable entrepreneurship, particularly by facilitating access to important tangible and intangible

resources, connecting SMEs owners-managers to sustainability information services, access to capital, infrastructure, and sustainability opportunities, and by promoting the local sustainability entrepreneurial culture (Kraus et al., 2017). Adopting and implementing sustainable activities and behaviours will likely be facilitated for SME's through such initiatives.

According to reports, organizational learning influences and promotes the adoption of sustainable entrepreneurship among SMEs in developing nations (Natarajan and Wyrick, 2014). This entails learning that occurs within an organization. This is accomplished through performing refresher training on sustainability activities, teamwork, and benchmarking with other SMEs to identify their best sustainable entrepreneurship methods.

Government assistance to promote sustainable entrepreneurship among SMEs (Alani Lawal, Worlu, and Ayoade, 2016). This assistance can help SMEs to do research, acquire enhanced technology that simplifies the manufacture of green goods, ensure the quality of green products, and promote them locally and worldwide. Short- and long-term financial stability will be provided to small and medium-sized enterprises (SMEs) in their attempts to adopt sustainable entrepreneurship. Walker et al. (2014) found that family and friends may also assist SME owners in acquiring raw materials, gaining access to technology, and promoting their green products.

2.3 Empirical Review

The study reviewed studies that have been done by other scholars and academicians on environmental entrepreneurship on sustainable development. The reviewed literature was presented as follows.

2.3.1 Globally Level

Globally, Environmental problems in relation to sustainability underscore the urgency of acting to mitigate climate change, conserve biodiversity, reduce pollution and promote sustainable development strategies (OECD, 2019; United Nation, 2020). Therefore, many Businesses who happens to have any beneficial effect to the environment, it’s coincidental to the pursuit of money and profit maximisation. Environmental protection is an expensive venture to business that is considered to yield little or no profits and hence some businesses resorts to maximising profits at the expense of the environment (Ibid).

2.3.1.1 European Perspective

Norway

In this study done in Norway by Samier and Quian (2010) aimed at establishing how sustainable business approaches can influence and enhance SMEs development despite of their barriers and limitations which are associated with their day-to-day management. The authors adopted a pragmatic approach to pragmatic insight into the three dimensions of sustainable development (social, environmental, economic) and how the interaction among these three dimensions will benefit SMEs as a whole. Further the study focused on companies as technique consulting co., software developing co., and head hunting co, the empirical materials needed for this research are collected during personal interviews with SMEs entrepreneurs. The results revealed that SMEs seem to work with their environmental impact or with their social responsibility towards sustainable development, but probably the three dimensions of SD are not widely interacted. It was also found that SMEs differs from large companies when it comes to applying sustainable development is the strategic approach and the use of formal sustainability concepts.

Bosnia and Herzegovina

Silajdžić et al. (2015) conducted a study on green entrepreneurship in the emerging economies. The study adopted a qualitative research approach and data was gathered using interview guides. Interviews were conducted with representatives of the government, the social community, businesses, and universities in Bosnia and Herzegovina. The results of this research show that, in emerging countries, entrepreneurship is yet to be well prepared for responding to possible challenges or admitting all sorts of risks for investing in green businesses. In this respect, government policies can attenuate the entry barriers and reduce the cost of establishing an appropriate market.

Romania

According to the study done by Soto-Acosta et al., **(**2016) in Romania on how sustainable entrepreneurship leads to business performance. The study investigated the standpoints of SMEs (small and medium-sized enterprises) entrepreneurs on different facets. The emphasis is laid on the entrepreneurs' approaches towards people, planet and profit and on their prioritization within business dynamics. The aforementioned dimensions are deemed important factors engendering

business performance in terms of turnover, customer attraction and retention and market share. The study adopted a quantitative perspective relying on a questionnaire-based survey. The results Posited that the proposed model accounts for almost 50 percent of variance in business performance, whereas sustainable entrepreneurship approaches towards the people and profit dimensions have a significant positive influence on business performance.

Poland

In another similar study done in Poland on the effect of entrepreneurship in the economic dimension is a business entity, most often a small or medium enterprise. The study aimed at to identifying and evaluate attitudes towards sustainable entrepreneurship among Polish enterprises. We compare the obtained results with their self-assessment and distinguish different approaches to business activity. The cluster analysis of survey results revealed that the Polish SME sector can be divided into five separate groups characterized by a different approach and level of implementation of sustainable development. It was concluded that the Polish enterprises are more focused on social than environmental aspects (Samier, 2010).

2.3.1.2 Asian Perspective

Malaysia

In, Malaysia, a similar study was done by Nordin, (2019) The study examined the **role of** opportunities for green entrepreneurship towards investigating the practice of green entrepreneurship among SMES in Malaysia. The study applied a quantitative approach to collect data by using purposive sampling in selecting the respondents. The study targeted SMEs entrepreneurs in Malaysia who have been practicing green entrepreneurship in their business activities. The questionnaires were sent to respondents consisting of the owners, managerial level or decision makers of SMEs from the services and manufacturing sector in selected regions of Malaysia. The finding from the study by Nagwan, (2023), revealed that, despite Government commitment to green economy and human opportunities that comes with green economy, the practice of green economy is still low among SMEs in Malaysia. It was also revealed that lack of studies and availability data were some key determinants that influencing the adaptation of the green technology.

Russia

Aroshidze A (2021) conducted a study on the sustainable enterprise development tetrad and assessment of its balance in Russia**.** The purpose of the study is to develop and apply a methodology for assessing the balance of the economic, social, environmental, and information components of sustainable development according to the criteria of reliability, dynamism, and acceptability. This article provided an argument regarding the need to transform information stability from factors into a determinant of sustainable development, thereby turning the traditional triad into a tetrad. Research results of small and medium-sized enterprises in Russia indicated that only two out of fifteen enterprises achieved a high level of balanced sustainable development. In most cases, regardless the sustainable development level, the balance of determinants is at a lower level. Moreover, cases with a high but not balanced sustainable development confirmed the assumption that a high sustainability level for some determinants can compensate for a low sustainability level for others. The results obtained therefore, prove that the real vector of sustainable development can be determined only in accordance with the balance degree.

China

Jiang et al. (2018) investigated the impact of green entrepreneurial orientation on the performance of the firms in China. The study used as a descriptive study design and adopted a quantitative research approach. The population of the study were Chinese firms and the sample size was 264 firms. The findings of the study show that the relationship between the green entrepreneurial orientation and the firm performance is adjusted by the dynamic technology of the green technology and knowledge transfer and incorporation. The green entrepreneurial orientation imposes positive impacts on financial performance and the environment.

In another study done on the influence of green entrepreneurial activity on sustainable development, using institutional economics as a theoretical framework. Also, the role of entrepreneurship policy is analysed in the context of Saudi Arabia. Using information from the General Authority for Statistics from 13 Saudi Arabian cities, the main findings show that green entrepreneurship positively contributes to the economic, social, and environmental components of sustainable development during the period 2012–2017. These results demonstrate a measurable indication of sustainable development outcomes, whereby Saudi Arabian institutions align

entrepreneurial activities with a positive triple bottom line effect. Accordingly, these findings contribute new evidence to justify government commitment to supporting green entrepreneurship in Saudi Arabia and encourage future domestic policies.

2.3.1.3 South American Region

Latin America and the Caribbean

According to United Nations (2010) on sustainable development in Latin America and the Caribbean: trends, progress, and challenges in Sustainable consumption and production, Mining, transport, chemicals and Waste management. The study argued that every business must assume responsibility for the wastes they generate, and for their management of the processes that generate them. Thus, it was noted that, it is required to move from traditional thinking to a concept that takes account of the challenges of sustainability. Civil society organizations can play a significant role in this connection. It was also noted that environmental policy in Latin America and the Caribbean has placed emphasis on solid waste management, due to the multiplicity of consequences it gives rise to. This has led to improved practices, although major deficiencies remain. In addition, new factors, not given sufficient consideration earlier, have arisen. Examples include the possibility of creating new recycling businesses, exploiting the energy potential of waste, contributing to the mitigation of climate change, and producing fertilizers. In order for these activities to be meaningful within a context of sustainability, there must be a change in the approach that has governed the waste disposal "business" in the past few decades, in which "more waste means more profit". Public policy must encourage a new perspective. This could produce major benefits to sustainable development efforts in a variety of dimensions. However, it was noted that political will on the part of Government is needed in order to adopt a positive approach to the problem of solid waste. National waste management policies must be implemented, and there must be a strategy to retain the necessary personnel in the public sector, prevent corrupt practices, ensure that wastes are categorized based on technical definitions, and institute training programmes for municipal personnel, led by experts in the field. The study recommended that serious fiscal problem involving recycling must also be addressed.

United Nation report on sustainability of development in Latin America and the Caribbean, challenges and opportunities. The report noted that in many sectors, the principles of environmental protection and sustainable development are still seen as a constraint on economic

and social development, and this has limited Governments' ability to control pollution and to halt the increasing environmental damage being done to critical ecosystems. Most of the explicit environmental policies now in effect, as well as the direct and indirect regulatory instruments in use in the region, are essentially reactive in nature. There is need for prevention and incentive policies aimed at improving environmental quality as it relates to industrial competitiveness which have received far less attention. There is also need to achieve the goals set out in these agreements through the formulation of effective cross-sectoral and sub-regional policies and to strengthen the international negotiating position of the countries (United Nations, 2006).

Several studies have revealed that in many developing and middle-income countries in Africa, SMEs have contributed to environment and social challenges such as environmental degradation, exhaustion of natural resources, poverty, diseases, poor in- restructure, unemployment and emission of dangerous gases (Choongo, Van Burg, Paas and Masurel, 2016). These challenges have emerged due to the profit maximization motive of the SMEs owners at the expense of conserving the environment and the values of the society.

2.3.2 African Perspective

2.3.2.1 West African Perspective

Nigeria

Ataman et al. (2018) investigated the concept of green entrepreneurship and attention to the opportunities for developing the green entrepreneurship in Nigeria. The study used an exploratory study design. The findings of this research showed that most of the developed countries and the developing ones have tried hard to operate in compliance with the green requirements according to the policies set by international authorities. This research suggests that, as far as environmental sustainability is concerned, the green economy and green entrepreneurship must gain more Similar study done in west Africa to investigate the causal relationship between Entrepreneurship and environment using the co integrating regression (COINTREG) or Fully Modified Least Squares approach (FMOLS). The study utilised Annual time series data for the period spanning 2000-2012. The results which emanated from the findings revealed that there was the existence of a long run relationship between entrepreneurship and CO2 per capita (a measure of environmental sustainability). The results further reveal the existence of the Environmental Kuznets Curve (EKC). The percentage of the service sector shows a positive relationship with

CO2 emission. It was further noted that this is owing to the erratic power supply in Nigerian economy which makes service firms dependent on self-power generators that make use of fossil fuels and emit large sum of CO2. All in all, it was observed that entrepreneurship has massive impacts on environmental sustainability.

Ghana

Abimbola and Agboola, (2011) conducted a study on environmental factors and entrepreneurship development in Ghana. The study used resources from academic publications, reports and publications of government agencies and other stakeholders in the field of entrepreneurship in Nigeria, some policy programmes of government were examined with a view to understanding their relevance and states in entrepreneurship development initiatives in the country. It was found that most of the programmes considered were moribund either due to discontinuation by succeeding governments or lack of adequate resources, both human and material, for their operations. In few cases where the programmes were in place, a skewed spread was observed, which was capable of hampering the success of these programmes. The paper r thus recommends that policy programmes should avoid duplication and clashes in spheres of operation; continuity in programme implementation. Attention in Ghana.

