THE IMPACT OF SUSTAINABLE PROCUREMENT ON THE ENVIRONMENT: A case study of Mukwano industries

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UGANDA CHRISTIAN UNIVERSITY
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DECLARATION

I, Nakimpi Aidah, hereby declare that this is my own original work and that it has never been submitted to any institution of higher learning for any academic award.

Signature: ..... Date: 14/09/2023

Nakimpi Aidah

J21B12/274

APPROVAL

This research work by Nakimpi Aidah J21B12/274 has been submitted for examination with my approval as the university supervisor.

Signature: ..... Date: 14/09/2023

Mrs. Jennifer Abiyar

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LIST OF ACRONYMS

ANOVA	Analysis Of Variance
BIER	Beverage Industry Environmental Roundtable
CIP	Clean In Place
CSR	Corporate Social Responsibility
CVI	Content Validity Index
FAO	Food and Agricultural Organization
GDP	Gross Domestic Product
IT	Information Technology
ICT	Information Communication Technology
JICA	Japan International Cooperation Agency
KCCA	Kampala City Council Authority
MTBF	Mean Time Between Failure
UBL	Uganda Breweries Limited
WUR	Water Use Ratio

ABSTRACT

This study investigated the impact of Sustainable Procurement on the Environment. The objectives of this study were to investigate the impact of product packaging on marine life, establish the impact of supplier relationship management on customer satisfaction and examine the impact of sustainable sourcing on the ecosystem.

The study was quantitative in nature with insights gathered through questionnaires distributed to the staff and other stakeholders at Mukwano Industries. The population of our study consisted of one hundred stakeholders and staff under the department of Procurement and Disposal having a sample size of 80 respondents determined using Slovin's formula (1960). The data collected was analyzed using Stata 2.0 and Excel which helped in the interpretation of the findings through use of graphs.

Findings revealed that all stakeholders at the company knew how important it was to preserve life in our water bodies by reducing on the amount of waste we dispose off in these water bodies especially due to the packaging materials. To this, stakeholders expressed the desire to help the company come up with better packaging materials that are a representation of responsible sourcing given the needs for future generations.

Secondly, the study also revealed how important it was for their existence to manage their suppliers with the aim of satisfying their customers. This was emphasized by finding that showed that customers preferred their concerns be put above those of the company. This is based on the fact that the employees are the number one customers to any organization and their satisfaction or dissatisfaction has the potential to spread outwardly.

Lastly, results reveal that sustainable sourcing had played a very important role in managing the ecosystem safe guarding or destroying nature having both an immediate and long-term effect. Collaborations and partnerships were some of the recommended strategies to safeguard the ecosystem since issues "eco-system" are larger than what a single company can do by itself.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter presents the background of the study, statement of the problem, the main objective, specific objectives, research questions, significance of the study and the conceptual framework.

1.1 Background to the study

Sustainability permeates all factors to do with the environment/planet, the economy/profit, and the people/social factors. The Investopedia defines Sustainability as the ability to maintain or support a process continuously over time, or simply, put sustainability seeks to prevent the depletion of natural or physical resources, so that they will remain available for the long term (Daniel Thomas, 2023). Similarly, James Meadowcroft of the Britannica does not defer greatly with the Investopedia when he defines Sustainability as the long-term viability of a community, set of social institutions, or societal practice (James, 2023).In a like manner, Procurement according to CIPs is the practice of buying of goods and services that enable an organization to operate its supply chains, in a profitable and ethical manner (CIPS, 2023). Therefore, Sustainable Procurement is the practice of supporting the sustainability goals of the organization and optimizes the environmental, social, and economic impacts over the life cycle of the product or service (CIPS, 2023). Similarly, ISO 20400 broadly defines Sustainable procurement as the process of making purchasing decisions that meet an organization's needs for goods and services in a way that benefits not only the organization but society as a whole, while minimizing its impact on the environment(ISO, 2017).

The environment on the other hand refers to the complex of physical, chemical, and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival (Britannica, 2023). Therefore, purchasing entities such as manufacturers aim to include the effects of products and services on human health and the environment in the procurement process because Sustainable Procurement encompasses more than just price and quality considerations(M.C. Zijp, 2018).

