# BINDURA UNIVERSITY OF SCIENCE EDUCATION FACULTY OF COMMERCE



#### FACULTY OF COMMERCE DEPARTMENT OF ECONOMICS

#### **DISSERTATION**

IMPACT OF SUSTAINABLE PROCUREMENT PRACTICES ON VALUE FOR MONEY IN TERTIARY EDUCATION INSTITUTIONS IN ZIMBABWE

 $\mathbf{BY}$ 

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE MASTER OF SCIENCE IN PURCHASING AND SUPPLY AT BINDURA UNIVERSITY OF SCIENCE EDUCATION FACULTY OF COMMERCE.

**JUNE 2022** 

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# **Release Form**

I attest that the aforementioned student B203214B is Walter Hlupo's student ID number B203214B. was under my command. I further attest that he has joined me for all scheduled meetings and that he has met all of the demands I placed on him as the Supervisor.

According to my professional opinion, the project is of a high caliber and should be presented with my name on it as the supervisor.

I therefore give the student my full permission to turn in his project for evaluation.

| Name of Supervisor | • |
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#### **DECLARATION FORM**

I, Walter Hlupo, thus certify that this research report is entirely original. It has never been submitted for any other degree or examination at any other University before and is being submitted for the Master of Science in Purchasing and Supply Chain Management at Bindura University of Science Education. I have given due credit to other authors when I have used their work, and I have never duplicated another author's or scholar's work with the goal to claim it as my own. I have accurately referenced all of the informal discussions and interviews I performed for this research report, and I have never claimed ownership of any of my participants' ideas or words.

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Student Number: ..... B203214B

# Dedication

I dedicate my work to my family, who were always there for me when I was doing the research, as well as to my parents, who helped me out financially the entire Masters Program.

# Acknowledgements

I extend my sincere gratitude to the fifteen respondents who participated fully in the interviews for their efforts. I want to express my profound gratitude to my supervisor, Dr. F. Chari, for his advice and intellectual support throughout this research. I want to express my gratitude to my wife S. Hlupo, as well as to my brother John Hlupo, for their unwavering support. I acknowledge the authors of a number of published and unpublished studies who granted their explicit or imply consent for me to use their concepts and findings in my research.

#### **Abstract**

In the past few decades, academics and procurement experts have become increasingly interested in supply chain value and sustainable procurement techniques. In the context of challenges like climate change, environmental degradation, resource depletion, water shortages, inequality, and global equity, among others, there is increased interest and focus on addressing sustainability issues and realizing value for money. The triple bottom line, commonly known as the 3Es, is a framework that helps people understand and interpret the sustainability argument (economy, environment and ethics). The emergence of sustainability as a discipline and a way of life is a result of the development in environmental and ethical consciousness. Despite numerous studies that glorified the sustainable procurement and value for money issues in huge projects and on the ecological and economic benefits of sustainable procurement practices to higher and tertiary education institutions in Southern Africa, there is scanty literature on considerations of sustainable procurement linked to the realization of value for money around the world, let alone in Zimbabwe, yet this is a critical source of efficiency and effectiveness of public institutions financial health, survival ,development and growth ,Matabeleland higher and tertiary institutions in particular. Data was gathered using interviews and triangulated from five specific universities and colleges namely Joshua Mqabuko Nkomo Polytechnic, Hillside Teachers College, Bulawayo Polytechnic, National University of Science and Technology and Lupane State University using snowball method. Thematic analysis was used to analyse data. It was revealed that value for money concept is not yet fully understood in higher and tertiary education institutions and sustainable procurement is not being practiced with the Tripple bottom line in mind. Interventions to ameliorate value for money gap along the higher and tertiary education institutions supply chain are but not limited to training of top management and procurement officers on the importance of sustainable procurement and value for money, consideration of life cycle costing of all goods and services procured(Quality and ease of disposal after use), allowing competition amongst the bidders and dealing decisively with corruption.

**Key words:** Sustainable procurement, Value for Money, Supply Chain, People, Planet and Profit.

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# **List of Acronyms**

VFM Value for money

SP Sustainable Procurement

SPP Sustainable Public Procurement

TBL Tripple Bottom Line

TBL Tripple Base Line

ZACC Zimbabwe Anti-Corruption Commission

#### CHAPTER I

#### INTRODUCTION AND BACKGROUND OF STUDY

#### 1.1 Introduction and Background of the study

Sustainable public procurement practices and value for money in supply chains have attracted great interest from procurement professionals and academia in the last few decades (Grandia 2016 & Edwards, 2020). There is growing awareness and attention in addressing the sustainability matters and realisation of value for money in the context of climate change, environmental degradation, resource depletion, water scarcity, inequality, and global equity among others Grandia & Voncken, (2019). The sustainability debate is best understood and framed within the concept of the triple bottom line, that is profit, people and planet, also known as the 3Es (economy, environment and ethics). The rise in environmental, ethical consciousness has given birth to sustainability both as a field of study and as a practise. Despite numerous studies that glorified the sustainable procurement and value for money issues in huge projects and on the ecological and economic benefits of sustainable procurement practices to higher and tertiary education institutions in Southern Africa Thomas, 2013; Frost, 2016. Stack et al., (2017), there is scanty literature on considerations of sustainable procurement linked to the realisation of value for money around the world, let alone in Zimbabwe, yet this is a critical source of efficiency and effectiveness of public institutions financial health, survival, development and growth ,Matabeleland higher and tertiary institutions in particular. The concept of value for money and sustainable procurement is attaining high levels of criticality given that it can help to minimize negative impact on the environment. Effective implementation of value for money concept and sustainable procurement practices will bring about reduced cost of procurement, procurement of quality materials that add value to the final product and procurement of right materials that are fit for purpose. The Zimbabwean public institutions play a significant role in public spending, this has resulted in the increase in need for practicing sustainable procurement that brings value for money PRAZ (2018). Value for money issues in Africa leaves a lot to desired mostly within the public institutions procurement function, this is resulting in an uneconomic, misappropriation and misplaced priorities, over-buying and rebuying of unnecessary materials, environmental degradation, public health concerns, climate change, resource depletion, and eventually persistent poverty. Therefore, this study sought to investigate the impact of sustainable procurement practices on value for money in higher and tertiary education institutions of Matabeleland province in Zimbabwe. The objectives of the study are to determine the sustainable procurement practices that are in place in various education institutions, to determine factors influencing implementation of sustainable

procurement and to make recommendations. The targeted population was on State universities, Colleges and Polytechnics in Matabeleland province in Zimbabwe mainly focusing on the southern part of the country, a sample of 15 institutions from the population of 20 higher and tertiary education institutions was selected. The data was obtained using interviews.

In south African universities, higher and tertiary education institutions have incorporated the concept of value for money through practicing sustainable procurement practices such as re-cycling of scrap metal, dissolving the scrap and remolding the steel for construction purposes. University of Cape town has established a water purification/recycling plant to ensure uninterrupted supply of water on its farms SABC (2021). The plant can produce up to 20000 cubic liters per day giving the institution more than enough water for its farms and daily institutional needs. The plant has saved the university up to 5 million rands per month for water procurement. This investment in these two plants answers well the practice of sustainable procurement that has a huge impact on the value for their money (VfM)The university of Cape Town has also tried to incorporate the concept of value for money through internal department self-sufficiency. The departments such as the Production, Electrical, Horticulture and Animal husbandry obtains their inputs from University plants that produces the Chicken feed, Animal feed and other production processes requirements Gopalachrishnan et al (2020).

Several studies (Maviya & Gumbo, 2017; Paumgarten and Shackleton, 2019; Roberts, 2018) have confirmed that the concept of value for money has attracted much attention in the sustainable public procurement that ensures value for the financial resources spent is realised in South Africa and Kenyan public institutions of higher learning. The only tangible procurements that are done is for the scarce materials that the internal departments cannot produce. However, to some extent the question that remains unanswered is the issue of accountability. In the public education institutions in South Africa accountability of who is responsible for the modernization and financial health of the government institution at local level is lacking ,no one is accountable whether the institution has made improvement in financial performance or the institution standards are going down. It remains the responsibility of the central government Pravin & Mboweni (2021).

In China ,Public procurement has moved to an advanced stage where the higher and tertiary institutions enter into contracts with suppliers in a bid to ensure uniformity and quality is obtained .Chinese central bank and Ministry of Finance (2015) The institutions have came up with Service level agreements that ensures suppliers perform up to an agreed standard .This was brought into play in a bid to realise value for money is always realised so that development ,growth and advancement is guaranteed.

In light of the above, the importance of sustainable public procurement that brings value for money to higher and tertiary education institutions in Zimbabwe cannot be underestimated, however, the question that remains unanswered is, does the public institutions of higher learning in Matabeleland consider sustainable procurement practices that brings value for money? Thus, this study seeks to investigate the impact of sustainable procurement practices on value for money in public higher and tertiary education institutions of Matabeleland in Zimbabwe.

#### 1.2 Statement of the problem

Sustainable public procurement and value for money in education institutions have attracted great interest from procurement professionals and academia in the last few decades (Grandia 2016 & Edwards, 2020). The increase in Environmental, Economic and Social consciousness has given rise to sustainable public procurement both as a field of study and as a practice. There is growing interest and attention given to sustainable public procurement issues in the entire supply chain that includes need identification, advertising, supplier evaluation, supplier selection and contract award. The sustainability debate is best understood and framed within the concept of the triple bottom line, that is profit, people and planet, also known as the 3Es (economy, environment and ethics). Despite many studies that glorified the sustainable public procurement practices in huge projects and on the ecological and economic benefits of public institutions of higher learning management in Southern Africa (Thomas, 2013; Frost, 2016, Stack et al, 2017), there is scanty literature on sustainability considerations that result in value for money procurement around the world, let alone in Zimbabwe, yet this is a foundation and a critical source of financial stability, growth, and development. This study therefore is meant to bridge that gap by assessing the inherent sustainability practices that enhances value money along the supply chain in the higher and tertiary education institutions in Matabeleland in Zimbabwe.

#### 1.3 Research objectives

The main objective is to identify the impacts of sustainable procurement in public institutions The following additional sub-objectives will help the researcher to address key objectives in the study:

- i. To establish sustainable procurement practices that are in use in tertiary education Institutions in Zimbabwe.
- ii. To determine the influence of sustainable procurement practices on value for money in tertiary education Institutions in Zimbabwe.
- iii. To find the recommendations on how to achieve value for money through sustainable procurement

#### 1.4 Research Questions

This study seeks to address the following research questions:

- i. What are the sustainable procurement practices that are in use in the Tertiary education institutions in Zimbabwe?
- ii. What is the influence of sustainable procurement practices on value for money in tertiary education Institutions in Zimbabwe?
- iii. What are the recommendations in order to achieve value for money in public procurement?

# 1.5 Significance of study

The research will be beneficial to various stakeholders that include the Academic field, Policy makers, Purchasing and Supply practitioners and the researcher.

### 1.5.1 Procurement practitioners

The study will help the Procurement practitioners to identify and unearth the gaps that deter the organisations from employing green procurement practices that brings about value for money procurement. Procurement practitioners may also adopt and adapt to the recommendations to improve their organizational decisions regarding the sustainable procurement processes. The findings of the research will also form a data bank of knowledge which identifies loopholes on some of the procedures and polices being used in various organizations by Procurement professionals.