Nigeria

Riti et al. (2015) investigated the causal relationship between Entrepreneurship and environment using the co-integrating regression (COINTREG) or Fully Modified Least Squares approach (FMOLS). Annual time series data is employed for the period spanning 2000-2012. The results which emanated from the findings depict that there was the existence of a long run relationship between entrepreneurship and CO^2 per capita (a measure of environmental sustainability). The results further reveal the existence of the Environmental Kuznets Curve (EKC). The percentage of the service sector shows a positive relationship with CO_2 emission. This is owing to the erratic power supply in Nigerian economy which makes service firms dependent on self-power generators that make use of fossil fuels and emit large sum of CO_2. The study recommended opportunities in green building, renewable energy, sustainable agriculture; recycling business and green financing created by degrading environment in Nigeria should be adopted for environmental entrepreneurship to boost sustainable economic development. While the erratic power supply in Nigeria should also be improved upon to reduce the use of self-power generators that use fossil fuels and emit large sums of CO_2.

2.3.2.2 East African Perspective

Ethiopia

In Ethiopia, a study was done to investigate the determinants of sustainable growth of SMEs in developing countries. To achieve this primary data was collected from SMEs engaged in service, manufacturing, trade, construction, and urban agriculture. The sampling techniques used for this study was the stratified simple random sampling technique in which 194 employees of SMEs were drawn as a sample size for this study and multiple linear regression models were used with the Statistical Package for the Social Sciences (SPSS) version 23 software as the data analysis tool. The results revealed that coronavirus and political uncertainty in Ethiopia, which have allowed for widespread corruption, are now harming the growth of SMEs. It was also noted that political instability, corruption, and COVID-19 are now having a substantial effect on the growth of SMEs in Ethiopia. These concerns have serious consequences for the long-term sustainability of Ethiopian SMEs. Hence, the study strongly recommended sequential policy reform in the region, as well as a review of current policies aimed at ensuring effective corruption control in the region and bringing political stability to the region, particularly in Ambo town, Ethiopia (Abdissa et al., 2022).

Kenya

A similar investigation was done on environmental entrepreneurship and sustainable development among SMEs in Nairobi County. A sample representation of 246 from three levels of management of all SMEs was chosen in the study using simple random sampling and data was collected using questionnaires. Data was analysed using both non-parametric and parametric tests. Most of the data collected using the Likert scale was ordinal. Open-ended questions were analysed using descriptive content analysis. There was error checking before data analysis to check for correctness of data input to the system cleared out transcription errors. Descriptive statistics including the range, mean, standard deviation and variance were applied. Exploratory data analysis included reliability tests for constructs at both individual and composite level and measurement of both convergent and construct validity were carried out using regression analysis to determine the relationship between the environmental entrepreneurship and sustainable development. The findings established the effect of environmental entrepreneurship and sustainable development as having a good fit since all were above or below the recommended levels. The effect of environmental entrepreneurship was indicated by regression model results

(R2 0.526, P < 0.000). The five independent variables had significant effects on sustainable development. Innovation had a significant effect on sustainable development (p> 0.019), venture product had a significant effect on sustainable development (P> 0.004), product development too had a significant effect on sustainable development (P > 0.011), whereas market opportunity and resource opportunity had significant effect on sustainable development (P > 0.03 and P > 0.000) respectively. The study recommends that SMEs' transition to sustainable practices can also favour the greening of supply chains; indeed, responding to green requirements for SMEs' participation in global value chains. Green-related changes in transnational supply chains can be particularly challenging for SMEs, as they are requested to fulfil highly demanding green quality standards, while facing growing pressures to reduce costs, in particular, among other recommendations.

Mwakambirwa (2013) conducted a study on Green Entrepreneurial Practices Among Small and Medium Enterprises in Mombasa County, Kenya. The purpose of the study was to determine the extent of Green entrepreneurial practices among SMEs and also to determine the factors that contribute to green entrepreneurial practices in Mombasa, Kenya. The study adopted a descriptive survey design and collected Primary data using self-administered questionnaires. The findings of the study were that the SMEs had within their spheres of operation green entrepreneurial practices. This could be attributed to the importance with which green entrepreneurship is regarded in Kenya. With regard to the factors influencing green entrepreneurship, they were found to have variable effects on the practices. Since green entrepreneurial practices by SMEs in Mombasa County were still in nascent stage it was recommended that relevant stakeholders should put in place measures meant to spur adoption and implementation by most entities including SMEs. Also, the government through its relevant authorities should enhance support for green product innovation and the investors in green entrepreneurship should form a lobby to enable them have strong negotiating ground with other stakeholders.

2.3.2.3 SADC Level

South Africa

Ogujiuba et al, (2022) conducted a study on impact of Government Support, Business Style, and Entrepreneurial Sustainability on Business Location of SMEs in South Africa's Mpumalanga Province. The author wanted to ascertain as to whether government support, business style, and entrepreneurship sustainability affect SME operations differently depending on location (rural,

semi-urban, or urban). The study adopted MANOVA technique for the analysis to determine whether there is a significant difference between groups on a composite dependent variable as well as the univariate results for each dependent variable separately. Government support (GS), business style (BS), and entrepreneurial sustainability were used as dependent variables (SE). The independent variable was the business location. The study revealed that on the combined dependent variables, there was a statistically significant difference between SME location: F (3, 902) = 20.388, p = 0.001, Wilks' Lambda = 0.88, partial eta squared = 0.06. When the results for the dependent variables were considered separately, they all reached statistical significance, using a Bonferroni adjusted alpha level of 0.017. BS: F (1, 904) = 13.29, p _ 001, partial eta squared = 0.03. The findings show that locational effects on government support have a knock-on effect on the business plan and long-term entrepreneurship. It was therefore, recommended that the government must reconsider its rural activities to ensure that support is distributed equitably across levels of location. The South African Government and other developing countries needs to commit themselves to creating an environment that bolsters sustainability for entrepreneurship to thrive.

Malawi

Gama (2020), Environmental Collaboration, Sustainable Innovation, and SME Growth in sub-Saharan Africa: Evidence from Malawi. The aim of the study was to investigate the impact of environmental collaboration on sustainable innovation and its impact on firm growth. The hypotheses were tested using data from 455 small and medium-sized enterprises (SMEs) in Malawi. The findings from the study show that environmental collaboration positively relates to sustainable innovation and this relationship is moderated by environmental commitment. The results also show that sustainable innovation is positively associated with SME growth. The results suggest that sustainable innovation mediates the environmental collaboration-SME growth relationship.

Zimbabwe

Chinyere (2018) conducted a study on ecopreneurship and competitive advantage of small and medium scale enterprises (SMES) in Bulawayo, Zimbabwe. The aim of the study was to investigate how ecopreneurship practices influence the competitive activities of SMEs in Zimbabwe. The study used survey design; and the sample size of 263 was obtained using Stat Trek's Sample Planning Wizard tool. The non-probability convenience sampling technique was

used for this study. The questionnaire was the primary source of data collection which was structured in four-point Likert scale and validated with face-to-face approach. The reliability was done using test split-half method. The result gave a reliability coefficient of 0.96 indicating a high degree of item consistency. Data was collected through a self-administered questionnaire. Hypotheses formulated were tested using z-test and regression analysis test. Findings from the study revealed that green products have a positive impact on the continued survival of SMEs business ($z = 6.119 >$ at $p< 0.05$), environmental sustainability positively affects the indigenous SMEs growth (R^{**} calc $= 0.711 >$ at $p< 0.05$) and that eco-creativity and innovation have positive impact on the competitive edge of SMEs over rival firms ($z = 9.181 >$ at $p< 0.05$). The study concludes that green product is the best tactic for sustaining operational survival of SMEs and they would continue to enjoy competitive advantage against rival firms if they imbibe the tools of eco-creativity and innovation. The study recommended that academics, entrepreneurs, and government entities should work together to expand research, publications, and other initiatives to promote eco-preneurship.

2.4 Emerging Issues

As the world grapples with challenges of climate change, resource depletion, and environmental degradation, there has been a growing recognition of the need for businesses, in this instance Small and Medium Enterprises, to adopt sustainable strategies. One significant avenue through which this transition can occur is through environmental entrepreneurship that pursues innovative business opportunities that are not only financially viable but also have a positive impact on the environment. The concept of green entrepreneurship reflects the current development trends, and it appears next to such terms as sustainable development, ecological development, and corporate environmental responsibility. Green entrepreneurship determines the effectiveness of achieving economic, social, and environmental goal (Anna, 2023).

2.4.1 Eco-Innovation and Competitive Advantage

The role of innovation in SMEs that embrace eco-innovations, such as energy-efficient technologies, sustainable supply chain practices, and waste reduction strategies, often experience improved resource efficiency and reduced operational costs. These eco-innovations can give them a competitive edge in the market. However, there is a need for further research to explore the

extent to which SMEs in Lusaka are adopting eco-innovations and the tangible benefits they accrue from these initiatives (OECD, 2011).

2.4.2 Evolving Regulatory Framework

One of the foremost emerging issues is the evolving regulatory policy framework in Zambia and its implications for SMEs engaged in environmental entrepreneurship. In Recent years, the government has been actively working to strengthen environmental protection laws and regulations. This shift in policy reflects the growing awareness of environmental issues within the country and the desire to align with international sustainable development standards

For SMEs in Lusaka's CBD area involved in environmental entrepreneurship, this evolving regulatory landscape represents both opportunities and challenges. On one hand, a supportive regulatory environment can encourage businesses to adopt environmentally friendly practices. On the other hand, compliance with new and potentially stricter regulations may require significant investments and adaptation, posing financial and operational challenges for SMEs. Thus, understanding the implications of these regulatory changes is crucial for SMEs striving to balance environmentally sustainable development with profitability (Chisala, 2008).

2.4.3 Access to Funding and Resources

Access to funding and resources has always been a concern for SMEs in developing countries and Zambia included and this issue is amplified when they engage in environmental entrepreneurship. While there is a growing interest among investors and financial institutions in supporting sustainable development among businesses, SMEs in Lusaka CBD may still face barriers when seeking funding for eco-friendly initiatives.

Emerging trends in impact investing and green financing present opportunities for SMEs in the CBD, but navigating these complex financial ecosystems can be challenging. SMEs must develop robust business plans and demonstrate their commitment to sustainable environmental business development to attract investors and secure the necessary resources (ZDA, 2013).

2.4.4 Consumer Awareness and Preferences

Consumer awareness and preferences are crucial factors shaping the success of SMEs involved in environmental entrepreneurship. As global awareness of environmental issues continues to rise, consumers are increasingly seeking products and services that align with their values and

prioritize sustainability. This shift in consumer behaviour has the potential to drive demand for eco-friendly products and services, benefiting SMEs that have embraced this trend.

However, SMEs must not only adopt to changing consumer preferences but also effectively communicate their commitment to sustainability. Building brand images that resonate with environmentally conscious consumers is essential, and SMEs in Lusaka CBD must stay attuned to emerging trends in consumer behaviour and marketing strategies.