Insight into the effect of Sustainable Procurement is useful for the evaluation of Mukwano industry's Sustainable Procurement policy both local and organizational levels. Sustainable

Procurement means that functionality and price are not the only criteria considered when items are procured, but that the effect of the procurement in question on humans and the environment far away, as well as in the immediate vicinity, is also examined (M.C. Zijp, 2018). According to Dijkmeijer director of the Netherlands Dans Theater, this can therefore be divided into a number of themes such as Sustainable Product Packaging, this recognizes the industry's responsibility to conduct business in a way that protects and improves the state of the environment for future generations. Supplier Relationship Management which aims at establishing positive and constructive relationships predefined stokeholds (Dijkmeijer, 2023). Lastly Sustainable Sourcing takes into account the exhaustion of raw materials by promoting reuse and recycling and bio based procurement contributes to the transition to the use of renewable sources instead of finite raw materials.

1.2 Statement of the problem

According to Anthony F.C Wallace a Canadian-American anthropologist, the Industrial Revolution in comparison to human adoption of agriculture, marked a major turning point in history and has influence almost all aspects of daily life(Wallace, 2023). Just like the humans have advanced, so has technology advanced. However, Roma Dhanani in 2022 said that this progress came with unequal distribution of wealth, exploitation of raw materials on a global scale, and the creeping greenhouse gas emissions shown earlier (Dhanani, 2022). Hence the need for sustainable procurement. This movement has transformed the way we think.

Dhanani also added that the adoption of Sustainable Procurement, environmental concerns have become alarming to the average citizen, stimulating the fear that economic growth at the current rate could endanger the survival of humans and the planet (Dhanani, 2022). Likewise, global warming has become recognized on a wider scale and industrialist have started to consider environmentalism as a selling point (Dhrolia, 2023). An article published by the United Nations Economic Commission for Africa in 2023 reported that despite industries using environmentalism as a selling point, Uganda in 2016 had registered the lowest rate of economic growth as compared to the past 30 years. Consequently, income inequality rose, and job creation became lackluster (Christopher, 2023).
According to the United Nations report of 2015, nearly every country endorsed the Paris agreement aimed at limiting global warming to 1.5℃. However, Sustainability spans beyond global warming, it looks at the health of individuals, staff welfare and the aspect of profitability. If we do not deal with

Sustainability as a whole, it should be noted that humans have been 'unsustainable' since ancient time with product packaging being disposed off at will, never minding building of relationships and not mindful of how and where they source from. If this continues, marine life will be at risk of extinction, manufactures lose customers and the entire eco system destroyed.

1.3The main objective

To establish the impact of Sustainable Procurement on the Environment

1.4The specific objective

To investigate the impact of product packaging on marine life
To establish the impact of supplier relationship management on customer satisfaction
To examine the impact of sustainable sourcing on the ecosystem.

1.5Research Questions

What is the impact of product packaging on Marine life?
How does supplier relationship management customer satisfaction?
What is the impact of Sustainable sourcing on the ecosystem?

1.6Significance of the study

The green competition establishes limits to the consumption of resources, engaging both consumers and companies and redefining the relationship between firms and their suppliers in the supply chain. Therefore, this study will provide relevant information to Mukwano industries on the impact of policies about product packaging on the management of marine life, how social norms and supplier relationship management impact on customer satisfaction and the impact of sustainable sourcing legislations on ecosystems.

Sustainable Development Goals (SDGs) have significantly impacted on academic research. This study will allow proposing more transformative strategies to implement Sustainable Procurement and provide information and data for farther researchers in the field of sustainable procurement and environment management.

Sustainability should be handled holistically and if not, the dangers of inclusive development prioritizing economic issues, relegating social or ecological inclusivity to the background, or the relational aspects of inclusivity that guarantee the existence of laws, policies and global rules that

favor equal opportunities. For this reason, this study seeks to help policy makers analyze the impact sustainable procurement has on environmental management.