#### 1.5.2 To the Academia

The research findings will help the academia to identify the impact of sustainable procurement in realizing value for money and a good corporate image of the organization and gain credibility from environmental management agencies for considering clean environment. Furthermore, the study helps the academia to understand how the triple bottom line relates to the sustainable procurement practices. It also helps the academia to identify the gaps and to seek ways in which the gaps between the value for money and the triple bottom line elements can be narrowed. The researcher will be equipped with research skills and will acquire more knowledge and skills concerning sustainable procurement process also knowing the impacts on value for money to the cooperate image to the company.

# 1.5.3 Policy makers

Sustainable procurement practices help policy makers in coming up with efficient ways of procurement that brings yield to the general populace for example the policy of recycling plastics, steel, and other materials to reduce pollution of the environment. The study will form a source of data bank for Policy makers. In addition, Policy makers also adopt and adapt some of the techniques suggested by the researcher as an essential strategy to develop good, efficient, and effective sustainable procurement policies and practice.

## 1.6 Assumptions

In order to do this research, the researcher came up with a lot of speculation in his research that was thought to be as follows:

- Respondents will provide accurate, accurate, impartial, and important information
- Interaction from sample
- Access to important information
- Company policies and regulations will not prevent the researcher from collecting the required information
- The research methods used for data collection will be accurate, up-to-date and appropriate to accurately measure what was intended to measure.

#### 1.7 Delimitation of the Study

The study is limited to higher and tertiary education institutions in Matabeleland region in Zimbabwe as the researcher investigated the impact of sustainable public procurement practices on value for money. The research followed a qualitative research approach within an interpretivist research paradigm. The data for the study was obtained using interviews and analysed through thematic analysis. Because of time and other constraints this study will be restricted to Matabeleland public institutions of higher learning.

#### 1.8 Limitations

The study has its own limitations and shortcomings. Firstly, the Covid-19 posed some challenges to the researcher as lockdown and travel restrictions made it difficult for the researcher to make frequent field visits. Secondly, the snowballing sampling technique used further adds another shortcoming, some respondents that the researcher was referred to had not enough information, however the researcher used observation in an attempt to address this gap. The duration of the fieldwork was limited by financial and time constraints which prohibited more in-depth fieldwork. The study was conducted when the staff was limited to going to work on full scale basis limiting more information that could have been gained if it

was done at when all the staff was at work. The research is therefore a baseline study, useful for building large-scale sustainable procurement processes and projects in this interesting and expanding field.

#### 1.9 Definition of terms

It is important to incorporate some hints and definitions for the research paper's important terms. The next sections will provide such definitions and highlights on essential terms. Some definitions from other scholars were used by the researcher, as shown below.

#### 1.9.1 Supply chain

A supply chain is a set of processes that lead to the delivery goods or services to a customer. Moving and processing raw materials into finished products, transporting those items, and distributing them to end-users are all processes in the process (Kotler & Keller, 2016). All of the functions that begin with receiving an order and end with meeting the customer's request are included in the elements of a supply chain. Product creation, marketing, operations, distribution networks, financing, and customer support are among these functions. The management of the supply chain is a critical component of the business process (Venter & Botha, 2019).

#### 1.9.2 Sustainability and sustainable procurement

The ability of something to retain or "sustain" itself over time is referred to as sustainability in the broadest sense (Craufurd & Kassam, 2017). Physical and natural resources, environmental deterioration, and social resources provide limits on sustainability in business and policy. Therefore, sustainable policies highlight how a specific policy or corporate practice will affect society, the economy, and the environment over the long run. The thought typically coincides with the belief that, without significant changes to the way the planet is managed, it would decline in an irreversible manner. Sustainable development, or the methods used to achieve it, is defined as "meeting current demands without compromising the capacity of future generations to meet their requirements" (Venter & Botha, 2019).

# 1.93. Value for money

(VFM) is about striking the best balance between the "three E's" economy, efficiency and effectiveness. It is not a tool or a method, but a way of thinking about using resources well. In the United Kingdom it is often used as a framework for assessing cost effectiveness across the public sector. Penny Jackson (2012)

#### 1.10 Ethical considerations

This study was conducted following and in accordance with the ethical requirements laid down by Bindura University of Science Education. The researcher warranted that respondents were not harmed, were not prejudiced and that they were cognizant of what they were taking part in. The data gathered

from this study was held in confidence and will be used for the research purposes only. Respondents were asked to sign a consent form which shows that they are free and not forced to take part into this study and that they are free to withdraw anytime they wish to. The confidentiality of respondents was guaranteed and maintained, and the researcher did not request names and personal details of the respondents. Finally, all the findings from the research were reported honestly and the researcher did not project his own feelings onto the study.

## 1.11 Organization of study

This study is made up of five chapters:

**Chapter one** of the study presented the background, including information on the topic under study, research questions, research objectives, contribution, and justification of the study.

**Chapter two** reviewed available literature - both theoretical and empirical. The study quoted several researchers who had done related studies and identify the research gap and examined how the reviewed literature is applicable to the current study.

**Chapter three** detailed the methodology in which issues concerning paradigm, research design, research approach, population, sampling, research instrument, data analysis, trustworthiness, and ethical issues were discussed.

**Chapter four** of the study presented actual data analysis and interpretation using thematic analysis following a qualitative research approach.

**Chapter five** presents the summary, conclusion, recommendations, study limitations, as well as area for further studies

# 1.2.1 Chapter Summary

The chapter outlined the background to the sustainable public procurement practices in tertiary education institutions supply chains, provided a description of the study area, problem and purpose statements and overall objectives of the research. Time was availed to present the research objectives as well as the questions and the key terms were defined in this chapter. Some highlights of the research methodology adopted, and findings were also presented in the chapter. The chapter also covered issues on assumptions, and limitations.

#### **CHAPTER 11**

#### LITERATURE REVIEW

#### 2.1 Introduction

A literature review is based on the assumption that knowledge accumulates, and that people learn from and build on what others have done (Neuman, 2011). Badenhorst (2007) asserted that "the literature review section is the place where previous research is discussed, and current research is located". This chapter of the research draws on a wide range of published and unpublished literature sources on the impact of sustainable procurement on value for money in the tertiary education institutions. The first section of the review deals with background to the concept of value for money, second deals with the concept of sustainable procurement benefits, the supply chain key concepts on sustainability issues are discussed. The conceptual framework of the research will then be presented that integrated the sustainable procurement practices, value for money and the triple bottom line concepts.

# 2.2 Background and Motivations Behind the study of sustainable procurement practices that have impact on value for money.

The world over procurement has been practiced only to avail the required goods and services to the internal departments of an organisation. Lysons (2005) reveals that in many African countries primitive procurement practices are still active, that does not consider the triple bottom line (TBL). Furthermore, value for money concept has to some extent been overlooked. In China and Americas, procurement process takes into account practical supplier evaluation and selection, suppliers' financial muscle, extent of human resource motivation, technological advancement of production processes, experience and technical expertise of human resources, certification of green procurement practices, child labour and performance profile or experience of providing the service required Naresh and Gopala (2009). Dobbler (2003) added that along the supply chain activities each stage has to include sustainable activities such that if procuring entities buys anything from that particular organisation, automatically it becomes a chain reaction of practical sustainable procurement practices and value for money being the norm across the supply chain. In Zimbabwean higher and tertiary institutions procurement is taken as a general exercise that does not add any financial value to the supply chain Gono (2006). Guvamatanga and Chiri (2017) further supported that value for money is seen only in accounting departments trying to reduce the quantity of the products and services that would have been sort by the procurement departments. The concept of value for money is not being cascaded where it should start from so that the supply chain

becomes so efficient and effective.

#### 2.3 Value for money (VfM) along the supply chain

Value for money, which is typically expressed in the price of the item purchased, refers to the best possible balancing of "whole life cost" and "quality" to satisfy the needs of the customer or end-user of the procured goods or service. The Public Procurement Board's goal is to standardize public procurement procedures throughout the public sector to ensure the wise, economical, and effective use of state resources in public procurement in a sustainable way and to witness to the procurement system's value for money principle (2018). Contrarily, competitiveness refers to the active involvement of the private sector and/or suppliers in the procurement process by the dissemination of procurement information to all parties, through the promotion of prequalification, sourcing reviews, tenders, and the implementation of open processes in the procurement systems are some examples. It is impossible to overstate the advantages of competitiveness, which include potential cost savings for the economy, expansions of the supplier base, and the growth of local industries within the economy, ultimately resulting in economic growth and the eradication of poverty. Value for Money (VFM) is therefore a gauge of the government's financial resources' economy, efficiency, and effectiveness (the "3Es"). Value for Money, as defined by The Association of Chartered Certified Accountants, ACCA (1999), is the pursuit of the finest possible combination of services using the least sustainable available resources.

## 2.4 Sustainable public procurement procedure and value for money

In sustainable public procurement, value for money refers to receiving fair services or products that are proportional with the money spent given the restricted resources at the disposal of the government. According to Gono (2007), VFM in procurement is essential for making the best possible use of limited budgetary resources. The main factor influencing PRAZ procurement is VFM (2018). It entails choosing the good or service that has the lowest total prices, is "fit for purpose," and complies with specifications. If a product is selected even though it does not have the lowest total cost of ownership, the additional "value added" advantage must be evident and justified PRAZ (2018). Only a public set of evaluation criteria, which must be pertinent to the subject of the contract, shall be used to evaluate supplier bids. These established standards must be met for any "added value" to justify a higher price to be justified. Department of Government (2007). When determining the optimum return and performance for the money being spent, value for money in Zimbabwe's educational institutions takes into account how best to advance government priorities and programs. McGuinness & Bauld (2006). This implies that organizations responsible for public procurement may decide to award a contract based on factors other than only the lowest price. The whole life cycle cost is one of the variables taken into account. Raymond(2008). Value for Money analysis must be used as the foundation for all public procurement of

commodities, works, and services, with adequate consideration for propriety and regularity.

World Bank (2003) reveals that Value for Money is not about achieving the lowest initial price, but the optimum combination of whole life costs and quality Behan (1994) points out the real Value for Money is how much the goods or service purchased cost to own and use. Barnett et al, (2010) indicate that Value for Money reflects a concern for more transparency and accountability in spending Public Funds, and for obtaining the maximum benefit from the resources available. Batho Pele Handbook (2007) suggests that Value for Money is achieved when public procurement is executed economically and efficiently. For this to happen, government departments are required to adapt and adopt creative ways to simplify procedures and eliminate wasteful expenditure and inefficiency to promote productive use of resources in public procurement. At the heart of the concept of Value for Money, are three critical elements namely economy, efficiency and effectiveness. This is known as the 3 E's. Batho Pele Handbook (2007)

#### 2.5 Value for Money in public institutions of higher learning

Given the limited resources available to public institutions of higher learning in Zimbabwe, ensuring VFM in procurement is key to ensuring the optimum utilization of scarce budgetary resources. Chizu (2009) reveals that VFM is the primary driver for procurement. It usually means buying the product or service with the lowest whole-life costs that is "fit for purpose" and meets specification. Gondo and Ruswa (2018) states that where an item is chosen that does not have the lowest whole-life costs, then the additional "value added" benefit must be clear and justifiable. PRAZ(2018) further revealed that in support of Treasury instruction(2003) assessment of supplier bids should be conducted only in relation to a published set of evaluation criteria, which must be relevant to the subject of the contract, and any added value that justifies a higher price must flow from these defined criteria (Office of Government, 2007). Value for Money(VfM) in the higher and tertiary education institutions involves consideration of the contribution to be made to advancing government policies and priorities while achieving the best return and performance for the money being spent Bauld & McGuinness, (2006,). This means that public education/tertiary procurement entities can choose to award a contract based on other criteria other than the lowest price. One of the factors considered is the whole life cycle cost Raymond, (2008). All public procurement of goods, works and services, must be based on Value for Money assessment, having due regard to propriety and regularity. Value for Money is not about achieving the lowest initial price, but the optimum combination of whole life costs and quality (World Bank, 2003).