2.4.5 Collaborative Initiatives and Networks

Collaboration is a key theme in emerging landscape of environmental entrepreneurship among SMEs in the Lusaka CBD. Recognizing that sustainability challenges are often complex and interconnected, businesses are increasingly forming partnerships and networks to tackle environmental issues collectively. Such collaborations may involve sharing best practices, pooling resources or jointly addressing common challenges.

In the emerging environment, SMEs that embrace collaborative initiatives can benefit from shared knowledge, reduced operational costs, and improved access to markets. However, effective collaboration also requires strong leadership and the ability to navigate potential conflicts of interest among participating businesses.

As SMEs in the CBD venture into environmental entrepreneurship and pursue sustainable development, they face a dynamic landscape characterized by evolving new regulation, access to funding challenges, shifting consumer preferences and collaborative opportunities. Navigating these emerging issues will be crucial for SMEs striving to achieve both environmentally sustainable and economic viability. Understanding the interplay between these factors and adapting strategies accordingly will be essential for the long-term success of the SMEs engaged in environmental entrepreneurship and the broader goal of sustainable development.

2.5 Knowledge Gap

Despite the growing interest in the relationship between environmental entrepreneurship and sustainable development globally, at continental, region and local level, a significant knowledge gap exists in the specific context of SMEs in Lusaka’s Central Business District. Several factors contribute to this gap.

There is a paucity of research that investigates environmental entrepreneurship within the Zambian context, especially in the SME sector. Existing studies primarily focus on deforestation and reforestation, larger corporations and international firms, leaving a void in our understanding of how SMEs in Lusaka's CBD area engage with environmental issues.

Data on the understanding and adoption of environmental practices, entrepreneurial initiatives of SMEs in Lusaka's CBD are scarce. To bridge this gap, it is crucial to gather comprehensive data on SMEs awareness, their adoption of environmental initiatives, and the extent to which these initiatives contribute to sustainable development.

While there is a general understanding that environmental entrepreneurship can positively impact sustainable development, the specific mechanisms and outcomes remain unclear. This gap prevents the researcher from drawing precise conclusion and proving evidence-based recommendation.

Sustainability challenges and opportunities can vary significantly depending on the local context. Understanding the unique environment, social and economic dynamics is essential for nuanced analysis.

2.6 Theoretical and Conceptual Frameworks

2.6.1 Theoretical Framework

Theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions. The theoretical framework is the structure that can hold or support a theory of a research study. The theoretical framework introduces and describes the theory that explains why the research problem under study exists.

A theoretical framework consists of concepts and, together with their definitions and reference to relevant scholarly literature, existing theory that is used for your particular study. The theoretical framework demonstrates an understanding of theories and concepts that are relevant to the topic of the study and how they relate to the broader areas of knowledge being considered. The selection of a theory depends on its appropriateness, ease of application, and explanatory power. This theoretical framework was based on pragmatism and the critical realism philosophies both which assume an *objective ontology* and a *subjective* epistemology (Johnson and Duberly, 2000). That

is to say, both acknowledge the nature of the nexus as objective; however, we can only know it subjectively. Pragmatism is more commonly drawn upon by entrepreneurship scholars whilst critical realism is more commonly drawn upon by other social scientists. The pragmatist perspective (Dewey, 1938) focuses on the interaction between an ever-fallible, socially constructed understanding of reality and the constraints of an objective natural world. Meanings about objects, actors, and relationships are constructed and driven by human agency (and its associated bias), but are inevitably fated to converge in the direction of the true nature of these things. Collectively, our subjective epistemology veils truth in the absolute sense from us. However, we can understand reality's 'tendencies' instrumentally, deemphasising causality and instead focusing our attention on predicting outcomes of interactions (Dewey, 1938).

2.6.2 Normal Activation Theory

Norm Activation Theory (NAT) is a psychological framework that aims to understand the factors influencing individuals' intentions and behaviors toward pro-environmental actions. It was initially proposed by Schwartz in 1977 and has since been widely used in the study of pro-social and pro-environmental behaviors.

At the core of NAT is the concept of "norm activation", which refers to the process through which individuals develop personal norms. Personal norms are individuals' self-expectations or feelings of moral obligation to engage in pro-social behaviors. These norms are constructed based on situational factors and personality traits.

The situational factors, also known as "situational activators," include awareness of need, situational responsibility, efficacy, and ability. Awareness of need involves individuals being aware of the negative consequences on others if they do not engage in pro-social behaviors. Situational responsibility refers to individuals feeling responsible for the negative consequences if they fail to act pro-socially. Efficacy refers to individuals' belief in their ability to perform pro-social behavior, while ability refers to their actual capability to do so.

On the other hand, the personality trait activators include awareness of consequences and denial of responsibility. Awareness of consequences is individuals' general awareness of the negative outcomes of not acting pro-socially, while denial of responsibility is the tendency to deny personal responsibility for any negative consequences.

2.6.3 Environmental Entrepreneurship Theory

Dean and McMullen (2007) formed a theory of environmental entrepreneurship from an environmental economics point of view, focusing on the idea of market failure. The theory of environmental entrepreneurship moves past the business/environment polarity and re-gives market constrains a role as an answer for environmental degradation. The theory of Environmental Entrepreneurship assumes an *objective ontology* and *objective epistemology* (Johnson and Duberly, 2000). This paradigm dominates natural science and has been broadly adopted by social scientists, including entrepreneurship scholars. Here the researcher is seen as objectively studying an objective reality, and therefore can stand back and observe the world without bias. The aim of this research is to establish the effect of environmental entrepreneurship on sustainable development among SMEs in Lusaka district. The evaluation of the research would involve a focus on issues surrounding internal validity, external validity, reliability, and operationalisation. Theory can be tested and research focuses on producing accounts that measure the relationship of variables in the independent reality [Johnson and Duberly, (2000). The entrepreneurial process is interestingly suited to address sustainability concerns because it can address the root problems of environmental issues in a way different solution cannot. Environmental entrepreneurship is the utilization of entrepreneurial activity to transparently address issues concerning sustainability (York and Venkataraman, 2010). The environmental entrepreneurship theory was chosen in this study in determining how environmental entrepreneurs move past the business/environment division and re-cast market forces as an answer for environmental degradation. The theory concludes that environmental degradation comes about because of the failure of markets, while the entrepreneurship literature contends that opportunities are innate in market failure. A synthesis of this literature proposes that environmentally applicable market failures represent opportunities for accomplishing profitability while at the same time decreasing environmentally degradation economic practices. It additionally infers conceptualizations of sustainable and environmental entrepreneurship, which detail how entrepreneurs seize the opportunities that are intrinsic in environmentally significant market failures.

2.6.4 Social Cognitive Theory

Social Cognitive Theory (SCT) started as the Social Learning Theory (SLT) in the 1960s by Albert Bandura. It formed into the SCT in 1987 and argues that learning happens in a social setting with a dynamic and complementary interaction of the person, environment, and behaviour. The unique element of SCT is the emphasis on social influence and its emphasis on external and internal social reinforcement. This theory assumes both a *subjective* ontology and a *subjectiv*e epistemology. It asserts that not only will our understanding of the nexus be subjective, but the nature of the nexus itself is subjective, only coming to be through the construction of human beings surrounding it. This subjectivist ontology and subjectivist epistemology may be the most challenging of the paradigms to grasp. SCT considers the unique route in which individuals secure and maintain behaviour, while additionally considering the social environment in which individuals perform the behaviour. The theory considers a person's past encounters, which factor into whether the behavioural activity will happen. These past encounters influence reinforcements, expectancies and expectations; all of which shape whether a person will take part in a specific behaviour and why a person participates in that conduct (Mcleod, 2016). The Theory of Social Cognition introduces the idea of knowledge structure; the mental models that are utilized to accomplish personal effectiveness in certain circumstances. Accordingly, since entrepreneurship is defined as relating to individuals or groups that make products/services for other people, Cognitive Psychology is increasingly valuable to assist set up the marvels related with entrepreneurship (Sánchez, 2011).

The application of this theory allows this study to utilize variables that are directly related to environmental entrepreneurship and sustainable development. The social cognitive theory was chosen in this study because it relates to how people make decisions, a critical part of entrepreneurship and sustainable development.

2.6.5 Diffusion of Innovation Theory

The diffusion of innovation theory seeks to explain how and why new ideas and practices are adopted, with timelines potentially spread out over long periods. The theory was established in 1962 by Everett Rogers but later edited in 2003 by Rogers. Rogers defines diffusion as the process by which an innovation is imparted through certain channels after some time among the individuals from a social system. As communicated in this definition, innovation, communication

channels, time, and social system are the four key components of the diffusion of innovations. The diffusion of innovation theory assumes that assumes an *objective ontology* and a *subjective* epistemology. Proponents of the theory are critical of the social science that is rooted in the positivist tradition and reject the notion that our research can be separate from the underlying culture. Often associated with Habermas (1971), this paradigm focuses on investigating issues such as exploitation, asymmetrical power relations, and distorted communication. According to Rogers (2003), an innovation is an idea, practice, or venture that is seen as new by an individual or different unit of appropriation. An innovation may have been invented quite a while back, however if individuals see it as new, then it might at present be an innovation for them. The newness characteristic for an adoption is more identified with the three stages (knowledge, persuasion and decision) of the innovation-decision process. According to Rogers (2003), a technology group comprises of at least one distinguishable elements of technology that are seen as being firmly interrelated.

The second element of the diffusion of innovations process is communication channels. For Rogers' theory (2003), communication is a process in which members make and impart information to each other in order to achieve a shared understanding. This communication happens through channels between sources. Rogers expresses that a source is an individual or an institution that originates a message. A channel is the methods by which a message gets from the source to the recipient. Rogers expresses that diffusion is a specific kind of communication and includes these communication elements: an innovation, two individuals or different units of reception, and a communication channel.

The third element of diffusion of the innovation process is time. According to Rogers (2003), the innovation diffusion process, adopter classification, and rate of receptions all include a period measurement. The fourth element of diffusion of the innovation process is social systems. According to Rogers, the social system is the last element in the diffusion process. Rogers (2003) defined the social system as an arrangement of interrelated units occupied with joint critical thinking to fulfil a typical goal. Since diffusion of innovations happens within the social system, it is influenced by the social structure of the social system. According to the diffusion of innovation theory, the structure is the designed courses of action of the units in a system. He additionally guaranteed that the way of the social system influences individuals' innovativeness, which is the main rule for categorizing adopters. Rogers (2003) contends that innovations offering

a more relative advantage, similarity, simplicity, trialability, and recognisability will be embraced faster than different innovations. Rogers, however, alerts that getting another idea received, notwithstanding when it has clear advantages, is difficult, so the accessibility of these factors of innovations accelerate the innovation-diffusion process

2.7 Conceptual Framework

In research, a conceptual framework is used to outline potential courses of action or to demonstrate the optimal way to consider an idea or concept (Ravitch & Riggan, 2012). Conceptual framework is a versatile analytic tool applicable in a variety of contexts (Ravitch & Riggan, 2012). It is used to make distinctions between concepts and arrange them in a logical order.

NAT has been applied to study various pro-environmental behaviors, such as recycling, energy conservation, and sustainable transportation choices. In this study NAT has been used develop the conceptual framework to try and understanding the behaviour of entrepreneurs as with regard to environmental entrepreneurship.