1.7 Conceptual Framework

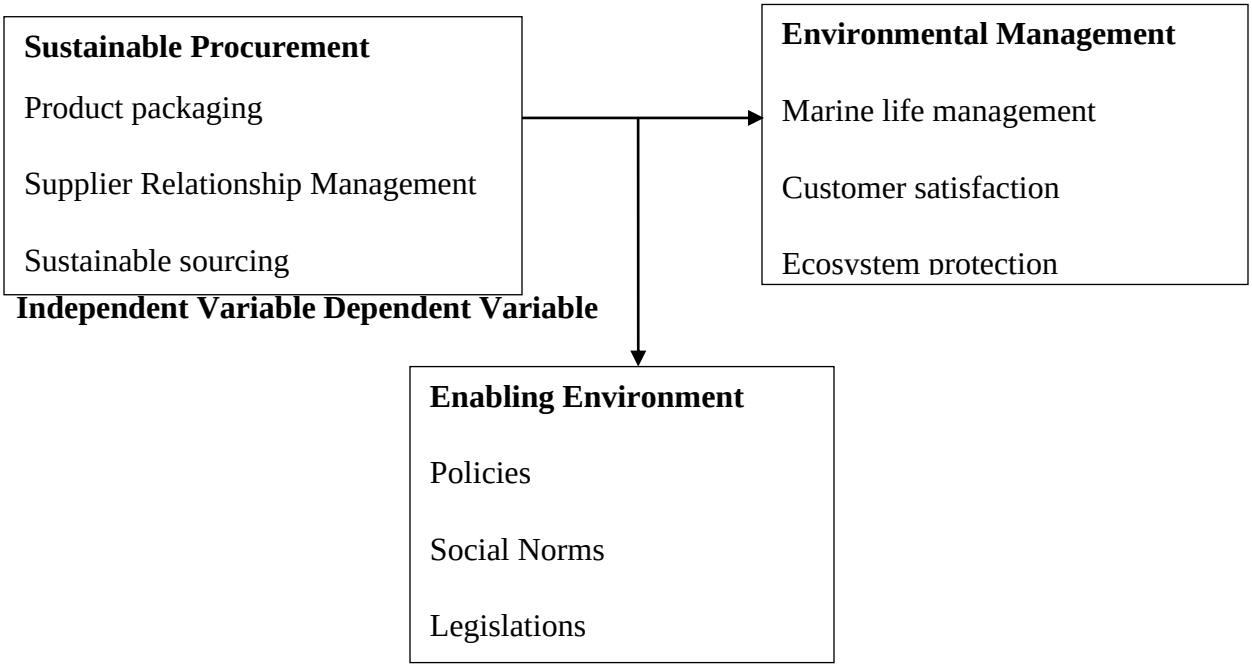

Figure 1. Conceptual framework (Tonny Ograh, 2021).

CHAPTER TWO

LITERATURE REVIEW

2.0Introduction

This chapter presents a review of literature for different authors on the subjects of the impact of product packaging on marine life, the impact of supplier relationship management on customer satisfaction and the impact of sustainable sourcing on the ecosystem.

2.1 Definition of Sustainability

Sustainability refers to the ability to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. It encompasses various environmental, social, and economic principles and practices aimed at maintaining ecological balance and ensuring the well-being of both current and future generations. Sustainability according James Meadowcroft 2023is understood as a form of intergenerational ethics in which the environmental and economic actions taken by present persons do not diminish the opportunities of future persons to enjoy similar levels of wealth, utility or welfare. Simply put, UCLA 2023 defines sustainability as the balance between the environment, equity, and economy. Lastly, CIPS says sustainability holistically considers the governance of an organization's environmental, social and economic viability to ensure organizations exist for the long term, and the needs of the present are met without compromising the needs of future generations.

2.1.1 Definition of Environmental management

ISO 14001:2015 intended for use by an organization seeking to manage its environmental responsibilities in a systematic manner that contributes to the environmental pillar of sustainability, specifies the requirements for an environmental management system that an organization can use to enhance its environmental performance. According to Tabitha Mishra, environmental management is the practice of organizing human activities aimed at protecting, land, flora and fauna, bodies of water, and the planet's atmosphere in order to limit their impact on the natural environment (Mishra, 2022). However, Jane Courtnell 2019, defines environmental management as the. This definition is nonetheless built on to include putting in place strategies to conserve energy, water and resources and to reduce negative impacts on the environment by industrial activities (Learn.org, 2023).