Behan (1994) factors out the real value for money is how lots the products or provider bought price to personal and use. Barnett et al, (2010) indicate that value for money reflects a concern for extra transparency and duty in spending Public funds, and for acquiring the maximum benefit from the sources to be had. Batho Pele guide (2007) suggests that value for money is achieved when public procurements are done economically and efficaciously. For this to show up, government departments are

required to adapt to creative ways to simplify procedures and eliminate wasteful expenditure and inefficiency to promote productive use of resources in public procurement. At the heart of the concept of Value for Money, are three critical elements namely economy, efficiency and effectiveness. This is known as the 3 E's. (Batho Pele Handbook, 2007). Economy: Explores whether specific inputs are acquired at the lowest cost and at the right time. Efficiency: This refers to how productively inputs are translated into outputs. It further means that there should be maximum output with little cost. Effectiveness: The extent to which outputs achieve the desired outcomes (Batho Pele Handbook, 2007).

## 2.7 Value for Money Metrics in sustainable public procurement process

# 2.7.1 Training

Firsly, supplier training is one of the most critical sustainable procurement practices that enhance sustainability and value for money Lysons&Farrington (2016). Training suppliers in new product developments or improvements allow for better design of products to meet the right specifications as well as packaging requirements of sustainability. Hence companies can have collaborative relationships with their suppliers to ensure supplier training goes well. To add on, commitment to waste reduction goals can be achieved. Kiwili & Ismail, (2016) postulate that this enhances innovation as there will be sharing of ideas between the buyer and the supplier which allows for waste minimization and improved recycling methods that will lead to positive effects after implementation. Johnson(2004) carried out a research at the university of California, on the ways of ensuring sustainable procurement within the supply chain . The research reveals a tool called the Sustainable Public Procurement Prioritisation Tool (SPPPT) used by the university procurement to make an initial assessment of potential social responsibility and sustainability risks for different commodities and highlight possible measures to target them. Before an award of a contract to the supplier, rigorous assessments are done and published summary briefs from our SPPPT assessments of high risk categories. The "next steps" indicated in these briefs highlight the issues around which the procurement depart hope to work with suppliers for further research and engagement. Wherever appropriate, the procurement department conduct pre-market engagement with potential suppliers and stakeholders.

# 2.7.2 Whole life cycle costing

Johnson (2004) reveals that, whole life cycle costing is a sustainable procurement practice that ensures that value for money(VfM) is achieved which institutions in the public sector seek to obtain. The total cost of ownership is broken down to see the costs of owning a certain product from buying up until disposal. Lysons and Carrington(2016) further uncovered that when the materials are being disposed of ,consideration must be given to the extent of carbon footprint. Sustainable disposal method should include acquisition costs, maintenance costs, and disposal costs (Lysons & Farrington, 2016). This helps in saving costs as waste production is reduced and buying products of high quality that are sustainable and that

meet the triple botton line(TBL) that is environmental, social, and economic goals.

#### 2.7.3 Recycling

Finally, sustainable public procurement in the higher and tertiary education in Matabeleland region consist of getting recyclable products that entails buying products that can be recycled so that there are no negative externalities (environmental impacts) Wallace & Omachar, (2016). Thus, aspects such as reduction, reuse, and recycling must be taken into consideration when designing products in the supply chain. Specifications are thus important to communicate to suppliers. The products must be disposable or can be returned to the supplier for recycling. Mwembe(2018) carried out a research at the University of Zambia and found out that the university was buying chemicals from Chemical Solutions a company that supplied government higher and tertiary education institutions in Zambia at a favorably lower price, this was due to the fact that the university was returning the empty chemical containers to the company and or molding its own containers and provide its own packaging. Mumba and Banda (2021) further supported that Value for money (VfM) was realised the whole university and was seen through growth and development of its research and development department

#### 2.7.4 Competition amongst suppliers

Competition of suppliers for the public institutions in Matabeleland has been regarded as one the most important factors towards attaining value for money. This is on the premise that competition amongst bidders can lead to improvements in pricing and alternative means of delivering VFM. According to Pitt et al. (2006), where a PPP project has been awarded through an open tender, the argument for VFM is made easier to substantiate. Kee and Forre (2002) also observe that competition can produce an efficient delivery of goods and services. They further elaborate on a competitive market model which envisions many markets comprising many buyers and sellers, whole expertise on high-quality and production costs, arm's duration negotiations, and shortage of impediments to the entry of firms in the marketplace. With the presence of these situations, it's miles believed that a marketplace would be a producer and allocator of offerings superior to the public area (Kee and Forre, 2002). In summary, risk switch has been regarded as the motive force of performance, competition, and contestability to make sure that it is correctly transferred (OECD 2008). opposition can both be for the marketplace or competition/contestability inside the marketplace which occurs after the agreement is concluded and is in operation. One may, consequently, finish that whether a PPP represents value for money is dependent upon enough risk transfer and competition. on the other hand, the absence of competition or capability entry could lead to problems in attaining better efficiency and value for money.

#### 2.8 Triple Bottom Line Concept in the supply chain

The Triple Bottom Line concept developed by John Elkington has changed the way businesses, non-

profit making organisations and governments measure sustainability (Slaper & Hall, 2019). Beyond the foundation of measuring sustainability and value for money on three fronts; people, planet and profits-the flexibility of the TBL allows public institutions to apply the concept in a manner suitable to their specific needs (Slaper & Hall, 2019). The TBL captures the essence of sustainability by measuring the impact of an organisation's activities (supply chain) on the world including both its profitability and shareholder values and its social, human and environmental capital. The Tripple bottom line framework is presented in figure 2.1 below;

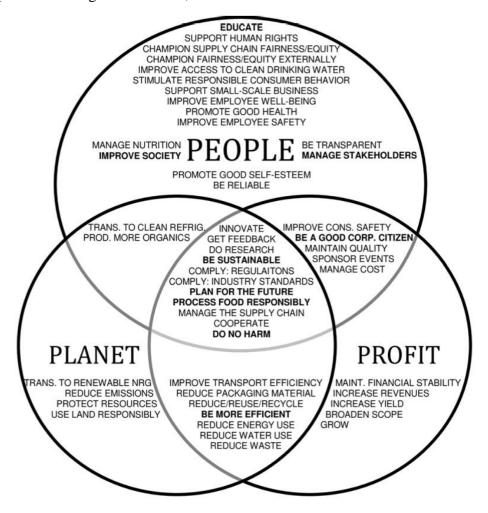


Figure 1: Tripple Bottom Line Framework. Source (Shnayder et al, 2015)

The 3Ps do not have a common unit of measure. There is no universal standard method for calculating the TBL, however, it sets to assess the following;

#### 2.8.1 Economic (profit)

The economic dimension of sustainability emphasizes increasing outputs value, while reducing inputs value, thus maximising profit, revenue and economic growth Closs et al., (2011). Furthermore, sustainable procurement practices should at least bring profitability, growth, financial stability as well as economic use of resources in order to realise value for money that would have been spent by the

organisation, such growth should also be aligned to environmental and social benefits. Economic variables ought to be variables that deal with the bottom line and the flow of money. It could look at income or expenditures, taxes, business climate factors, employment, and business diversity factors. Specific examples include personal income, cost of underemployment and job growth among others. Lysons &Farrington(2003) further supported that for the public institutions to be economic, the supply chain must therefore be designed in a manner that ensures service level agreements(SLAs) with service providers so that there is economic use of financial resources as well as physical resources.

# 2.8.2 Environment (planet)

Environmental dimension of sustainability encourages organisations to reduce (or at least minimize) their negative ecological impacts and to actively contribute to green practices, such as natural resources protection, waste collection, pollution prevention Taghikhah, Daniel, & Mooney(2017). Environmental variables should represent measurements of natural resources and reflect potential influences to its viability. It could incorporate air and water quality, energy consumption, natural resources, solid and toxic waste, and land use/land cover. Ideally, having long-range trends available for each of the environmental variables would help institutions of higher learning to identify the impacts a project or policy would have on the area. Specific examples include land use and degradation, cutting down of trees, ozone depletion, solid and hazardous waste management among others. When the public institutions dispose of their waste, they should make sure that either what is capable of being recycled should be recycled and what is capable of being sold must be sold to realise value for money rather than leaving the materials to pollute the environment.

# 2.8.3 Social (people)

The social dimension of sustainability supports the development of programs related to society welfare and stakeholders (Shnayder et al., 2015, Fahimnia & Jabbarzadeh, 2016), satisfaction variables refer to social dimensions of a community or region and could include measurements of education, equity and access to social resources, health and well-being, quality of life, and social capital. The examples include female labour force participation rate, child labour usage, sweat shops, level of social ills, household income, crimes. Sustainable procurement practices in tertiary education institutions must ensure that they are socially responsible so that value for money is extended to the society at large. Dobler (2008)further added that for institutions to be socially responsible they must employ from the surrounding society so that the society benefits from the activities of the institutions. Furthermore, Lysons and Farrington(2003) added that the public institutions should remunerate its employees fairly in order for them to be motivated

and in return be productive which in turn promote value for money

#### 2.8.4 Drawbacks of the Triple bottom line framework

The three major criticisms of the TBL approach are in its measurement approach, its lack of integration across the three dimensions and its function as a compliance mechanism. The measurement of TBL is complex. The first limitation of the TBL approach revolves around social measurement (Sridhar & Jones, 2012). The second limitation found in the TBL approach is a lack of ability to aggregate the results across the three principles of TBL (Shnayder et al., 2015). This is a limitation because TBL promised in its aggregation claim to provide a social profit and loss number, whereby the claim states that the social metric can be quantified into a single number using various formulae. TBL offers no means of prioritizing among the requirements of different stakeholder groups. Secondly, it provides no method or formula in its framework that can aggregate across the TBL principles (Sridhar & Jones, 2012). The third limitation found in the TBL approach is the lack of integration. Firstly, the integration between the three dimensions of TBL will be hard as people are trained to be experts in each of the three dimensions and not across all of them, and this leads to the data collection within each area separately (Gibson, 2016).

#### 2.9 Empirical Evidence

Empirical evidence refers to the past studies which might be just like the present study. It indicates how these studies relate or vary with the current study investigation, consequently organising the understanding hole. Empirical proof that is the document of one's direct observation or reports, can be analysed quantitatively or qualitatively. through quantifying the evidence or making sense of it in qualitative form, the researcher can answer empirical questions, which have to be absolutely described and answerable with the evidence amassed. This research will synthesize the previous research which were finished concerning sustainable procurement practices that carry value for money in tertiary education institutions in Zimbabwe.