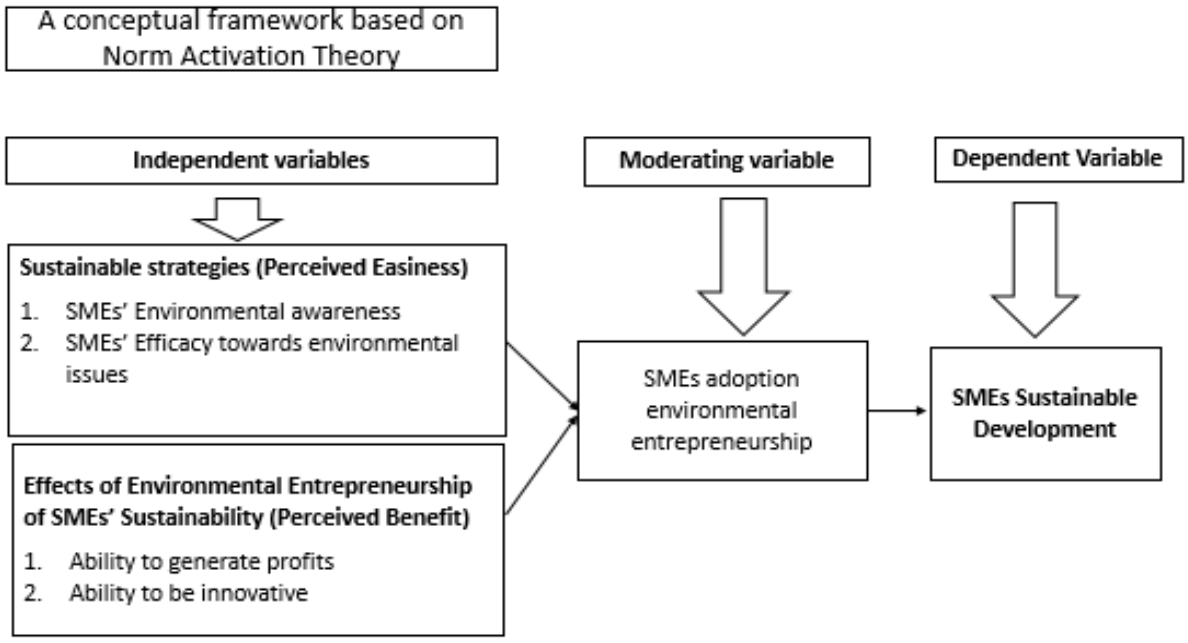

Figure 1: Conceptual Framework

2.7.1 Operationalization of Conceptual Framework

The study aims to shed light on the measurement of the independent variables, moderating variable, and dependent variable, and how these constructs come together to elucidate the impact of SMEs environmental awareness, efficacy towards environmental issues, ability to generate profits and innovate on their sustainable development, with the moderating influence of SME adoption of environmental entrepreneurship.

2.7.2 Independent Variables

The study is anchored by two key independent variables; sustainable strategies and effects of environmental entrepreneurship of SMEs sustainability, each representing a distinct facet of SME behaviour and mind-set. These variables are crucial in understanding the factors that influence SMEs sustainable development efforts.

The first independent variable under sustainable strategies; environmental awareness was operationalized through a questionnaire that assessed the extent to which SMEs are aware of environmental issues and their potential impact on society and the business itself. Assessing the understanding of ecological problems, including resource depletion, pollution and climate change. The questionnaire was designed to measure both cognitive awareness and affective awareness, capturing not only the knowledge of environmental issues but also the connection to these concerns by level of education and gender.

The second independent variable measured SMEs perceived ability to generate profits while having positive impact on the environment through innovative practices that address environmental challenges effectively through eco-friendly practices such as waste reduction, energy conservation and sustainable sourcing.

The moderating variable represents the extent to which SMEs integrate environmental sustainability into their core business strategies. It is assessed through a combination of qualitative interviews that measure the adoption level.

The dependent variable this study was SMEs sustainable development, encompassing economic, environmental and social dimensions.

2.8. Chapter Summary

This chapter outlined the theoretical review, Empirical literature review covering global perspective in all six continents regional African perspective covering Southern, eastern and north

western African as well as the Zambian perspective. It also looked at the emerging issues in the Zambian context and lastly the knowledge gaps identified .This chapter focused on the theoretical and conceptual frameworks; the theories were drawn from the studies in relation to environmental preservation. The Norm Activation Theory (NAT) was used to build the conceptual framework. NAT is a psychological framework that aims to understand the factors influencing individuals' intentions and behaviours toward pro-environmental actions. It was initially proposed by Schwartz in 1977 and has since been widely used in the study of pro-social and pro-environmental behaviours.

CHAPTER 3
RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the research methodology by clearly stating the research philosophy, approach, study design, target population, sample size and sampling techniques. The chapter further covered the sources of data, data collection and analysis methods, pre-testing methods, validity and reliability as well as the ethical considerations.

3.1 Research Philosophy

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analysed and used (Creswell 2014). Therefore, this study will adopt pragmatic research philosophy to provide a guide to how the research ought to be conducted in order to come up with comprehensive results regarding the effect of environmental entrepreneurship on sustainable development among SMEs. Unlike positivistic researchers, who assert an objective knowledge acquired by examining empirical evidences and hypothesis testing, and constructivists, who propose that knowledge is relative and reality is too complex, pragmatists believe that the process of acquiring knowledge is a continuum rather than two opposing and mutually exclusive poles of either objectivity and subjectivity. Pragmatism which is not committed to any sort of philosophical stance (Creswell, 2014). But argues that the forced choices between positivism and interpretivism should be abandoned as it views reality as both singular and multiple. Pragmatism "is pluralistic and oriented towards 'what works and practice" (Creswell & Plano Clark, 2011, p. 41). In other words, pragmatism uses multiple methods but the use of the methods should always be guided by research problems. It values both objective and subjective knowledge to meet research objectives. Researchers adopting a pragmatist position have the liberty to choose those research methods or strategies that can best answer their research questions (Creswell, 2007). The essence of pragmatic research philosophy in this study is that it employs a mixed-methods design to follow one or multiple combinations of some of the prevalent research paradigms. In a mixed-methods research design, qualitative research approaches help understand the nature SMEs, products and services offered and overall environmental entrepreneurship situation through indicative results by exploring through the tools like participant observation and interviews whereas quantitative approaches help derive objective findings by using the questionnaires.

3.1.1 Ontological assumptions

Ontology is the study of 'being' and is concerned with 'what is', i.e., the nature of existence and structure of reality as such (Crotty, 1998), or what is known about the universe (Snape & Spencer, 2003). According to the SAGE Online Dictionary of Social Research Methods (2006), ontology is "a term concerned with the presence and connection of many parts of society, such as social actors, cultural norms, and social institutions. Ontological concerns refer to questions regarding the kind of entities that exist in society (no page). According to Richards (2003), ontology consists of the assumptions we make on the nature and kind of reality and what exists. Snape and Spencer (2003) describe ontology as the world's nature and what we can know about it. In addition, Bryman (2008) introduces the concept of "social ontology," which he defines as a philosophical consideration in research that focuses on the nature of social entities, i.e., whether these social entities are or can be objective entities that exist independently from social actors, or whether they are rather social constructions constructed from the perceptions, actions, and interpretations of the members of society. Similarly, Ormston et al. (2014). Therefore, the ontological aspect of this study many SMEs have caused environment and social challenges such as environmental degradation, exhaustion of natural resources, poverty, diseases, poor infrastructure, unemployment and emission of dangerous gases, due to lack of sustainable entrepreneurship practices. And that these challenges have emerged due to the profit maximization motive of the SMEs owners at the expense of conserving the environment and the values of the society. Thus, there is need to take care of the environment by SMEs both in profit and loss, since no business can exist with environment. The ontology of mixed methods allows the researcher to make use of both subjective and objective view and these were collected through observation of the environment, interview schedule and questionnaire

3.1.2 Epistemology assumptions

In general, epistemology is the assumptions we make about the sort or character of knowledge (Richards, 2003) or how we may learn about the world (Snape & Spencer, 200). According to Crotty (1998), epistemology is a means of understanding the world. It requires information and, by necessity, a certain comprehension of what that knowledge implies. He emphasizes further that epistemology is concerned with the "nature" of knowledge, its possibility (what knowledge is feasible and may be pursued, and what is not), its extent, and its validity. Similarly, Bryman

(2008) defines epistemology as "a problem pertaining to the question of what is (or should be) recognized as appropriate knowledge in a field," with specific reference to the divergent viewpoints of how the natural and social worlds should be examined (p.13). To further illustrate what epistemology is about, I mention Cohen, Manion, and Morrison (2007), who state that epistemology is about "the basic foundations of knowledge. In this mixed approach research, the epistemological assumption is that the researcher and SME respondents are independent and that the researcher can investigate the effect of effect of environmental entrepreneurship on sustainable development among SMEs in CBD without influencing or being influenced by them.

3.1.3 Axiological Assumptions

According to Piwowar Sulej (2021), axiological assumptions play a pivotal role in shaping our approach to sustainable development. These assumptions revolve around a set of core values and principles that guide our actions and decisions, with the ultimate goal of ensuring that the needs of the current generations are met without compromising the ability of future generations to meet their own requirements. In essence, axiological assumptions provide the ethical and moral foundation upon which the concept of sustainable development is built.

One of the key axiological assumptions underlying sustainable development is the recognition of intergenerational equity. (Ambio, 2014) Suggests that this principle emphasizes that the well-being and aspirations of future generations are of equal importance to those of the present. It acknowledges that the choices and actions we make today can have profound and lasting impacts on the quality of life and business opportunities available to our descendants (Gordon, 2007). Therefore, it is our ethical responsibility to consider the long-term consequences of our decisions and strive for a world in which future generations inherit a planet that is not depleted or irreparably damaged.

Another critical axiological assumption in the context of sustainable development is the notion of environmental stewardship. This principle posits that we are custodians of the natural environment and have a moral obligation to protect and preserve it for the benefit of all life forms on earth, both now and in the future (Ezimah, 2021). It underscores the need for responsible and sustainable us of natural resources, as well as the importance of mitigating the adverse impacts of business activities on ecosystems and biodiversity (B Bonaventure. Gubazire Dr. , 2022).

Furthermore, axiological assumptions encompass the concept of social justice and inclusivity. Sustainable development should not only aim to meet the material needs of all people but also strive for fairness, equality, and discrimination is not only a matter of economic development but also a matter of ethical imperative. Axiological assumptions advocate for policies and actions that ensure that the benefits of development are distributed equitably among different social groups.

The axiological assumptions underpinning sustainable development provide a moral and ethical framework for our actions and choices. (Spijkers, 2018) emphasizes intergenerational equity, environmental stewardship and social justice as core principles that guide us in achieving a world where current generations can prosper while leaving a legacy of sustainability for future generations.

3.2 Research Approach

Research Approach refers to the strategies and processes adopted and used in research that cover the phases from broad assumptions to precise techniques of data collection, analysis, and interpretation are referred to as research approaches. These research approaches are also known as research methodologies (Best and khan, 2006). The nature of the research topic or issue that is being addressed, the personal experiences of the researchers, and the audiences for the study all have a role in the decision on which research technique to use (Best and khan, 2006). In this study, the researcher will adopt the mixed method approach. The mixed methods research approach refers to the method approach that incorporates and combines both quantitative and qualitative research and methods in a research study. Researchers use a mixed method design in order to broaden understanding by incorporating both qualitative and quantitative research, or to use one approach to better understand, explain, or build on the results from the other approach. Since this study contains the interaction of dependent and independent variables, the mixed method approach will allow the analysis and determination of relationship between dependent and independent variables. For instance, the level of environmental entrepreneurship, strategies, nature of the SMEs and sustainable development. The mixed method approach allows the researcher to establish the nature of the business SME, products and services offering, awareness of sustainable environmental entrepreneurship practices and their effect of the performance of the company and overall development. Therefore, mixed method approach is best for this study since it will give the researcher the logical ground, methodological flexibility and an in-depth

understanding of smaller cases, which ultimately enables researchers to answer research questions with sufficient depth and breadth

3.3 Research Design

According to Willman (2017), the study design outlines the procedures and methods for gathering and analysing the necessary data. It describes a framework or plan for the research as well as the techniques utilized to collect the necessary data. It specifies the sampling technique, sample size, measurement, and data processing procedures. According to Mugenda & Mugenda (2012), a descriptive research approach gives a reliable and accurate description of relevant elements and variables. The objective of descriptive study design is to get an accurate profile or description of the sample's characteristics, such as behaviour, critiques, skills, beliefs, or comprehension. Sullivan (2009) observed that such research collects data from members of a population and demonstrates interest by gathering information on their views, attitudes, or values. Based on the nature of the study population and the relationship between the study variables, descriptive research was utilized in this study utilising both quantitative and qualitative research methods. Nassaji (2015) argues that descriptive research design represents a statement of affairs on the study variable over which the research has no control; it is intended to shed light on the current challenges by involving data collection and analysis to enable or describe the situation rather than employing a method in a phenomenon.

3.4 Population of the Study

Sullivan (2009) describes a population; as a well-defined set of people, services, elements, and events, group of things or households that are being investigated. Saunders, et al. (2009) defined the target population for a study as the entire set of units for which the study data are to be used to make inferences). The target population comprised of registered SMEs in the Lusaka Central Business District (CBD) specifically town centre market.

3.5 Sample Size and Sampling Techniques

Kothari (2008) defined a sample size as a part of the target (or accessible) population that has been procedurally selected to represent it. The sample size was determined with the help of the Cochran sample size formula. The Cochran formula allows one to calculate an ideal sample size given a desired level of precision, desired confidence level, and the estimated proportion of the

attribute present in the population (Bartlett *et al.*, 2001). The confidence level of 95% was used and the margin of error was 5%. A confidence interval, calculated from a given set of sample data, gives an estimated range of values which is likely to include an unknown population parameter. The Confidence Interval is expressed as 2 numbers, known as the confidence limits with a range in between. This range, with a certain level of confidence, carries the true but unknown value of the measured variable in the population. The 95% Confidence Interval is defined as "a range of values for a variable of interest constructed so that this range has a 95% probability of including the true value of the variable. It can therefore be expressed in other words that one can be 95% certain that the truth is somewhere inside a 95% confidence interval (Attia, 2009).

The sample size was determined with the help of the Cochran sample size formula:

The confidence level of 95% was used and the margin of error was 5%, the target population of 998 SMES at the town centre market was obtained through the help of the market master and rounded off to 1,000 SMEs.

n_0 = Sample size and n = True sample

$$n_0 = \frac{Z^2 P(1-p)}{e^2} = \frac{1.96^2(0.5)(1-0.5)}{0.05^2} = 384.16$$

$n = \frac{n_0}{1+\frac{n_0-1}{N}} = \frac{384.16}{1+\frac{384.16-1}{1{,}000}} = 277.74 = \mathbf{278}$ and a response rate of 91 was achieved with 252 respondents.

3.6 Pilot Study

A pilot study is a small-scale preliminary investigation conducted before the main of full-scale research. The purpose of this was to test and refine the research methods, procedures, data collection, techniques or experimental protocols to ensure they are effective and appropriate for the main study.

The pilot study for this dissertation conducted in Lusaka's CBD faced several challenges stemming from the initial unknown population size. This lack of information was primarily due to the unavailability of personnel at the Lusaka City Council and Central Statistics Office responsible for providing accurate date on the actual population in the area. Additionally, the

study encountered a notable lack of interest from potential participants, largely attributed to previous studies conducted by students from the several Universities that seemingly yielded no discernible benefits, changes or incentives for the community.

These obstacles in gathering baseline data and garnering participant involvement underscore the need for innovative approaches and improved engagement strategies in future research efforts within Lusaka's CBD. Addressing these issues will be crucial to ensure that future studies not only provide valuable insight but also offer tangible benefits and incentives to both participants and the business community at large.

3.7 Pilot Study Results and Adjustments

The term "pilot study results and adjustments" pertains to the findings and outcomes derived from the preliminary research endeavor, which subsequently inform modifications and enhancements to the design of the primary study. Initially, the study operated under the presumption of a population consisting of 995 SMEs, based on data obtained from an initial survey conducted along Cairo, Freedom and Chachacha Roads

However, due to the initial challenges encountered in the acquisition of baseline data, the study adopted the utilization of the simple random sampling by convenience method along Chachacha Road aiming for the SMEs stationed in and around Soweto market. This method allowed participants to be interviewed or answer questionnaires on availability and willingness. The legal population designated by the market marshal was 998 SMEs, when rounded up to 1000. This adjustment worked well within the initial assumption of 995 SMEs and aligned with the Cochran sample size calculation, which determined the sample size of 278 SMEs as an appropriate study.

3.8 Validity and Reliability

Validity and reliability are two essential concepts in research design that help ensure the quality and trustworthiness of the research findings. They are used to assess the accuracy and consistency of the data collected.

The validity and reliability of this research study where pivotal aspects that determined the credibility and trustworthiness of its findings. In the context of this research, conducted within the Lusaka City Council Market Marshal Jurisdiction, the focus was on evaluating the research methodology, specifically with regard to the sample size, verification process and data collection

methods. The study aimed to explore key insights into the SME sectors' characteristics and challenges, utilizing a sample of 998 SMEs, with the initial 995 SME population adhering to the accuracy criteria of the Cochran's sample formula.

3.8.1 Sample Size and Cochran Sample Formula

The decision to employ a population of 1000 SMEs in this study was based on its practicality and feasibility within the scope of the research objectives. The initial population of 995 SMEs was meticulously chosen to adhere to the accuracy of the criteria outline by the Cochran sample formula at 278. This formula a well-established statistical too, utilized to determine the required sample size for a given population with specific confidence level at 95% and margin of error at 5%. By ensuring that the initial sample size aligned with the Cochran sample formula parameters, the research aimed to minimize sampling bias and enhance generalizability of the findings to the larger population of SMEs with the Lusaka City Council Market Marshals jurisdiction.

The Market Marshal played an important role in ensuring the validity of the population and of the sample size.

3.8.2 Validity

Data validity refers to the extent to which data accurately and reliably represents the real-world information it is intended to capture. The questionnaire and interview guide were built around the following;

3.8.2.1 Content Validity

This term refers to the extent to which a measurement instrument in this case; the interview guide and questionnaire adequately covers the entire range of the construct being measured. It involves ensuring that the items or questions used in the instrument represent the domain under investigation comprehensively

3.8.2.2 Construct Validity

The theoretical construct intended to be measured using convergent or divergent validity testing.

3.8.2.3 Context Validity

Considers whether the measurement instrument and its results are appropriate and applicable to the specific context or population of interest, it is essential for the particular setting or study sample.

3.8.2.4 Criterion Validity

Assesses whether the measurement instruments accurately predict or correlates with specific outcomes by concurrent validity that examines the relationship between the measurement instrument and a criterion that is measured at the same time and Predictive validity that assesses whether the measurement instrument can predict future outcomes

3.8.2.5 Face Validity

Subjective assessment of whether a measurement instrument appears on the surface, to measure what it claims to measure. It however does not provide evidence of validity but can be important for user acceptance.

3.8.3 Reliability

Refers to the consistency, stability and dependability of research findings and measurements. It is a used to ensure that the results obtained are accurate and can be trusted.

3.8.3.1 Internal Reliability

Also known as internal consistency measures the extent to which the questions within a measurement instrument are consistent with each other.

3.8.3.1 External Reliability

also known as test-retest reliability or stability assess the consistency of measurements over time or across different administrations of the instrument. It examines whether the same results are obtained when the measurement is repeated under similar conditions.

3.9 Chapter summary

This chapter dealt with the methods that were employed in conducting this study, the researcher employed descriptive research which aims to accurately and systematically describe a population, situation or phenomenon. It can answer what, where, when and how questions, but not why

questions. A descriptive research design can use a wide variety of research methods to investigate one or more variables design and adopted a mixed methodology approach to research. The sample size was determined through the use of the Cochran's formula with the target population being SMEs in Lusaka CBD Town Centre, the 95% precision was used which gave an allowance of 5% margin error. The sample was collected through the use of questionnaires with two major sections which are demographic information with age, gender and level of education, the other section depicting the variables in the conceptual framework. The data was analysed using the statistical package of social sciences (SPSS) as indicated in this chapter.

CHAPTER 4

PRESENTATION OF RESEARCH FINDINGS

4.0 Introduction

This chapter presents data presentation and analysis of the effects of environmental entrepreneurship on sustainable development among small medium enterprises from which a sample of 278 respondents were selected among the SMEs in Lusaka CBD and 252 of them responded representing a response rate of 91%. The analysis was performed using the Statistical Package for Social Scientists commonly known by its abbreviation as SPSS. The three variables under observation in relation to sustainable development as with to environmental entrepreneurship are: environmental awareness, environmental efficacy, and environmental innovation.

4.1 Demographic details

Gender under demographic information reveals that 170 out of 252 respondents are male representing 67.5 percent of the total respondents and 32.5 out of 252 respondents are female representing 32.5 percent of the total respondents as. The data collected clearly indicates most of the respondents are men than women from Town Centre Market in Lusaka CBD as shown in the table below:

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	170	67.5	67.5	67.5
	Female	82	32.5	32.5	100.0
	Total	252	100.0	100.0	

Table 1: Gender

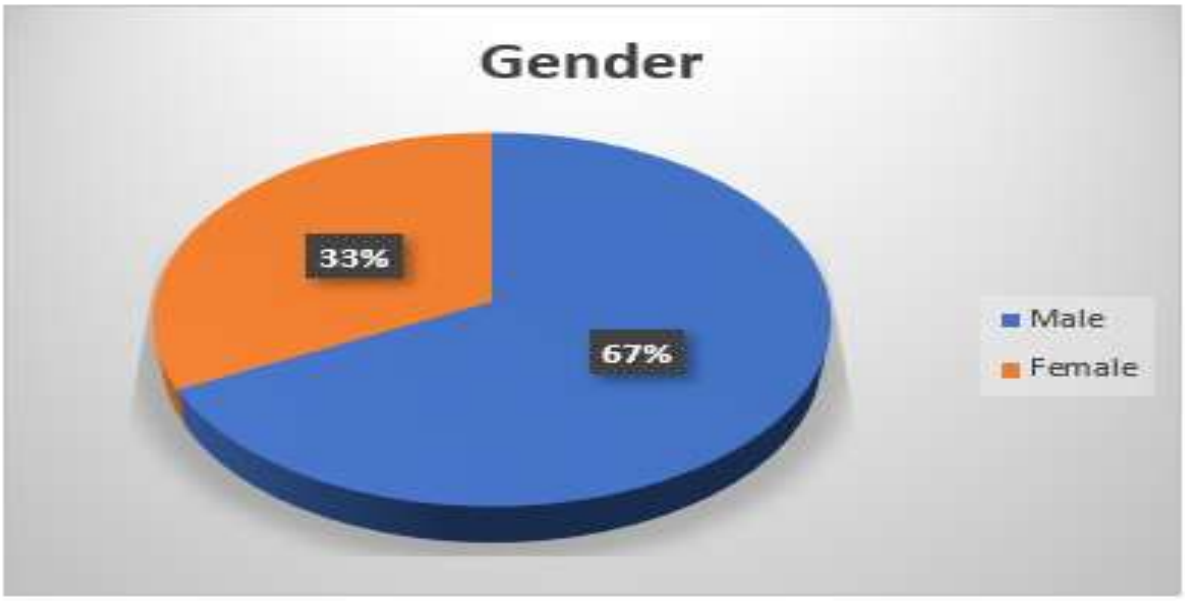

Figure 2: Gender distribution

Age distribution of the respondents

The most frequent age among the respondents is between 41 years to 50 years with the frequency of 76 respondents representing 30.2 percent and the lowest frequent age classes are 18 years to 25 years and 31 years to 40 years representing both representing 15.1 percent of the total respondents. The information is indicated in the table below from the SPSS output.