#### Stephen and Helen (2011)

Stephen and Helen (2011) researched on the Sustainable public procurement practices in the public sector internationally. The research identified facilitators of sustainable procurement activities such as government support for sustainable procurement. Stephen and Helen (2011) states that national and international policy environments regarding sustainable procurement are a primary determinant of the extent to which organisations engage in sustainable procurement that promote the realization of economic/financial use of available resources. The research also suggested that the government should be more committed to driving sustainability within organisations. The findings of the research

are that governments use power embodied in public procurement activities to further social and environmental policy and goals. Stephen and Helen (2011) contributed to the knowledge of this research by identifying government support as one of the facilitators of sustainable procurement. However, Stephen and Helen (2011) responses may be biased as countries provides answers that are political and social common to protect their country's image. Walker and Brammer (2007) investigated sustainable procurement in the United Kingdom public sector. The findings of the research were that local government authorities are mainly concerned with buying from local and small suppliers and disregards value for money(VfM) concept. Moreover, their research identified cost as a leading barrier to sustainable procurement. Value for money(VfM) has been overlooked and the cost of rebuying the same equipment was to a greater extent bars the growth and profitability of the organisations. The study also identified top management support as the leading facilitator of sustainable procurement. The research determined that organisations are only complying to the social dimension whereas the environmental dimension is being ignored. Walker and Brammer (2007) were able to identify costs as barriers to the sustainable procurement this also helped to increase knowledge on the research problem under investigation. However, this research will go beyond that of Walker and Brammer (2007) as their study was mainly concerned about investigating sustainable procurement in developed nations but failed to address the impact of sustainable procurement practices on value for money in developing nations

#### 2.9.2 Voon (2014)

Voon (2014) conducted study on the issues of sustainable procurement. The study revealed that in Singapore, sustainable procurement is currently optional and there are no financial incentives offered for obtaining value for money (VfM). According to Voon (2014), significant issues with present procurement procedures have verified that organizations failed to take sustainable factors into account while making decisions. Value for money (VfM) is also not a priority because public entities have a limited fiscal budget. Voon (2014) contends that the absence of green objectives and procurement standards, as well as a lack of understanding of end users' needs and client expectations, are further issues. According to Voon (2014), all levels of stakeholders must take initiative and participate in the implementation of sustainable procurement. The research's key findings revealed that some traits are employed more frequently than others, showing that differing levels of relevance are accorded to voluntary sustainability measures in practice. Research on the impediments to sustainable procurement procedures in Zimbabwe was done by Chari and Chiriseri in 2014. The analysis discovered that upper management didn't provide enough help. Lack of information and expertise was another obstacle to the implementation of sustainable procurement. The research also revealed that organizations' lack of sustainable procurement policies serves as a barrier to the implementation of sustainable procurement. The

According to the report, employees should receive training on whole life costing, the significance of value for money procurement, and how to work together when making purchasing decisions. In terms of understanding on the obstacles to sustainable procurement, Chari and Chiriseri (2014) contributed. The limitations preventing the adoption of green procurement in public institutions in Kisii, Kenya, were the subject of research by Arisa and Muturi (2016). The study's goals were to determine how much the adoption of sustainable procurement is influenced by organizational structure, the price of environmentally friendly products, knowledge, and technology. The study used a descriptive research approach with the goal of analyzing the barriers to green procurement. The study found that social consequences of production, the price of environmentally friendly goods, and constrained design of items has a stronger impact on how green procurement is implemented. Low response rates, however, hurt the study's results.

## 2.9.3 Ngugi (2014)

Ngugi (2014) conducted research on Kenyata University of Technology as a case study for the factors that influence the adoption of sustainable procurement in the public sector. The cost (financial value) of green products, green incentives, and the availability of green supply were some of the variables used in the study. Those directly involved in the procurement function were the population that was being targeted. The study discovered that the primary factors influencing Kenya's green public procurement include an organization's capacity for sustainability, incentives, and pressures. College of Technology. Ngugi's (2014) study only looked at green public procurement; however, Chari et al(2016).'s research proposes to go beyond that by looking at the impact of sustainable procurement practices, which include the environmental aspect, social aspect, and economic aspect (financial aspect) on value for money. An empirical study on the implementation of green procurement techniques in the German food service sector was done by Hauschildt and Ehlers (2014). The relationship between sustainability perspectives, drivers, impediments, and sustainable buying methods was examined in the study. According to the report, food industry businesses understand the significance of sustainability challenges as well as its internal societal importance. According to the study, businesses are hesitant to actually adopt sustainable procurement in the German food industry. The study provided a contribution by determining how individuals value sustainable procurement and by demonstrating the relationship between the drivers and impediments of green procurement. Hauschildt and Ehlers (2014) attempted to connect the dots between German procurement's sustainability problems, however they did not provide any concrete recommendations for how to overcome these obstacles. By offering solutions to the implementation of sustainable procurement practices research concerns, this study will go beyond those of Hauschildt and Ehlers (2014).

Chari et al., (2016) researched on the factors affecting green procurement implementation in the

manufacturing industry in Zimbabwe's Harare. The study looked at how the implementation of sustainable procurement is impacted by employee competency, supplier participation, and ICT infrastructure. A descriptive research design was employed in the study. A sample of 30 individuals was chosen using stratified random sampling from the study's target group of 93 participants. The study's conclusions were that staff competency, supplier participation, and ICT infrastructure have a favorable impact on the implementation of sustainable procurement and that these variables work well together to make it more successful. Manufacturing organizations are advised by Chari et al. (2016) to conduct performance assessments in order to discover all the variables that influence sustainable procurement. Beyond Chari et al(2016) s. findings, this study will not just examine green procurement but also sustainable procurement, which takes into account the economic, social, and environmental aspects.

#### 2.9.4 Zhu and Sarkis, (2004)

In their study on the advantages of sustainability in the private sector, Zhu and Sarkis (2004) found that many of these advantages came in the form of risk mitigation and performance improvement. It was important to shed more light on how effective policy initiatives have been at encouraging private organizations to procure sustainably given the scope and importance of procurement and the potential for sustainable procurement to play a significant role in delivering social benefits both directly and by influencing the activities of private sector organizations (McCrudden, 2004; Weiss and Thurbon, 2006). They did conduct research, and the nature and scope of sustainable procurement practices were examined in a sample of more than 20 public sector organizations from across the public sector globally. The study adds two new ideas. The analysis began by outlining the benefits of sustainable procurement. The study also looked at how these factors connect to involvement with various areas of sustainable procurement. These factors were found to be the most important enablers and impediments to the further growth of SP, respectively. The policies and initiatives required to advance sustainable procurement practices are illustrated by these contributions. The majority of research on sustainable procurement focuses on indirectly promoting social and environmental advantages through pressuring suppliers to lessen their own impacts, according to the UN Global Weather Report from 2008. Research on sustainable procurement has a history of focusing on case studies and frequently adopting a multi-sectoral approach by examining how sustainability might be supported when purchasing from suppliers in particular industries. For instance, earlier studies have looked at how sustainable buying practices might help a company project a positive image. According to a UN study from 2008, only environmental considerations, quality management, and stakeholder satisfaction increase the profitability of public institutions.

The crucial assumption is that any methods or measurements employed in the procurement process must

be impartial and, as such, should apply without regard to the goals of public policy. This indicates that they just need to evaluate the effects of public procurement in terms of sustainability, devoid of and impartial to the priority of any political agenda. The second is in the general strategy for measurement in the practice of procurement. The Government explains gauging success in terms of "value for money on a whole life basis and creating benefits not just to the organization, but also to society and the economy, while limiting damage to the environment" in its definition of sustainable procurement. These two strategies make one wonder what constitutes an organization's sustainable buying policy. In Dolva's (2008) evaluation of Green Public Procurement, Analysis of the perceived factors that encourage and hinder using more green public procurement in Norway. The findings showed that environmental criteria were present in 60% of all tender documents, but only 1/3 of them were certain. They identified three key obstacles to green public procurement: lack of information and a focus on product functionality and economic factors. The other two were work pressure and time constraints. The factors were identified as more cooperation, increased managerial emphasis, a simplification of requirements, and a greater availability of products with environmental labeling. In order to improve cooperation in the procurement process, the author advised labeling products and making visible more environmentally friendly alternatives. She also supported efforts for Environmental Management Systems and standards and worked to make it possible to include Green Public Procurement as a viable option. He also then agreed that if organizations adopt sustainable procurement, they are more likely to create a good corporate image. This is because most of the goods are labelled environmentally friendly.

# 2.10 Conceptual framework derived from theories and models (Sustainability considerations at each stage of procurement cycle)

The research conceptual framework of the study is derived from models and theories that the study is hinged on. The TBL, supply chain model and the disposal theories were integrated to give a detailed conceptual framework as shown in figure 2.2 below.

Figure 2.2

Fig 2.2 Sustainable Procurement conceptual framework

#### IDENTIFICATION(INITIAL CONSIDERATIONS)

- ✓ Community needs & expectations
- ✓ Naturally arising environmental risks
  - ✓ Enviro&social impact assessment
- ✓ Prioritization of sustainable needs

#### ANALYSIS(MARKET RESEARCH&PLANNING)

- **✓** Expected sustainability benefits
- ✓ Relevant sustainability products/services available in market
  - ✓ Is the market able to deliver sustainable products
  - ✓ Anticipated costs and value for money proposition
  - **✓** How will procurement strategy address sustainability

#### REQUIREMENTS(PROCUREMENT PROCESS DESIGN RFQ OR RFP

- ✓ Use prequalification or not
- ✓ Specification: conformance or performance
- ✓ Identify relevant sustainability standards and classifications
  - ✓ Assess sustainability priorities
- ✓ Develop sustainability criteria and check contract terms to reflect sustainability

#### SOURCING PROCESS

- ✓ Advertise and evaluate bids/proposals
- ✓ Assess quality of sustainable solutions &sustainable credentials and track records
  - ✓ Assess, compare, & evaluate VfM (cost of sustainable solutions)
    - ✓ Select best bid & service level agreements

#### **CONTRACT IMPLEMENTATION**

- ✓ Contract management plan &system to monitor sustainability priorities
  - ✓ System to report against delivery and outcomes being achieved
- ✓ Assess delivery vis KPI sustainable measures & value engineering to improve SP outcomes

#### **CHECK**

- ✓ Assess sustainability outcomes & VfM over the whole-of -life
  - ✓ Review usefulness of sustainability KPIs
- ✓ Review effectiveness of sustainable monitoring , reporting & identify lessons learnt and share learning

Figure 2.2: Conceptual framework (Authors' own work)

The above conceptual framework brings all the concept of triple bottom line, sustainable procurement, and value for money into one model. Value for money therefore depends on the sustainable procurement practices

# 2.11Summary

The chapter reviewed literature on the impact of sustainable procurement practices on value for money. The chapter has unpacked inherent sustainability issues involved in the supply chain that is need identification, Advertisement, supplier evaluation, supplier selection, contract award and ordering, goods received and inspection, storage and contact management. The major theories and models upon which this study is hinged on were also presented. The literature findings reveal that sustainable procurement is beneficial to the public institutions if practiced in the correct manner. However, in African states government, sustainable procurement practices are still lagging behind.

#### CHAPTER III

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

The previous chapter discussed literature review where supply chain, sustainability, triple top line, as well as *value for money* issues were discussed. This chapter will discuss the methodology that the researcher used in the study. Based on the framework for the research process, the methodology chapter shall investigate the methods employed to answer the research questions. Issues connected to population, sampling, data analysis, as well as ethical considerations will be presented in this chapter.

## 3.2 Research Methodology adopted

In terms of research design and method, there has been a lot of debate in the literature about the differences between qualitative and quantitative methods (Creswell & Creswell, 2018). One of the key distinctions between qualitative and quantitative research is that "qualitative research expresses human opinions and experiences in descriptive words, whereas quantitative research expresses them in numbers, figures, equations, and tables" (Bryman, 2017). Furthermore, qualitative research "connects the experiences, feelings, and perspectives of individuals, groups, or society to produce subjective data" (Creswell & Creswell, 2018). This study followed the interpretivism paradigm has adopted the qualitative research approach in which the respondents were interviewed to get the deeper and richer information about the sustainable procurement impact on value for money. The researcher opted for qualitative research because it considers and embrace the feelings of respondents. In August 2021 a scoping trip was undertaken by the researcher to study various colleges and universities in Matabeleland for data mining from the procurement management units. The research applied a little bit of quantitative method when presenting data using the pie chart and histogram.

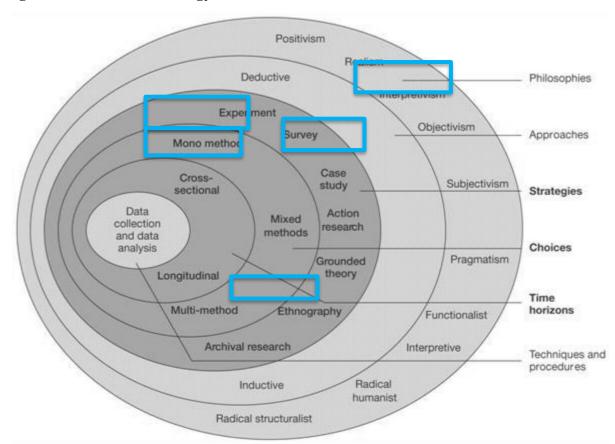


Fig 3.1 Research Methodology Framework

Figure 3.1: Saunders Research Onion

Figure 3.1. above depicts the methodology chapter framework that the researcher must adhere to. The researcher must first define the research philosophy, which includes positivism, interpretivism, realism, and subjectivism, among other things. In addition, the researcher's research approach, whether deductive or inductive, will be described in this chapter (Gray, 2018). The procedures for research, design, and data collection will be unpacked.

#### 3.3 Research Philosophy

According to Creswell and Creswell (2017), Phylosophy embraces critical assumptions about how one views the world. Furthermore, according to Gray (2018), these assumptions will buttress and determine the research methods and strategies used in this study. According to Bryman and Bell (2018), epistemological issues in research concern the question of what constitutes reasonable knowledge in each discipline. Considering the foregoing, epistemology is defined as "a branch of philosophy concerned with the nature of knowledge and what constitutes acceptable knowledge in a specific field of study" (Guidita, 2019). There are basically four epistemological positions, according to Braun and Clarke (2018): positivism, realism, constructionism, and interpretivism. The study adopted an interpretivism philosophy to get an in-depth understanding of sustainability issues pertaining to the procurement, storage and disposal of materials/goods

#### 3.4 Research Paradigm

As previously highlighted, this study adopted an interpretivism paradigm. The study objectives align to this paradigm. The current study will adhere to the interpretivism paradigm, which is based on the idea that reality does not exist independently of humans. Humans cannot be separated from reality, according to the Interpretivism paradigm. The interpretivism paradigm is relevant to this study because the goal is to understand the impact of sustainable procurement on value for money and the behaviour of procurement officers towards the fulfilment of organisational objectives.

## 3.5 Research Approach

According to Chilisa and Kawulich (2018), there are two types of research approaches: deductive and inductive. An inductive approach, according to Creswell and Creswell (2018), is a method in which a researcher collects data for a specific topic first and then develops theory as a result of the data analysis. This method involves five steps: deducing a hypothesis, expressing the hypothesis in operational terms, testing the hypothesis, examining the outcome, and, if necessary, modifying the theory in light of the findings. This research will be conducted in a deductive manner. The researcher justifies this approach by claiming that there is enough literature in the sustainable procurement issues and supply chain. This method will help in the explanation of the impact of sustainable procurement on value for money as well as providing the researcher with the ability to categorise and uncover the sustainable procurement issues qualitatively. Above all, this approach has the potential to generalize findings, and it is based on this assumption that the findings regarding sustainable procurement issues will be useful for all other areas where procurement is done for instance in the private sector in Zimbabwe.

### 3.6 Research Strategy/ Method

In terms of research design and method, there has been a lot of debate in the literature about the differences between qualitative and quantitative methods (Creswell & Creswell, 2018). One of the key distinctions between qualitative and quantitative research is that "qualitative research expresses human opinions and experiences in descriptive words, whereas quantitative research expresses them in numbers, figures, equations, and tables" (Bryman, 2017). Furthermore, qualitative research "connects the experiences, feelings, and perspectives of individuals, groups, or society to produce subjective data" (Creswell & Creswell, 2018). According to Gray (2018), all positivism research should be accompanied by quantitative research.

This study following the interpretivism paradigm has adopted the qualitative research approach in which the respondents were interviewed to get the deeper and richer information about the impact of sustainable procurement on value for money in tertiary education institutions in Zimbabwe.

Human beings have two distinct operating systems. One is a subconscious mode of functioning, which involves making quick and instinctive observations when data is available. The other operating system is slower and more systematic, preferring to consider all available data sources before deciding (Creswell & Creswell, 2018). Many types of study rely on the second operating system while neglecting the human mind's instinctive character. The researcher opted for qualitative research because it considers and embrace the feelings of respondents. The motivation for this research method is based on three issues:

### 3.7 Previous Research

Through reviewing past literature, many researchers conducted on this field of *sustainable supply chain* and its importance on the profitability of the organisations made use of the qualitative method.

### 3.7.1 Time Constraints

Adopting qualitative research suited this researcher due to time constraints. "Qualitative research is normally less time consuming because it makes use of small sample size" (Gray, 2018).

### 3.7.2 Objectivity

"Qualitative method that the researcher employed looked at the respondents' opinions and attitudes and compare them without influencing responses" (Creswell & Creswell, 2018).

## 3.8 Research Instrument

Researchers can use a variety of tools to conduct their investigations. The researcher considered all possible instruments and ultimately decided to use interviews and observations as the study instrument after much deliberation and consideration. Because of their ability to collect data from a small samples interviews and observations were chosen as the study instruments. (Creswell & Creswell, 2018). Instead of solely quantitative approaches like questionnaires, interviews and other qualitative methods like

observation are claimed to provide a "deeper" understanding of social issues (Guiditta, 2019). When nothing is known about the research phenomenon or when complete insights from individual participants are required, interviews are the most appropriate strategy (Gray, 2014). Interviews and observations are also good for delving into difficult themes that people might be hesitant to address in a group setting. The researcher conducted interviews with 30 procurement officers in order to assess whether sustainable procurement has any benefit towards realising value for money.

### 3.8.1 Conducting interviews

Finding out more about a participant's background through an interview is a terrific idea. Interviews enable the researcher to learn more about a topic (Gray, 2018). To ensure that the respondent(s) were at ease while the interviews were being conducted for this study, the researcher picked a location with little to no distractions. In essence, the researcher appropriately disclosed the interview's purpose and got respondents' agreement before conducting the interviews at the respondents' domicile to assure their comfort. The researcher explained confidentiality to the subject before the interview began and provided a rough time estimate. For this study, interviews lasted 30 to 60 minutes with respondents. In order to ensure sincere responses, the researcher tried to avoid making the interview too long but also not too short.

## 3.9 Achievement of objectives

Table 3.1: Achievement of Objectives

| Objectives | Data collection Instrument          | Sampling  | Data analysis |
|------------|-------------------------------------|-----------|---------------|
|            |                                     | procedure |               |
| 1-4        | Observation and in-depth interviews | Snowball  | Thematic      |

## 3.9.1 Pilot study

To validate the study instrument, a pilot study is required. The pilot study was conducted on 5 respondents National University of Science and Technology(NUST) for this study. "The pilot study evaluates the research instrument's reliability and aids in its refinement." The benefits of conducting a pilot study are that the research will be able to identify problems with the instrument's layout, grammar, sequence, punctuations, and lengths through this process (Gray, 2018). Following a pilot survey review, the researcher can remove, reword, or add new questions.

### 3.10 Population

The study population is defined by Bryman and Bell (2018) as the "universe of units from which the

sample is to be selected." All procurement officers and buyers in government tertiary education institutions in Matabeleland are the target population for this study. The study's population, according to Leedy and Ormrod (2017), is a "comprehensive group of individuals, institutions, and objects who share common features or characteristics that the researcher will be interested to investigate".

### **3.11 Sample**

To select a study sample, the researcher used the convenience sampling method of the non-probability technique. The researcher through this method did not use a pre-determined scientific process to select participants for this study, which is a merit of using non-probability sampling. The researcher used convenience sampling, a type of non-probability sampling, to select respondents based on how close and convenient they were to the researcher (Creswell & Creswell, 2018). The study sample consisted of 15 respondents in all the colleges and universities in Matabeleland.

| College/University   | <b>Procurement Officers</b> | Gender |        |
|----------------------|-----------------------------|--------|--------|
|                      |                             | Male   | Female |
| NUST                 | 3                           | 2      | 1      |
| LSU                  | 3                           | 1      | 2      |
| Bulawayo Polytech    | 3                           | 2      | 1      |
| JM Nkomo Polytech    | 3                           | 1      | 2      |
| Hillside Trs College | 3                           | 2      | 1      |

Table 3.2: Number and gender of respondents in each area

For the purposes of this study, the sample was collected considering:

- (i) **Procurement Officers:** The respondent is involved in procurement/buying.
- (ii) **Storeman:** The respondent is involved in storage of material8 in a sustainable manner.
- (iii) **Disposal committee members:** The respondent is involved in disposal of materials

## 3.12 Data Gathering

Interviews are a great way to discover more about a participant's background. Interviews allow the researcher to delve further into a subject (Gray, 2018). Data was collected primarily for this study through interviews, which required about 30-60 minutes of respondents' time and also through a supplementary method of observation in which the researcher observed trends, patterns, activities, and actions of the

respondents to make a conclusion.

### 3.12.1 Procedure for data collection

This study gathered theoretical evidence on the sustainable procurement role in value for money realisation in Tertiary education institutions in Zimbabwe. The criteria mentioned under the sampling section that data was gathered from procurement officers, storeman, and those who are involved in disposing equipment that institutions no longer need. The research explored data on the sustainability issues in realisation of value for money in colleges and universities in matabeleland. The primary research instrument is interviews and supplementary was observation with interviews conducted on procurement officers. The researcher made use of the recorder to capture participants' responses and also a notebook to take down observed activities in colleges.

## 3.13 Data Analysis

Raw data collected is irrelevant until it is analysed and interpreted (Gray, 2014). The data was collected using a recorder. The researcher transcribed on Microsoft word. The researcher was immersed in the data and read word to word coding the data. The coding process allows the researcher to make sense of the data collected and analyse it. Coding is defined as the "transformation of data into a computer readable format to make room for analysis" (Creswell and Creswell, 2018). The interview material was translated and then manually typed into a Microsoft Word document. The responses were categorized into important themes covered in the thesis. A theme is a 'patterned response or meaning' that emerges from the data and helps to answer the research question. A theme is a more abstract object that requires a larger degree of data interpretation and integration than a category, which describes and organizes the 'manifest content' of a data collection (Nowell et al. 2017). The researcher became familiar with the data by reading it again and actively. Knowing the data helped the researcher code, which is the process of organizing data at a granular, precise level.

## 3.14 Measures of study quality control for the quantitative phase

### 3.14.1 Trustworthy

The term "trustworthiness" is an overarching concept used in qualitative research to describe the procedures researchers use to ensure the quality, rigor, and credibility of a study while (re)establishing congruence between the researcher's epistemological and ontological underpinnings and the design, implementation, and articulations of a research study (Creswell & Creswell, 2018). As a result, being trustworthy should be a researcher's goal and habit. By making the technique and procedures that underpin the study transparent, the study's trustworthiness section often explains why the findings and

implications can be considered as acceptable and valuable to the readers.