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18YRS - 25YRS	38	15.1	15.1	15.1
	26YRS - 30YRS	44	17.5	17.5	32.5
	31YRS - 40YRS	38	15.1	15.1	47.6
	41YRS - 50YRS	76	30.2	30.2	77.8
	51YRS - 60YRS	56	22.2	22.2	100.0
	Total	252	100.0	100.0	

Table 2: Age

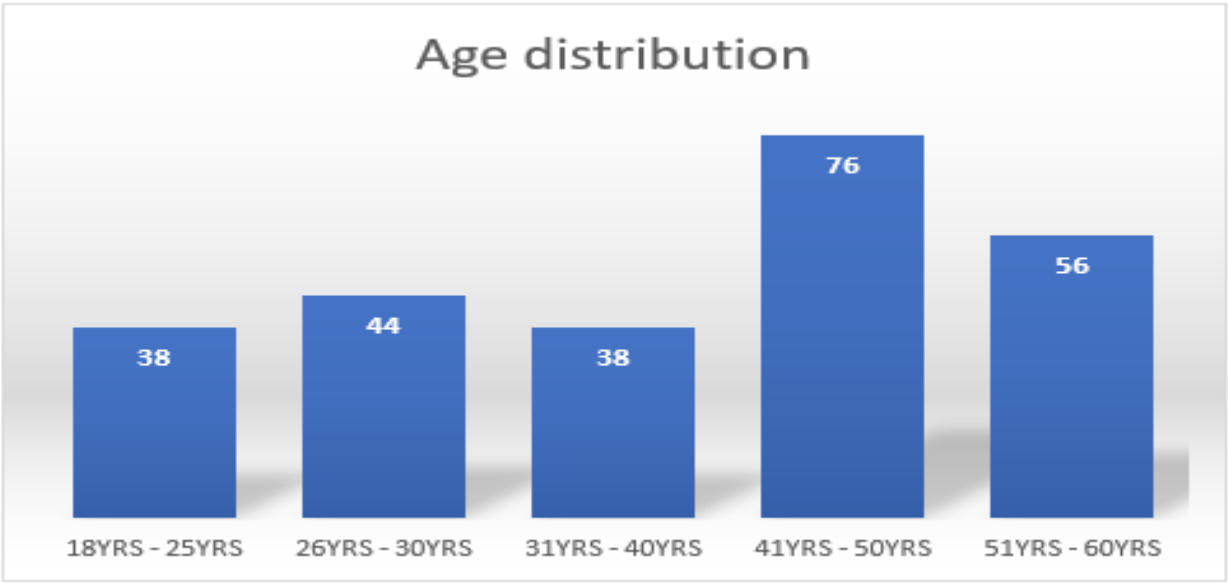

Figure 3: Age distribution

Level of education

Analysis of the level of education of the respondents indicates that tertiary category constitutes the most frequent respondents with 94 out of 252 representing 37.3 percent and the least represented education level of the respondents among respondents from the SMEs constitutes secondary holders with the 76 out of 252 representing 30.2 percent. This suggests that most people employed in the hotel industry are degree holders.

Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary	82	32.5	32.5	32.5
	Secondary	76	30.2	30.2	62.7
	Tertiary	94	37.3	37.3	100.0
	Total	252	100.0	100.0	

Table 3: Level of education

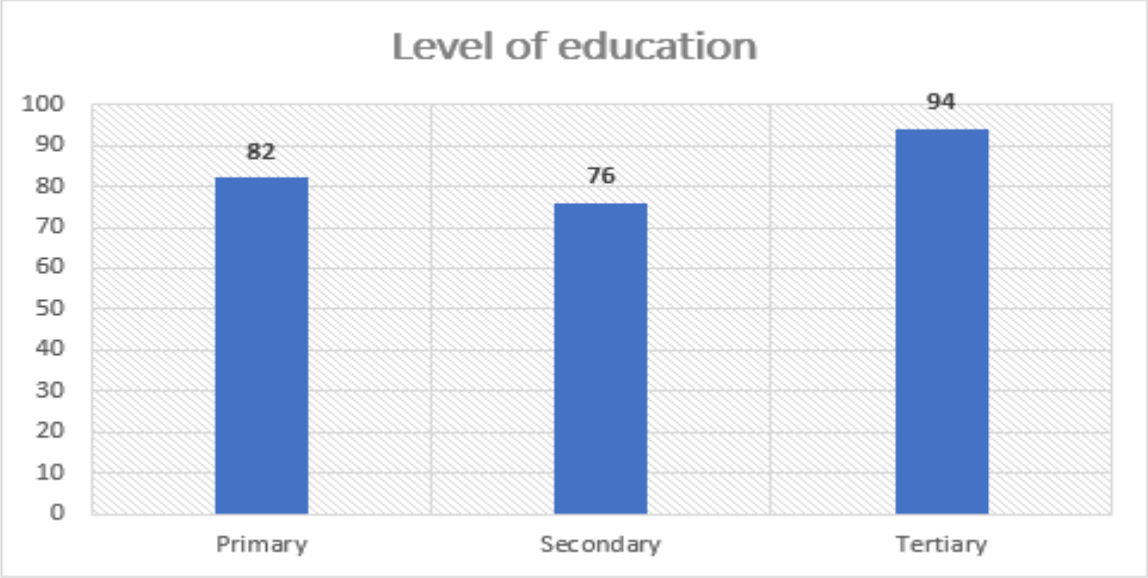

Figure 4: Level of education distribution

Descriptive statistics

The most frequent response which is represented by the mode on Environmental awareness is yes, the median is yes and there is 1.3095 which if rounded off leads to the yes response as indicated below in the table. This indicates that the majority of the SMEs are aware of environmental entrepreneurship. The figure below indicates 174 of the respondents' representing 69 percent are aware of environmental entrepreneurship and 78 of them are not aware with a percentage representative of 31%.

Environmental awareness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	174	69.0	69.0	69.0
	NO	78	31.0	31.0	100.0
	Total	252	100.0	100.0	

Table 4: Environmental awareness

From the descriptive information in the table below indicates that the mode in environmental awareness is 'YES' indicating that most SMEs are environmentally aware and the majority of

them are the age younger below 50 years, this could suggest that the younger generation understand more of environmental entrepreneurship.

Statistics

Environmental awareness

N	Valid	252
	Missing	0
Mean		1.3095
Median		1.0000
Mode		1.00

Table 5: Environmental awareness descriptive data

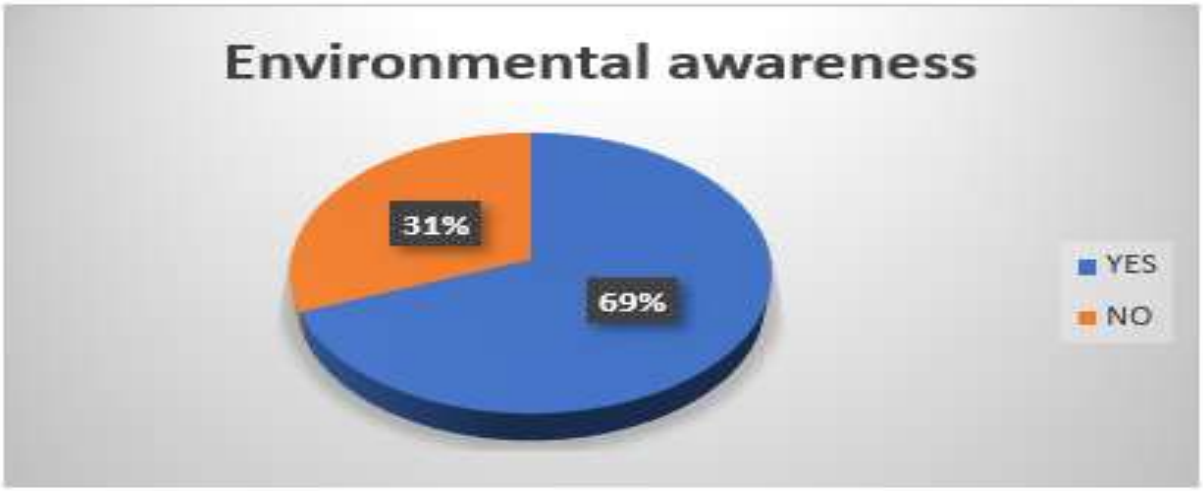

Figure 5: Environmental awareness distribution

Inferential statistics

The inferential statistics used the correlation of coefficient to help determine if there is a relationship between the dependent variable and the independent variables. The overall results were analysed using the Analysis of Variance (ANOVA) to examine the extent of the combined results in terms of the extent to which the independent variable influence the implementation of environmental entrepreneurship among SMEs in Lusaka's CBD area and its relationship with sustainable development.

Efficacy as an environmental strategy and SMEs sustainable development

There is a significant relationship between Efficacy as an environmental strategy and SMEs sustainable development since the P-Value from the SPSS output is below 0.01 which the level of significance as indicated in the table below. The coefficient of correlation of 0.926 suggests that there a very strong positive relationship between efficacy as an environmental strategy and SMEs sustainable development. This suggests that, efficacy as an environmental strategy has a significant influence on sustainable development.

Correlations

		Sustainable Development	Efficacy as an environmental strategy
Sustainable Development	Pearson Correlation	1	.926**
	Sig. (2-tailed)		.000
	N	252	252
Efficacy as an environmental strategy	Pearson Correlation	.926**	1
	Sig. (2-tailed)	.000	
	N	252	252

**. Correlation is significant at the 0.01 level (2-tailed).

Table 6: Results, Efficacy and Environmental Sustainability

5.1.1. Innovation as an environmental strategy and Sustainable development among SMEs

There is a significant relationship between There is a significant relationship between Innovation as an environmental strategy and Sustainable development among SMEs since the P-Value from the SPSS output is below 0.01 which the level of significance as indicated in the table below. The coefficient of correlation of 0.482 suggests that there a moderate positive relationship between Innovation as an environmental strategy and Sustainable development among SMEs. This suggests that, Innovation as an environmental strategy has a significant influence on sustainable development among SMEs since the P-Value from the SPSS output is below 0.01 which the level of significance as indicated in the table below.