## 3.14.2 Credibility

The term "credibility" describes whether the participants' perceptions of the scene or the events match the researcher's account in the research report (Babbie & Mouton, 2018). The degree to which data analysis takes into account the social and cultural context in which it is obtained determines the qualitative research's credibility (Creswell & Creswell, 2018:19). By spending enough time building trust and repeating the processes essential to data gathering, the researcher ensured the study's trustworthiness. Furthermore, sufficient documentation and preliminary visits to the respondent's institution were used to guarantee the study's legitimacy.

### 3.14.3 Transferability

"Transferability in qualitative research is the extent to which the outcomes of a research can apply or transfered beyond the confines of the project," (Gray, 2014). The term "transferability" refers to the ability to apply the findings of a study to similar situations or people. The readers of this study will determine whether the findings are transferable. The study will encourage readers to make connections between the research's findings and their own experiences.

### 3.14.4 Dependability

The study's dependability is another factor to consider when assessing the study's credibility. Dependability is important since it confirms that a research study's findings are reliable and consistent (Miller, 2015). The researcher verified his conclusions to make sure they lined up with the raw data he had gathered. It was intended to verify that the outcomes, interpretations, and conclusions reached by other researchers who looked at the data were consistent. The researcher used an outside researcher to carry out an audit of the information to guarantee the validity of the research study..

### 3.14.5 Confirmability

The degree to which the findings may be confirmed or corroborated by others is referred to as confirmability in qualitative research (Gray, 2018). To strengthen the study's confirmability, the researcher documented the method for examining and rechecking data throughout the investigation. In addition, the researcher carried out a data audit, in which the researcher assessed data collection and processing processes and made judgements on the potential of bias or distortion.

## 3.15 Ethical Considerations

This study was carried out following and in line with the ethical requirements laid down by Bindura University of Science and Education. The researcher ensured that respondents were not harmed, were not deceived and that they were fully aware of what they were taking part in. The data gathered from this

study was held in confidence and will be used for the purposes for which it will be gathered only. Respondents were requested to sign a consent form which shows that they are free and not forced to take part into this study and that they are free to withdraw anytime they wish to. The confidentiality of respondents was ensured and maintained, and the researcher did not request names and personal details of the respondents. Finally, all the findings from the research were reported honestly and the researcher did not project his own feelings onto the study.

## 3.16 Summary of the Chapter

The methodology chapter addressed the philosophy, research paradigm and research method that the researcher will use to address the research problem. The chapter noted that the epistemological of this research will be interpretivism approach which favours a qualitative research method. The research objectives set in chapter one was achieved through qualitative research and through an interviews and observations as research instruments. 30 Respondents who were either procurement officers, buyers, storeman or disposal committee members were conducted for interviews. The chapter also explained the data analysis issues and trustworthy which confirms the dependability, credibility, confirmability, and transferability of the study. The following chapter will present the actual data analysis and interpretation.

#### CHAPTER IV

### DATA PRESENTATION AND ANALYSIS

### 4.0. Introduction

The research methodology was discussed in the previous chapter and the researcher fully stated the research paradigm, methodology, sample procedure, data collection, and data analysis methodologies used in this study. This chapter of the study focuses on analysing and interpreting the findings of the research. In this chapter, the researcher does a question-by-question analysis to fully explain and understand all of the responses to each question as stated in the study's interview guide. The material gathered from the interviews will be analysed using themes and sub-themes.

## 4.1. Qualitative Data Analysis

To analyse the data the TBL theory was used as foundation of measuring sustainable public procurement effect on value for money. This has three fronts, which are people, planet and profits as indicated in Chapter 2. The TBL was employed to assist sustainability measuring in view of the impact of an organisation's activities including both its profitability and shareholder values and its social, human and environmental capital. These themes were unpacked to reveal sustainability issues in realising value for money in Tertiary education institutions in Matabeleland in Zimbabwe.

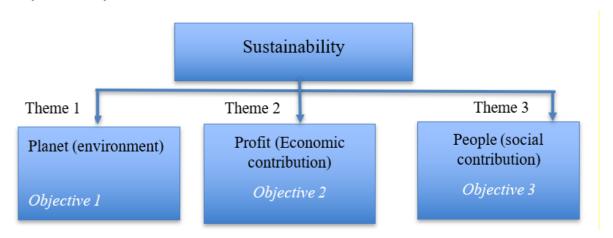


Figure 4.1. Themes derived from objectives and guided by the TBL theory

## 4.2. Demographics of the Respondents

Thirty interviews with procurement officers and storeman were performed at six institutions of higher learning in Matabeleland to be specific at NUST (3), LSU (3), Bulawayo Polytechnic (3), Hillside

Teachers College (3) ,United College of Education (UCE) (0) and Joshua Mqabuko Nkomo Polytechnic (3). The majority of the respondents about 5 out of 15 of the respondents were between the ages 20-29 followed by 4 out of 15 of the respondents who are respondents between the ages 30-39, followed by 3 out of 15 of the respondents who are below the age of 20, 2 out of 15 of the respondents were between 40-49, and only 1 respondent was 50 years and above. Important to point out is the majority of the respondents both procurement officers, administrators and storeman were males constituting about 18 of the respondents while females accounted for 12 respondents.

Most of the respondents cited the major misconception about procurement and supply chain management, it is mistakenly assumed that everyone can be a buyer, however, not everyone is capable of reducing purchasing costs in the supply chain and not everyone is aware of the concept of value for money and sustainable procurement of goods and services.

Procurement used to be done by the personnel with accounting, human resources or marketing qualifications. Out of the 15 respondents 8 possesses purchasing qualifications and 7 did not have any purchasing qualification. This is, furthermore, supported by the research done by PRAZ 2018 that procurement mostly in the public institutions was done by unprofessional personnel and the personnel that is not trained and was responsible for all the misfits in terms of the procurement of materials that have a high carbon footprint and lacks value for money that would have been spent by the public institutions. Before 2018, procurement was just taken as a clerical department that has no value like other department like accounting and Marketing.

## 4.3. Planet (Environment)- theme 1.

The biggest sustainable public procurement issue in realising value for money lies in the procurement procedure and methods used by the institutions. The methods are very unsustainable as seen in the following responses under this theme category. The perceived change in procurement methods brought by the Procurement regulatory authority of Zimbabwe result in variations in the way suppliers are evaluated and win tenders and this is considered one of the most important themes of this study. It can be seen that factors such as lack of support from senior management team, lack of roadmap or strategy,lack of management commitment, lack of knowledge or skills, poor communication, weak processes, Implementation costs are too high, Complex documentation processes and procedures, Loss of competitive edge, Focus on reducing cost at the expense of environment, Reluctance to change from traditional practices, Shortage of qualified personnel and Lack of knowledge in the industry. This suggests that they have been rated high by most of the respondents. More so, challenges like Lack of support from other staff and workers, other procurement targets, Contractors" abilities, accounting methods limit green reporting, Pressure for lower prices environmental and Conflict with assembly"s

objective record high mean values. This means that they have been rated low by the respondents. When introducing environmental issues into construction procurement, public sector organizations, such as the colleges and universities are often limited by new procurement regulations and national procurement laws. The procurement law requires entities to have a transparent and non-discriminatory procurement process. These regulations do not allow procurement entities to introduce irrelevant pre-qualifications to contracts. Often, procurement entities are concerned that environmental sustainability would be considered an irrelevant pre-qualification. However, with careful wording and interpretation of the law, procurement entities can show that environmental sustainability is relevant to the contract. So that value for money spent by institutions is realised through considering the impact of the materials procured to the environment.

The first respondent was therefore asked what he understood about sustainable procurement and value for money

# What do understand by the term sustainable procurement and how do you link it with value for money at your organisation?

Sustainable procurement is the procurement that takes into consideration the environment, Profit and society and if these are well followed they ensure value for money is realised .Our organisation is very much serious about practicing sustainable procurement through choosing the suppliers that prioritise green production, produce recyclable, packaging material and finally our disposal method is very economic ,we do reverse logistics ,that is returning unused material to the supplier for money value. However, it is difficult to practice on the ground due to circumstances beyond our control[Respondent 1]

From the responses given by respondent 1 above, the researcher found out that that, the procurement professionals really understood the concept of sustainable public procurement and how it links with value for money. From the responses it is clear that the top management has no support and actually has resistance towards full implementation of sustainable procurement practices.

# .....What sustainable procurement practices are there at your organisation that have impact on value for money

"at this institutions when the procurement planning is done, there is so much consideration of sustainable procurement practices such as getting materials and services from organisations who have an ISO certification for quality. Furthermore, we consider recyclability and whole of life costing of goods that we want to buy and finally and finally checking whether the goods are worth the money spent through the procurement committee that consist of technical department representatives. [Respondent 2]

Dodger(2003) supported what respondent 1 said about the elements of products that makes them sustainable and worth the money spent by clearly and unequivocally citing that the recyclable products have a great impact on the organisational financial standing.

"Do you incorporate environmental aspect and value for money in your daily procurement?" the procurement that we do my friend has little to do with the environment and normally we don't even consider the value for money, this is probably due to the cost of the environmentally produced goods from the suppliers. [Respondent, 1].

According to respondent number 1, it is clear that environmental aspect is of little significance Management support of environmentally and sustainably produced goods is lacking. Notes that another respondent in a follow-up question revealed that suppler evaluation basing on the ability to supply and having all the documentation qualifies the suppliers not anything to do with Value for money and environment.

"...The only sustainable procurement practices that are in place at this institutions are ensuring that there is transparency and competition in the way the adverts are flighted and supplier selection that includes all the departments that would have sent their request for purchase to the procurement, they are the ones who choose what they want from the suppliers and environmental issues are something that we don't even dream of " [Respondent, 2].

### Respondent 3 also reiterated that;

"I would say, environment is key and significant to the procurement process but considering the urgency of most procurements that we normally do here for example lets say there is a burst sewer pipe that need to be fixed, do you talk of buying environmentally friendly produced pipes when students are at risk of cholera and typhoid, you will get fired my friend "[Respondent 3].

These statements converge with what is revealed by PRAZ (2018) that.

"In the event of a life threating occurrence such as provision of water and sewage pipe repairs for students, urgency has to be considered and even buying from one supplier without even following procurement due processes.so you see that environmental concept and value for money concept are left out [Respondent, 4].

It was also noted that price is a major influencing factor, 12 out of 15 of the respondents agreed that most of the procurement are only based on the lowest price and not the whole life product costing. This means that the university buys poor products that would need to be replaced within a short space of time and this means value for money is not even a priority.

other respondent highlighted that;

"...most of the bad environmental practices that affect sustainability and value for money here at the university is due to bad disposal of waste, the products that are bought here many of them cannot be recycled and even destroyed by the institution itself "[Respondent, 6].

Sustainable procurement and value for money is also heavily affected by destruction of trees surrounding the college. From the responses given by respondent 6, the college does not have good disposal methods. There is so much waste that is left without due care by the college without considering good disposal methods as recommended by the environmental management agency. This was emphasized by another respondent who said that;

"those that destroy habitats don't get reported, if you are found cutting down a tree and get reported you just pay a cut, \$2 and they let you go, my friend, because of lack of serious punishments, things are getting worse here in Gwanda where in the absence of electricity the college authorities give a green light to the grounds personnel to cut down trees to provide firewood for students meals preparation, do you think this is sustainable" We just need to get solar powered stoves and we would get our value for money because that will be used for a considerable time period and the power is smart [Respondent, 7].

## How does sustainable procurement practices affect value for money in tertiary education institutions?

....to begin with my brother Training should be done to those who does procurement for the college The problem with those who just practice procurement, they lack ethical conduct, they think of their pockets and opportunity to defraud the college [Respondent 1]

From what respondent 1 said, corruption is rampant in the public procurement which in turn derail the strategic effort to practice sustainable procurement that brings value for the money spent by the university. This response is in line with what the state procurement board recommended in 2018 that training and strict procurement supervision greatly influence the value for money procurement in all public institutions in Zimbabwe.