Correlations

		Sustainable Development	Innovation as an environmental strategy
Sustainable Development	Pearson Correlation	1	.482**
	Sig. (2-tailed)		.000
	N	252	252
Innovation as an environmental strategy	Pearson Correlation	.482**	1
	Sig. (2-tailed)	.000	
	N	252	252

**. Correlation is significant at the 0.01 level (2-tailed).

Table 7: Results, Innovation and Environmental Sustainability

5.1.2. The relationship between environmental implementation and reduced profits

There is a no significant relationship between environmental implementation and reduced profits since the P-Value of 0.252 from the SPSS output is higher than 0.01 which is the level of significance. The coefficient of correlation of -0.072 suggests that there a weak negative relationship between environmental implementation and reduced profits. This suggests that environmental implementation has no effect on the profitability of the SMEs.

Correlations

		Reduced profits	Environmental implementation leads to Reduced profits
Reduced profits	Pearson Correlation	1	-.072
	Sig. (2-tailed)		.252
	N	252	252
Environmental implementation leads to Reduced profits	Pearson Correlation	-.072	1
	Sig. (2-tailed)	.252	
	N	252	252

Table 8: Results, SMEs profits and Implementation of environmental entrepreneurship

Model Summary using the coefficient of determination

The overall coefficient of correlation of 0.947 in the table below from the SPSS results suggests that there is a strong positive relationship between the variables under observation in relation to sustainable development among SMEs with regard to environmental entrepreneurship strategies which are: environmental efficacy, and environmental innovation. The R-Square (coefficient of determination) of 0.897 suggests that sustainable development is influenced 89.7% by the independent variables observed.

The R-Square (coefficient of determination) of 0.897 suggests that sustainable development is influenced 89.7% by the independent variables which are: environmental efficacy, and environmental innovation.

There is a significant relationship between Efficacy as an environmental strategy and SMEs sustainable development since the P-Value from the SPSS output is below 0.01 which the level of significance as indicated in the table below. The coefficient of correlation of 0.926 suggests that there a very strong positive relationship between efficacy as an environmental strategy and SMEs sustainable development. This suggests that, efficacy as an environmental strategy has a significant influence on sustainable development.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947[a]	.897	.896	.23794

Table 9: Results, Regression Summary Model

The ANOVA results from the SPSS output indicates that SMEs awareness, efficacy and innovation is statistically significant towards the adoption of environmental entrepreneurship and sustainable development among the SMEs since the F-statistics of 719.941 is greater than significance value $F_{3,\ 248,\ 0.05}$ (2.65) obtained from the F-tables. This is also consistent with the interpretation of the P-Value in the table below of 0.000 which is less than the P-Value of 0.05

significance level. This suggests that actually awareness, efficacy and innovation is statistically significant towards the adoption of environmental entrepreneurship and sustainable development among the SMEs.

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	122.277	3	40.759	719.941	.000[a]
	Residual	14.040	248	.057		
	Total	136.317	251			

Table 10: Results, ANOVA

CHAPTER 5
DISCUSSION OF RESEARCH

5.0 Introduction

This chapter presents answers to the study questions in the first chapter. The discussion interprets and gives meaning to the results obtained in chapter four and answers to the study questions are founded on regression and correlation analysis results. The chapter also related the findings to the results obtained by other authors on similar topic and theme on how SMEs can adopted environmental entrepreneurship practices which leads to sustainable development.

5.1 Discussion

There exists a significant relationship between There is a significant relationship between innovation as an environmental strategy and sustainable development among SMEs because the P-Value from the SPSS output is less than 0.01. The correlation coefficient of 0.482 indicates that there is a moderately positive relationship between innovation as an environmental strategy and sustainable development among SMEs. This suggests that innovation as an environmental strategy has a significant impact on sustainable development among SMEs, as the P-Value from the SPSS output is less than 0.01

However, when investigated separately the results indicated that, there is a no significant relationship between environmental implementation and reduced profits since the P-Value of 0.252 from the SPSS output is higher than 0.01 which is the level of significance. The coefficient of correlation of -0.072 suggests that there a weak negative relationship between environmental implementation and reduced profits. This suggests that environmental implementation has no effect on the profitability of the SMEs. This is not consistent with the suggestions by Ogujiuba et al., 2022; Pascucci et al., 2022; Patriarca & Magnusson, 2007; Sendawula, 2018), who asserts that, environmental protection is an expensive venture to business that is considered to yield little or no profits and hence some businesses resorts to maximising profits at the expense of the environment

There is a significant relationship between Efficacy as an environmental strategy and SMEs sustainable development since the P-Value from the SPSS output is below 0.01 which the level

of significance as indicated in the table below. The coefficient of correlation of 0.926 suggests that there a very strong positive relationship between efficacy as an environmental strategy and SMEs sustainable development. This suggests that, efficacy as an environmental strategy has a significant influence on sustainable development.

There is a significant relationship between There is a significant relationship between Innovation as an environmental strategy and Sustainable development among SMEs since the P-Value from the SPSS output is below 0.01 which the level of significance as indicated.

The coefficient of correlation of 0.482 suggests that there a moderate positive relationship between Innovation as an environmental strategy and Sustainable development among SMEs. This suggests that, Innovation as an environmental strategy has a significant influence on sustainable development among SMEs since the P-Value from the SPSS output is below 0.01 which the level of significance.

According to Mwakambirwa (2013) in the study conduct in Kenya, the results suggested that, the effect of environmental entrepreneurship was indicated by regression model results (R2 0.526, P < 0.000). The five independent variables had significant effects on sustainable development. Innovation had a significant effect on sustainable development (p> 0.019), venture product had a significant effect on sustainable development (P> 0.004), product development too had a significant effect on sustainable development (P > 0.011), whereas market opportunity and resource opportunity had significant effect on sustainable development (P > 0.03 and P > 0.000) respectively.

The study recommends that SMEs' transition to sustainable practices can also favour the greening of supply chains; indeed, responding to green requirements for SMEs' participation in global value chains. Green-related changes in transnational supply chains can be particularly challenging for SMEs, as they are requested to fulfil highly demanding green quality standards, while facing growing pressures to reduce costs, in particular, among other recommendations. This is consistent with the results from the study which suggested that, there is a positive relationship between environmental entrepreneurship and innovation.

5.2 Interpretation of Findings

The findings of the study suggested that there is no significant relationship between the adoption of environmental entrepreneurship and the profitability of SMEs. this suggests that the adoption of environmental entrepreneurship does not affect the profitability of SMEs in Zambia. However, innovation indicated a positive relationship towards the adoption of environmental entrepreneurship. The P-Value from the SPSS output is below 0.01 which the level of significance. The coefficient of correlation of 0.482 suggests that there a moderate positive relationship between Innovation as an environmental strategy and Sustainable development among SMEs in Zambia. There is a significant relationship between Efficacy as an environmental strategy and SMEs sustainable development since the P-Value from the SPSS output is below 0.01 which the level of significance as indicated. The coefficient of correlation of 0.926 suggests that there a very strong positive relationship between efficacy as an environmental strategy and SMEs sustainable development. This suggests that, efficacy as an environmental strategy has a significant influence on sustainable development

5.3 Chapter Summary

This chapter presented the results obtained from SPSS through the testing of variables presented in the conceptual framework. The discussion of the results presented arguments between the findings and other studies in literature to further examine the consistent of the outcome. Findings discussed the results of the finding in more summary form by providing statistics stated in the study.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This chapter presents answers to the study questions in the first chapter. The conclusions and answers to the study questions are founded on regression and correlation analysis results. The chapter also recommends how SMEs can adopted environmental entrepreneurship practices which leads to sustainable development.

6.1 Conclusions

The analysis of the effects of environmental entrepreneurship on sustainable development among Small and Medium Enterprises (SMEs) in the context of Lusaka Central Business District (CBD) has shed light on the critical role that proactive environmental practices can play in fostering sustainable economic growth and societal well-being. This study has provided valuable insights into the strategies that could be adopted to embrace environmental entrepreneurship and the potential benefits that can accrue to SMEs and the broader community.

First and foremost, it is evident from the findings of this study that environmental entrepreneurship is not just a moral obligation but also a strategic imperative for SMEs operating in the Lusaka CBD and beyond. The integration of environmentally responsible practices into business operations can lead to several advantages, including cost savings through energy efficiency, waste reduction, and resource conservation. Moreover, it can enhance the reputation and brand image of SMEs, attracting environmentally conscious consumers and investors. In an era where sustainability is increasingly becoming a competitive advantage, SMEs that proactively engage in environmental entrepreneurship are likely to be better positioned for long-term success.

Furthermore, this study highlights the importance of stakeholder collaboration and engagement in the pursuit of sustainable development through environmental entrepreneurship. SMEs should not operate in isolation but should actively seek partnerships with government agencies, non-governmental organizations, academia, and other businesses. Collaborative efforts can lead to the development of supportive policies, access to funding opportunities, knowledge sharing, and the creation of a conducive ecosystem for sustainable entrepreneurship.

The case of Lusaka CBD serves as an illustrative example of the potential challenges and opportunities that SMEs face in embracing environmental entrepreneurship. While the CBD presents unique challenges, such as limited space and infrastructure, it also offers opportunities for innovation and creativity in sustainable urban development. The findings of this study underscore the need for tailored strategies that consider the specific context in which SMEs operate. In this regard, policymakers and support organizations should provide targeted support and incentives to SMEs in CBDs to promote sustainable practices.

It is important to note that the benefits of environmental entrepreneurship extend beyond the economic realm. Sustainable development encompasses social and environmental dimensions as well. The adoption of eco-friendly practices by SMEs can lead to reduced pollution, improved air and water quality, and enhanced public health. Additionally, it can create employment opportunities, particularly in green sectors, contributing to poverty alleviation and social inclusion. Therefore, environmental entrepreneurship should be seen as a holistic approach that aligns economic, social, and environmental objectives.

6.2 Recommendations

The SMEs in Zambia should adopt new technologies which encourage environmentally friendly production processes. Sustainable entrepreneurship increasingly recognizes the transformative potential of digital technologies to mitigate and counteract grand environmental and social challenges through entrepreneurial action.

The adoption of improved technology in production reduces carbon emission and produce products that environmentally friendly. Currently the SMEs in Zambia are encouraged to give customers their goods in a plastic bag which biodegradable because of their technological production which makes them to be environmentally friendly.

SMEs should design innovative products that support environmental entrepreneurship. Though most SMEs in Zambia are into retailing, some have ventured into production of goods and it is therefore important that they design products which are less harmful to the environment.

The government should foster waste disposal mechanisms that are environmentally friendly to help achieve sustainable development among SMEs. And also, there is currently demand for plastics, tins and cane refusals which are being sold to recycling companies like MMI steels in

Zambia. If only SMEs can design bins which separate their waste into plastic and canes they can generate extra income from their disposal.

6.3 Limitations of the study

One of the limitations of the study is sampling bias since, the study only focused on the CBD and in particular Chachacha road using a random sampling technique by convenience, this may not be representative of all the Small and Medium sized businesses thereby limiting the general findings. The limitation can be attributable to small sample size. For academic purposes, the study involved a small number of SMEs in Lusaka CBD area, the results may not be statistically significant or applicable to a larger population of SMEs. Lastly, time limitation since the study had academic time limitation with a due date for submission.

6.4 Areas for further Study

Studying and analysing the effects of environmental entrepreneurship on sustainable development among SMEs in Lusaka's CBD area is a valuable research topic with a wider and comprehensive understanding for further study, ie.