......Further to the responses from respondent 1, respondent 4 supported

If public institutions are to buy only recyclable materials or products that would go a long mile in reducing the idle equipment and increase in scrap. For instance our procurement officers here bought Chinese cars last year (2018) and now we are in 2022 the cars are all dead and buried. [Respondent 4]

.....Whole of life cycle costing is another factor that is influencing the attainment of value for money

Procurement officers are failing to consider the whole of life cycle when buying capital equipment for

instance there are some machines for brick molding that were bought here and they were used only once and thereafter are neglected, so it was better for them to hire cause there is no longer the value for money that you are talking about. [Respondent 9]

The researcher found out that the procurement officers and the management mostly recommends buying rather than hiring so that in turn they get kickbacks .When the project is completed there are a lot of machinery that is left to lie idle . Cronje(2002) revealed that in any case where capital equipment is sort, whole of life costing should be taken into consideration that is ,when the equipment is not to be used continuously it's prudent to hire than to purchase. This will save the organisation financial resources that would be redirected to other fruitful projects.

.....Competition my friend is a factor that if not considered well would destroy the financial muscle of the university, there are a few suppliers that supplies the university but there are so many players out there who have the capacity to supply the university, those few suppliers I believe they have something in common with our buyers here [Respondent 13].

Beardshaw(2003) states that competition is health and should play a significant role in making sure there are so many suppliers for public organisations. Having a database of different suppliers allows competition and hence quality of supplies automatically is guaranteed. If quality is guaranteed it implies that value for money is achieved.

### 4.4. Profit (Economic) – theme 2

The economic dimension of the TBL focus much on the value for money creation by the organisation and goes beyond its financial performance and financial concept as sales growth ,cash flow and shareholder value .it includes the economic and operational business impact on the society Chabowsky et al (2011) .Further it focuses on the organisational performance through the efficient management of its strategic capabilities such as core competencies Prahalad and Hamel (1999) shareholder value creation and marketing orientation Consumer become more concerned with economic stability since the economic downturn in 2008 jeopardises financial stability and consequently employment. Organizations mostly depend on financial performance to gauge performance. Profits tend to focus on aspects of a business that generate revenue, such as business decisions made, strategic planning, or performance and cost reduction methods.

### What do you think are the factors that inhibit the attainment of Value for money at this institution?

"...Lack of serious audit is the reason why value for money procurement is not being realised at this institution, there is no monitoring mechanism as to how procurement processes are done. Procurement is being done in a haphazard manner" [Respondent, 9].

The above-mentioned statement brings out the main reasons why value for money is not being realised

in public procurement, another respondent (3) also opened up that.

"Auditing is lacking, most of the procurement officers at this institution require a full lifestyle audit, the way they conduct their procurement leaves a lot to be desired." [Respondent 3]

Dobbler(2003) brings out that ,the procurement officers must not accept any financial benefit from the supplier. And if they are to receive it must be declared to the institution. From the response above, it is clear that procurement activities in most of the public higher and tertiary education institutions are not being audited in a manner that uncovers corrupt activities.

### Respondent 7 added that;

"...We used to have a buyer here who influenced the results of a tender and after the construction company won the tender and completed the construction project the buyer who influenced the bidding process was seen driving the vehicle that was being used by the company in the project" [Respondent, 7].

This simply means that even when the project is evaluated for quality and value for money (VfM) the same buyer has got the capacity to influence the process and overlook the mistakes by the construction company that might need remedial works.

### Respondent 10 also declared that;

".... Some companies here my friend they bid using more than two companies, they own 3 companies and they all respond to the same advert and it happens that all of them be given lots to supply, then thats when you realise that the quality of their service does not commensurate with the value of the money spent by the institution" [Respondent, 10].

Collusion of bidders to win a tender is one of the elements that defeats the whole idea of realising value for money in public institutions procurement. This however supported by Lysons (2009) that collusion between suppliers can kill value for money concept in public institutions. According to respondent 1;

"We are getting a raw deal from our suppliers here, they collude and charge exorbitant prices that the university cannot afford but the laws and regulations of the procurement processes must be followed and one of the companies have to win the bid" [Respondent] Respondent 11 also alluded that.

"Ever since I started work here, I have been noticing some funny price variations amongst our suppliers and if you are to use common sense you would see that these guys are the same(one) who are competing, at the end of the procurement process you will find that the quality of their service is not satisfactory" Value for money is lost through collusion. [Respondent, 11].

Respondent 1 further mentioned that.

..there is little that the management can do to address this corrupt practices by the suppliers. Especially when they fail to provide value for money" at the end of the day the public institutions lose a lot of financial resources, profitability, and growth prospects [Respondent, 1].

The researcher found out that poor sustainable procurement practices bring about financial loss to the organisations. Respondent 15 brought out that;

"There are retrogressive regulations that are brought by the government for instance supporting small to medium enterprises that acts as the middlemen. They buy goods from say Halstead and Electrosales and resale them at a considerably higher price than those of Halsted" [Respondent, 15].

The researcher found out that middlemen are milking the public institution of their hard-earned cash flows through this practice of supporting the locals businesses.

"The university is losing a great deal of money through these unsustainable procurement practices that are supported by the government and by so doing value for money is still in a pipe dream as far as efficiency and effectiveness of the public procurement is concerned" [Respondent, 13].

However, respondent 8 complained that procurement officers are always to blame when the organisation spend more money on services and goods and gave a detail that;

"...value for money can only be realised if corruption is addressed for instance my brother how can a state procurement board buy a snow grader for use in Zimbabwean roads.it shows unsustainable procurement and a poor understanding of the concept of value for money (VfM)" if state procurement is unsustainable in procurement, how can a college be sustainable [respondent 14]

This is also supported in literature review:

public procurement must be done by professionally trained personnel and all the procurement officers must be given a licence to practice such that if ever one is involved in corrupt activities the licence is withdrawn. In agreement to PRAZ (2018) that reveals that training of procurement officer to incorporate sustainable procurement practices that brings value for money (VfM). The researcher established that sustainable public procurement greatly impacts value for money. respondent 11 pointed the following:

"...as buyers we earn a living through procuring for the college because the suppliers give us 10% of every order generated. If you want to be rich, my friend be a buyer for the government institutions because there are little controls." [Respondent, 11].

The response above shows that in most public institutions of higher learning ,procurement is seen as just a clerical job.It is not yet regarded as a profession that requires trained personnel. The above statement is

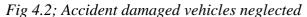
also in line with what respondent 12 posited

"I did accounting but I am in the procurement field, there is nothing so hard, just look for quotations and compare them then you choose the cheapest, is that difficult." [Respondent, 12].

It is clear from the above statements that procurement personnel are not well trained to do procurement that brings value for money.

"...zvorwadza mukoma, maBuyers eGovernment havambozivi kukosha kwekuvaka nyika .Ukavavunza kuti sei matenga maLaptops kunevanhu vasina maOffice ipo pane vana First pack vakachipa.Vanokuvudza kuti mari yacho irikutenga ndeyako here.Government hayiBroki(Its painful my brother if you ask our buyers why they buy from those who does not have offices neither a shop, they will tell you that the government has money and will never go broke.)" [Respondent 6].

"Government institutions are failing to dispose of equipment that is no longer useful for any productive activity. Look at the cars that are parked here, equipment that that has fallen idle and obsolete, they cannot even auction to realise residual value. Since these guys are not after profit, they just buy and never worried about disposing idle equipment" [Respondent, 10].





.....These are just neglected and they keep on losing value, the management should have organised an auction and sell these cars and realise some money than to leave them until they are not able to get even a single cent from them.[Respondednt4]

The researcher observed a lot of accident damaged cars and other cars seemed to have parked for a long time and some respondents were citing theft of some parts. This shows that the assumption that in public institutions value for money is still a raw subject and sustainable procurement is not well understood.

Fig 4.3: Scrap metal lying idle



Junk yard at one of the colleges in Matabeleland

"My friend even if the university sells this idle equipment for instance these grounded cars, and this scrap metal ,the top management will just connive and buy everything at low price. Lack of knowledge of value for money in government is what is killing profitability, sustainability, and growth." [Respondent, 3].

"...the punitive measure for those caught on the wrong side of the law are not harsh that is why in all these universities and colleges don't care about sustainable procurement that brings value for money (VfM)" [Respondent 6]

## 4.5. People (Social) – theme 3

One area that cannot be ignored when exploring sustainability issues is a social aspect. Venter and Botha (2019) pointed out that there will be no sustainability without taking into account the social and cultural aspects. In support of that, Rebe (2019) noted that the most ignored element in the TBL model as proxied by planet, people, and profit is people. The researcher in this study wanted to establish the impact of sustainable procurement practices on value for money(VfM). The following were the findings:

"Being a buyer for such a big university is synonymous with being a slave. Here you are not allowed to go on leave. [Respondent, 7].

The above statement shows that work life balance for buyers in public institutions is not health they are overwhelmed by work and there are a few professionally trained to withstand pressure associated with the job. The researcher observed that motivation withing the procurement staff is poor since the management fails to compensate for extra work hours.

The other worrying issue is what other respondents cited regarding adequate compensation for the work the procurement officers do. Respondent 9 highlighted that;

"...having a two in one college is not a joke and being only three in the procurement department is an insurmountable task, the buyers here work up to 10 o'clock evening due to pressure of trying to procure for the teachers college and the technical side " [Respondent, 9].

Through observation the researcher also managed to establish another form of corruption and abuse of office by the top management.

In agreement to what was observed by the researcher, respondent 15 pointed out that:

"...it is disheartening and sad that the college has a cattle fattening project and after selling, the top management reward themselves handsomely whilst those who were involved in physical and menial jobs get peanuts" [Respondent, 15].

The researcher found out that sustainability of the institution's projects suffers stillbirths because of greediness of the management.

What are your recommendations to the top management on how to achieve Value for Money at this institution?

"There is nothing that you can ever do in terms of projects that is sustainable at this institution and the value for money is a subject that top management must be trained on first because everyone thinks of getting a chance to loot public funds," [Respondent, 4].

Fig 4.4 Cattle fattening feeding lots



Cattle fattening project at JM Nkomo Polytechnic

The researcher observed the grievances that the workers on the ground were having concerning how demanding feeding of cattle task is. It is therefore clear that proceeds from the sale of university cattle is diverted to other use rather than apportion it in a manner that promotes continuity of the project. When the project become self-propelled, then value for money spent is realised.

....The college must remunerate the personnel in a manner that motivates the employees. Look my brother this is not a simple task but after the college sells the cows, the workers are not even considered, and this is not fair. [Respondent 1]

In support of respondent 1, respondent 14 further concluded that the management should consider the whole of life of procured products, dispose all unused wreckages, return especially the packaging material to the supplier for them to re-package in a bid to reduce environmental pollution and finally competition must be prioritized when sourcing goods through tenders. Competition will definitely bring quality products that are worth the money spent. [Respondent 14]

The college should just do an overhaul of the procurement department otherwise the current incumbents are so corrupt that they cannot repent over and above that those without procurement qualifications should be removed. [Respondent 10]

In support of the view by the procurement regulatory authority of Zimbabwe respondent 10 cited that the institutions should just remove the non-procurement certified personnel form procurement department.

Graphical presentation of the respondents on sustainable procurement practice that are in place at the college

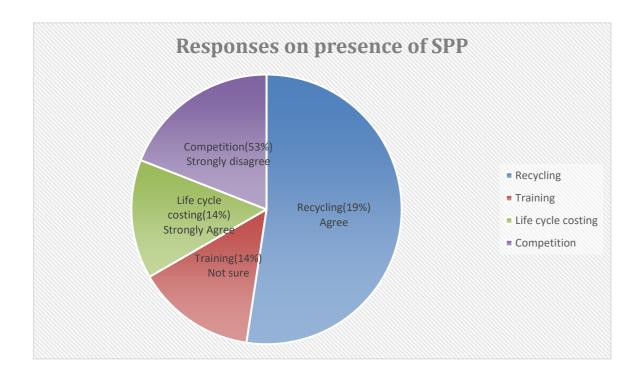


Fig 4: Percentage responses on the presence of sustainable procurement practices at higher and tertiary education in Zimbabwe.

From the findings presented on the fig 4 above ,53% of the respondents disagreed that the institutions were allowing competition to determine the quality of the products purchased from suppliers, however 19% showed that, the institutions were practicing reverse logistics and they were considering the whole of life cycle cost of the procured products. This is in line with the study done by Njeru(2015) who stated that sustainable procurement in education sector leaves a lot to be desired. Only 19% of the respondents agreed that the sustainable procurement practices are being done which shows a weakness of the understanding of sustainability is there in the education institutions. The researcher found out that it was only the top management that were in agreement that their institutions were practicing sustainable procurement. This is however, supported by Mboweni(2015) who revealed that corruption is rife in higher and tertiary education sector ,the only level that is driving corruption are the top management who decide who wins the tenders.only 14% were not sure of the concept of sustainable procurement and these were non procurement professional personnel.

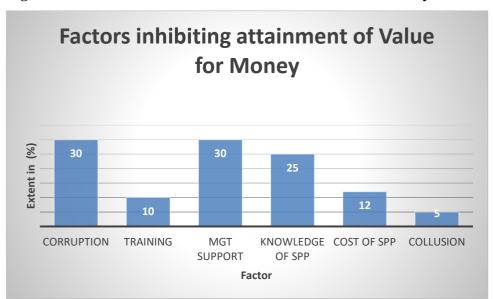


Fig 4.2 Factors that inhibit the attainment of Value for Money

The researcher found out that all these factors do affect the attainment of value for money, chief among them is corruption with 30% confirming its presence followed by the lack of management support with another 30% and knowledge about the sustainable procurement with 25%. In line with what PRAZ (2018) revealed that the most important aspect that drives the higher and tertiary institutions to be uneconomic is corruption and lack of knowledge of sustainable procurement practices. The other factors such as collusion of internal staff and suppliers happen because of lack of accountability by the top management. Dobbler (2003) suggested that training and development of the procurement staff and the management helps the organisation to take sustainable procurement into practice which enhances value for money. Furthermore, training of staff only got 10% of the respondents who were confirming the extent to which it affects value for money. The least factor was collusion with 5% which shows that it was not a big factor that causes the institutions not to achieve value for money.

### 4.5. Summary of the chapter

This chapter presented findings from the interviews carried out in various colleges and universities in Matabeleland area pertaining to the impact of sustainability procurement practices on value for money. This was presented in three thematic areas as guided by the TBL model on which the study is hinged on. The major findings are that some colleges and universities do not consider value for money in their daily procurement processes. The researcher also noted that in some colleges strict auditing and adherence to policies by the management helps to improve procurement sustainability and value for money. However, there are some social constraints associated with potential sustainable projects that should help in realisation of value for money(VfM) such as underpaying workers, allowing other officers to work during

the night and connivance of suppliers with the procurement officers to inflate the prices thereby reaping off the finances of the public institutions without taking due care on value for oney. The next chapter offers discussion, recommendations, areas of further study, limitation, and conclusion.

#### CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### **5.1 INTRODUCTION**

The presentation, analysis, and discussion of study findings were covered in the preceding chapter. The research findings, conclusions, and recommendations are summarized in this chapter.

### 5.2 Summary of research findings

The study discovered that Value for money (VFM) in public institutions is still unclear and dependent on the leadership of the particular public organization. In most higher institutions, the practice of sustainability is being hampered to a greater extent by the invisible hand of self-interest that Adam Smith proposed in his book, Wealth of Nations. In Zimbabwe, a greater proportion of public institutions are run by politicians, and they are the ones who ultimately decide where to purchase the necessary products and services.

The primary goal of the study was to ascertain how sustainable purchasing practices affected the effectiveness of public institutions in Zimbabwe. The findings demonstrated that some elements of sustainable procurement have an impact on value for money for the institutions under consideration. One significant sustainable purchasing factor that improves the financial performance and brand image of public organizations is the consideration of the environment. According to the survey, sustainable procurement practices used by public institution procurement officers are the first step in maintaining a clean and safe environment. The results also showed that it is difficult for public institutions to practice sustainable procurement since the government has no money to finance the procurement of the goods that are sustainably produced due to their slow payment system. Product lifecycle tracking, which is also another aspect of sustainable procurement proved to be important in shaping the profitability and realization of value for money within public institutions. Sustainable procurement does not only involve buying goods, it involves procurement of services in a sustainable and economic manner thus human services or labour is also considered under sustainable procurement. CIPS (2010) stated in their journal that labour force should be provided with a healthier environment that will ensure a good relationship with employees so as to finally realise value for money spent on the human resources.

The research findings showed that sustainable procurement practice is not only one factor that builds

cost-effectiveness of the organization. Given that organizations occasionally did not engage in sustainable procurement, it is challenging for the organization to claim openly that doing so solely resulted in the development of a healthier organization. The findings also demonstrate that there was disagreement among the personnel regarding the existence of sustainable procurement practices. Sustainable procurement was not encouraged by management. It was also challenging to determine how sustainable procurement affected value for money, as some employees believed that there were few sustainable products on the market, while others had misconceptions regarding sustainable procurement and the cost of sustainable products. However, the study came to the conclusion that some components of sustainable procurement, such as Value for money is realized with the use of corporate social responsibility and life cycle tracking.

### 5.3 Conclusion

The study makes the following conclusion

The study has shown that the term 'value for money' seems abstract and subjective, and not every Public Procurement Official can be presumed to be implementing it given that there is a lack of understanding of what it means. A clearer definition of Value for Money is therefore required to facilitate its effective implementation in public institutions procurement.

Value for money is therefore not a decision about products or services based on the lowest bid price, but rather a decision based on the project's or service's total life costs. Given the finite budgetary resources available to the government, achieving VFM in procurement is essential to making the best possible use of those resources. The main force behind procurement is VFM. This study's main objective was to assess strategies for ensuring value for money in public procurement using a few particular Zimbabwean polytechnics, universities, and colleges as case studies. According to the study's conclusions, a strong public procurement system is essential for enhancing the supply of decentralized commodities, projects, and services. The study's findings provide recommendations to be proposed. The following recommendations are drawn from the study:

- Management supports for VFM programmes at all levels of administration should be encouraged.
- Procurement regulatory authorities (Public Procurement Authority) in collaboration with public entities Polytechnics, Universities and colleges must ensure compliance through rigorous monitoring and evaluation of the procurement policy to ensure VFM.
- Stakeholders of public entities should also invest in training of their staff on achieving value for money

in their procurement activities

#### 5.4 Recommendations

The study makes the following recommendations based on the objectives of the study:

## **Recommendations in connection to objective 1**

Employees should be trained on sustainable procurement concept and regular refresher courses should be put in place to enhance the skills and knowledge for effective sustainable procurement practices. Procurement Regulatory Authority of Zimbabwe should continue engaging public institutions of higher learning in order to support them each time they make large procurement that affect the financial stability of the state. In the findings it was found that some of the employees at tertiary education institutions did not have technical knowledge about sustainability and its impacts to the organizational performance. Tough evaluation measure must be put in place in order to reduce the emergency of collusion between the buyer and the supplier. Furthermore, the procurement officers must be issued with professional certificate of practice and when they go ultra -vias for instance being involved in corrupt practices, the certificate is withdrawn.

### Recommendation in connection with objective 2

Value for Money is hard to attain in the public institutions of higher learning because there are no punitive measures for those who are found wanting in connection with collusion and corruption. Zimbabwe Anticorruption Commission should be allowed to investigate and bring the culprits to book without fear or fear of being terrorized by the politically connected people who might have influence in the tenders. Tenders must be advertised fully in the national papers of wider circulation and the procurement officer must only be in the committee to offer secretarial services, they must not make any decision on who wins the tender. The findings reveal that upon disposal of idle equipment, the top management collude and buy the equipment at a cheaper price. When the auction is done it must exclude all the employees of the institution, an independent auctioneer must be engaged to carry out the proceedings.

## General recommendations based on objective 3

The research reveals that there are some institutions that allow non procurement professionals to do procurement such as human resources, and accounting personnel. Procurement should only be done by the professionally trained personnel who have practicing certificates who are aware of the ethics and integrity that is required by the professional bodies. Reverse logistics must be practiced where for instance when the empty containers of chemicals or idle equipment must be returned to the manufacturer at a price so that the institutions in question realise dollar value on those materials. Manufacturers are also supposed to follow up on their packaging material and recycle them to reduce environmental pollution when wrongly discarded by the user.

## **Appendix A: Questionnaire**

The researcher is a Master of Commerce in Purchasing and Supply Chain Management student at Bindura University of Science Education. The impact of sustainable procurement methods on value for money in tertiary education institutions in Zimbabwe is the topic of a research project that the researcher is conducting as part of the study. The researcher would like to thank you in advance for taking the time to complete this questionnaire in order to gather pertinent data for the project. All responses are kept private and confidential and are never shared with anybody.

Section A

Do you agree that the following sustainable procurement practices are in use at your institution?

| <b>Procurement Practice</b>               | Agree | Disagree | Strongly | Strongly | Not sure |
|---|-------|----------|----------|----------|----------|
|   |       |          | Agree    | disagree |          |
| Buying recyclable products                |       |          |          |          |          |
| Training of supply chain players          |       |          |          |          |          |
| Training of procurement personnel         |       |          |          |          |          |
| Allowing amongst suppliers                |       |          |          |          |          |
| Consideration of whole of life cycle cost |       |          |          |          |          |
| Reverse logistics                         |       |          |          |          |          |

## Question 2

To what extent are the following factors inhibit the attainment of value for money(VfM) in your organisation

| Factor  | Greater | Lesser | Not  |
|---|---------|--------|------|
|   | extent  | extent | sure |
| Lack of management support                          |         |        |      |
| Lack of sustainable procurement and value for money |         |        |      |
| knowledge   |         |        |      |
| Corruption  |         |        |      |
| Unavailability of green products in the market      |         |        |      |
| Lack of training on why VfM is important            |         |        |      |

## **Section B**

| 1. | What do you understand by the term sustainable public procurement and value for money            |  |  |
|----|--|--|--|
|    |  |  |  |
|    |  |  |  |
| 2. | What are the sustainable public procurement practices that are in place at your                  |  |  |
|    | institution  |  |  |
|    |  |  |  |
|    |  |  |  |
|    |  |  |  |
|    |  |  |  |
|    |  |  |  |
|    |  |  |  |
| 3. | What do you think are the major factors that influence the attainment of Value for Money at your |  |  |
|    | institution  |  |  |
|    |  |  |  |
|    |  |  |  |
|    |  |  |  |
|    |  |  |  |
|    |  |  |  |
|    |  |  |  |
| 4. | What do you think are the recommendation to the top management on how to achieve value for       |  |  |
|    | money at your  |  |  |
|    | institution  |  |  |
|    |  |  |  |
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