Conduct a comprehensive quantitative analysis to measure the impact of environmental entrepreneurship initiatives on various sustainability indicators, such as economic, environmental, and social dimensions. Use statistical methods to quantify the relationship between environmental entrepreneurship practices and SME performance.

Complement quantitative data with qualitative research methods, such as interviews, surveys, or focus groups, to gather insights into the motivations, challenges, and experiences of SMEs in implementing environmental entrepreneurship strategies. Understand the barriers they face and the factors that drive or hinder their sustainability efforts.

Compare the effects of environmental entrepreneurship on sustainable development between SMEs in the Lusaka CBD and those in other regions or industries. This comparative analysis can shed light on the context-specific factors that influence the relationship.

Evaluate the role of government policies and regulations in promoting or hindering environmental entrepreneurship among SMEs in Lusaka CBD. Analyze how policy changes or incentives affect SMEs' sustainability efforts.

Investigate the role of various stakeholders, including government agencies, NGOs, consumers, and industry associations, in supporting or influencing environmental entrepreneurship initiatives among SMEs. Assess the dynamics of these relationships.

Explore the extent to which SMEs in the Lusaka CBD are adopting innovative technologies and practices as part of their environmental entrepreneurship strategies. Evaluate the impact of such innovations on sustainability outcomes.

Investigate the effectiveness of capacity-building programs and training initiatives aimed at enhancing SMEs' environmental entrepreneurship skills and knowledge. Assess how these programs influence their sustainability efforts.

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APPENDIX I: INTRODUCTORY LETTER

THE UNIVERSITY ZAMBIAN

GRADUATE SCHOOL OF BUSINESS

***Title**: Establishment of the effect of environmental entrepreneurship on sustainable development among SMEs in Lusaka district: a case of the Central Business District (CBD).*

Dear Respondent,

My name is Kazhila Sepo a student at the University of Zambia studying Master of Business Administration Management Strategy in the graduate School of Business. I am conducting a study on; "the effect of environmental entrepreneurship on sustainable development among small medium enterprises: a case of Lusaka Central Business District (CBD)." As such you have been identified as a key informant to participate in this research. You are therefore, requested to provide answers to questions contained in this interview guide. However, be assured that the findings of this research are purely for academic purposes. Thus, your response will be treated with the greatest level of confidentiality.

The research findings will be of benefit to policy makers and will help our Government with information needed to boost the country's economy in the midst of the pandemic.

Kazhila Sepo

Signature: ……....

Thank you.

APPENDIX II: PARTICIPANT INFORMATION SHEET

Informed Consent Form for Small and Medium Enterprises (SMEs) operating from Lusaka Central Business District (CPD), The study targets top and lines managers who are more likely to have more understanding and insight about the business operations and performance. The study is therefore titled, "*The effect of environmental entrepreneurship on sustainable development among small medium enterprises: a case of Lusaka Central Business District (CBD).*"

Name of Principle Investigator: KAZHILA SEPO

Name of Organization: University of Zambia graduate School of Business

Name of Sponsor: Self

Introduction

I am **Kazhila Sepo** a student at the University of Zambia studying Master of Business Administration Management Strategy in the graduate School of Business. I am conducting a study on; "*the effect of environmental entrepreneurship on sustainable development among small medium enterprises: a case of Lusaka Central Business District (CBD).*" "The findings of this study will be of great importance as it will give more insight about better ways of running the business without posing a threat to the environment thereby sustaining economic activities. This study will also advance the importance of filling and bridging the knowledge gap that exits in the business populace concerning maintaining balance between the environment, economic activities and encouraging sustainable development through the introduction of sustainable strategies that will help maintain this equilibrium, for future wellbeing. I am going share key information and invite you to be part of this research. This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can ask them of me or of another researcher. Before you decide to participate in the study.

Type of Research Intervention and Duration

This research will involve your participation by answering the questions in the questionnaire (or structured interview schedule) and it should take about 15 to 20 minutes to complete.

Participant Selection

You are being invited to take part in this research because we feel you have the knowledge and understanding with regard to revenue collection, challenges and factors affecting revenue collection at Lusaka city council as well all local government branches throughout the country. Thus, with your experience in taxes, rates and revenue collection, it will be a great contribution to the research which will ultimately help with coming up with comprehensive report with significant findings.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate all the services, you receive at this Centre will continue and nothing will change. The choice that you make will have no bearing on your job or on any work-related evaluations or reports. You may change your mind later and stop participating even if you agreed earlier.

Uses of information

The information we shall get from you will be used help making decisions by the district local authority in your area on how best we could prevent malaria at a household level.

Risk

There are no foreseeable risks associated with this study or whatsoever.

Benefits

It may not benefit you as an individual directly, but the outcome or solutions would benefit the local government and the public at large.

Compensation

There is no compensation for participating in this study whatsoever.

Confidentiality

Your responses will be given maximum confidentiality. Any information which may identify you will be kept strictly confidential and your responses will in no way lead to any adverse effect on or negative feedback from the school or the general public because of the response you may provide. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a lock and key. It will not be shared with or given to anyone except [name who will have access to the information, such as the Supervisor, and Research ethics and research committee.

Questions /Clarification

The researcher conducting this study is a student at the University of Zambia studying Master of Business Administration Management Strategy in the graduate School of Business. In case you have questions or clarifications. You may contact the individuals listed below.

Principle Investigator Details

Phone Number: +260 96 2380047

Address, Mean hood Kwamwena, Lusaka, Zambia

Chairperson, Humanities and Social Sciences, Research Ethics Committee,

University of Zambia

P O Box 32379

LUSAKA

CERTIFICATE OF INFORMED CONSENT

I have been invited to participate in research study titled; the establishment of the effect of environmental entrepreneurship on sustainable development among SMEs in Lusaka district: a case of the Central Business District (CBD).

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print Name of Participant_____

Signature of Participant _____

Date _____

Day/month/year

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Print name of witness_____ Thumb print of participant

Signature of witness _____

Date _____

Day/month/year

Investigator Details

I hereby confirm that I have personally explained to the above respondent the proposed research, procedures, and confidentiality of his/her personal information

_____

Signature

Name: Kazhila Sepo

Date: 6th November, 2022

Phone Number: +260 96 2380047

Address, Mean hood Kwamwena, Lusaka, Zambia

APPENDIX IV:

QUESTIONNAIRE FOR LINE MANAGERS AND OTHER STAFF

Title: Establish the effect of environmental entrepreneurship on sustainable development among SMEs in Lusaka district: a case of the Central Business District (CBD).

INSTRUCTIONS

1. Please, answer each question by ticking (∨) or filling in the spaces provided.

3. Kindly explain where your explanation is needed.

4. Do **NOT** indicate anything that will identify you, (e.g. name, or signature).

Thanking you in anticipation of your co-operation.

Yours faithfully.

Part A: Social Demographic Characteristics of the Respondents

1). Name of the Business or Firm?.....
2). Number of employees……
3). What is your gender?

a. Male [ ]
b. Female [ ]

4). What is your age?

a. 18-25 [ ]
b. 26-30 [ ]
c. 31-40 [ ]
d. 41-50 [ ]
e. 51-60 [ ]
f. 60+

5). Respondents Highest Education

a. None [ ]
b. Primary [ ]
c. Secondary [ ]
d. Tertiary [ ]

6). What is your employment status?

a. Employed [ ]
b. Self-employed [ ]

c. Unemployed [ ]

7). What is your income (in kwacha per month)?

a. Low (<5000) [ ]
b. Medium (6000-20,000) [ ]
c. High (>20,000) [ ]

SECTION B: EXTENT AND FCTORS AFFECTING SUSTAINABLE ENVIRONMENTAL ENTREPRENEURSHIPS AMONG SMES

8). What is the niche of your company/ Firm?

a. Services [ ]
b. Commerce [ ]
c. Production [ ]

9). What is the market coverage of your Business

a. Local [ ]
b. Regional [ ]
c. National [ ]
d. International [ ]

10) How many years of experience do you have in operation of SMEs Business?

a) 1 to 2 years [ ]
b) 3 to 4 years [ ]
c) 5 to 6 years [ ]
d) 7 years and above [ ]

11). As a SME what is the most crucial perspectives /issues that concerns you when thinking about company‟s survival and development?

12). Are your awareness of environmental entrepreneurship?

a) Yes [ ]
b) No [ ]

13).If so what do you know about environmental entrepreneurship on sustainable ……..……
……

14).What is the perceived usefulness (PU) of environmental entrepreneurship on sustainable development among SMEs ……

15).What are the effect of environmental entrepreneurship on sustainable development among SMEs?

1. Yes [ ]
2. No [ ]

Please specify below.....

SECTION C: ATTITUDE AND EFFECTS OF ENVIRONMENTAL ENTREPRENEURSHIP ON SUSTAINABLE DEVELOPMENT AMONG SMES

17). To what extent do you agree or disagree with the following statement?

Statement	**Strongly agreed**	**Agreed**	**Neither Agree nor Disagree**	**Disagree**	**Strongly disagree.**
It is important for our firm to contribute to the welfare of the workforce.					
It is important for our firm to be actively involved in the community development.					
It is important for our firm to build long-term cooperative relationships with partner's in our market(s).					
Our products and/or services yield economic benefits to the larger community					
It is important for our firm to operate within business networks for achieving tenable economic goals.					
Our products and/or services are meant to be harmless in terms of environmental issues.					
It is important for our firm to adopt responsible policies in terms of material and energy resources usage.					
In the current activities, we try to rely on green technologies as much as possible..					

In terms of yearly turnover, our business may be described as profitable.					
In terms of customer attraction and retention, our business may be described as effective.					
In terms of market share (considering direct competition), our business may be described as competitive.					

SECTION D: SUSTAINABLE STRATEGIES THAT PROMOTE ENVIRONMENTAL ENTREPRENEURSHIP AMONG SMES

18a). Does your company motivate innovation?

a. Yes [ ]

b. No [ ]

18b) And if so what is the idea behind your willing to innovate? (social/economic/environment) needs? …….

…….

19). Do the company applies SD strategy only because the policies or because the managers and employees are convinced about the benefits that SD carries?

a. Yes [ ]…….

b. No [ ]……

20) What are the most barriers in your opinion that bind you from develop sustainability?.....

……..

21). Regarding networking, do you think that it will make it easier to develop sustainable when you and the partner company in the same industry applying SD same path? Why /why not?

22a). Does your company own relevant big assets?

c. Yes [ ]…….

d. No [ ]……..

22b). If yes, do you think management these assets in environmental care way will save disposal cost? Is it meaningful for your company? ……..

23). Does environmental project and management increase good will of the company and make closer relationship with your customer?

a) Yes [ ]

b) No [ ]

24). For internal management perspective of the company, do you have budget for the usage of resources of company?

a. Yes [ ]

b. No [ ]

25a). How do you measure company performance, for example, „balanced scorecard"? Do you have stuff work as auditor assign for this tasks? ……

25b). If no suggest measure to take to help them?.....

…….

26). Is there any support group to give guidance to SMEs about better and sustainable ways of business operations?

a. Yes [ ]
b. No [ ]

27). Do you think the government should open education centres to help with environmental sustainability among SMEs?

1. Yes [ ]
2. No [ ]

28). In your own opinion what are keys strategies that should be employed to improve environmental sustainability among SMEs?.....(1)

…… (2)

The End.

Thank you