2.2 The impact of product packaging on marine life

Product packaging can have a significant impact on marine life, particularly when it is not properly managed or disposed of. The main issues arise from plastic packaging, which constitutes a significant portion of marine debris. According to Ana Gotter 2022, product packaging all comes down to how the product is presented, and it is closely tied with customer perception and can tell a story and set the stage for how you want to represent your entire organization. In addition, product packaging says a lot about your brand in a fraction of a second, with customers sometimes judging the value or quality of a product just at a glance. Similarly, Matthew Chalmers 2021 defines marine life encompasses all animal life that exists in saltwater, in the planet's seas and oceans though freshwater life, that inhabits rivers and lakes, is categorized differently. These, he adds, are classified by different factors, including temperature, light penetration, nutrients, and vegetation. There are three basic types of freshwater ecosystems: Lentic (slow moving water, including pools, ponds, and lakes), lotic (faster moving water, for example streams and rivers) and wetlands (areas where the soil is saturated or inundated for at least part of the time).

According to Manuela Piccardo, one of the authors of an online article on the Impacts of Plastic-Made Packaging on Marine Key Species, plastic production in Europe reached almost 58 million tonnes in 2019(Manuela Piccardo, 2021). In addition, packaging represents the largest end-use market accounting for approximately 40% of the total demand, the growth of which has been accelerated by a global shift from reusable to single-use containers. Examples resin types used according to Manuela include polystyrene and expanded-polystyrene are widely present as containers of fish products; polyethylene terephthalate (PET) is used in water and juices bottles, as well as for the production of shopping bags; polyethylene (PE) is used for milk bottles and food packaging films; polypropylene (PP) is applied for microwave containers, sweets and snack wrappers. According to Maria Helena Semedo the Food and Agricultural Organization Deputy Director-General, Soils are one of the main receptors of agricultural plastics and are known to contain larger quantities of micro plastics than oceans(Semedo, 2021).Semedo added that agricultural value chains each year use 12.5 million tonnes of plastic products while another 37.3 million are used in food packaging while crop production and livestock accounted for 10.2

million tonnes per year collectively, followed by fisheries and aquaculture with 2.1 million, and forestry with 0.2 million tonnes.

Considering the huge production of resin types of products and their short lifetime (from production to disposal is about 0.5 years, a proper waste management strategy is clearly necessary. According to Plastics Europe (2020), since 2006, the quantity of plastic post-consumer packaging waste sent to recycling sites has increased by 92%. In Uganda, according to Steve Muyanja (2019), the Kampala Industrial and Business Park (KIBP) features as the premier and the best planned industrial complex in Uganda's history that impacts the inner Murchison Bay of Lake Victoria (Muyanja, 2019). However, the number of operational establishments in the park has raised environmental concerns such as air, land and water pollution. Muyanja also noted that industrial packaging are producing volumetric wastes, and rendering the surrounding areas unacceptable for residential, shopping and recreational purposes as previously proposed in the construction design. In Europe, packaging and packaging waste account for 50% as the recycling target for plastic packaging by 2025 and 55% by 2030, strengthening interest and commitment to the correct management of plastic materials. Meanwhile, many mistakes have been made and the evidence of such mistakes is clearly visible. In fact, food wrappers represent a consistent slice of marine litter. In 2019, the International Coastal Clean-up (ICC) world campaign collected a total of 32,485,488 litter items, of which 4,771,602 were food containers, thus, representing the most abundant litter item. Plastic litter is widespread along the coasts of European Countries and in Italy, where waste is found at levels of 6.2 items per linear meter of beach and plastic accounts for 80% of the total waste recorded.

It is also noted, as see in the Food and Agricultural Organization journal of 2019, that legal and illegal dumps in coastal areas could represent a potential risk to the preservation of marine ecosystems. In these areas such as the Namanve wetland and showers of Lake Victoria the waste loss represents a significant and direct impact on marine ecosystems. Large plastic packaging abandoned in the marine environment such as Nakivubo channel could affect wildlife via direct mechanical damage due to ingestion or trapping, and is also consistent source of micro plastics (MPs)(Asiimwe, 2020). Asiimwe, editor of infoNile an online paper says that the community of Ggaba and the nearby Port Bell communities are the two major landing sites on the shores of Murchison Bay, which provides much of the drinking water for Kampala city but the same

populations rely on the same water bodies to throwaway plastics threatening the health of the lake. However, according to Asiimwe, between the two landing sites visited, Ggaba with a population of 25,000 residents is the bigger culprit, contributing more plastics especially polythene bags to the lake and its shores compared to Port Bell (Asiimwe, 2020). This write-up adds that due to the dense population, there are more recreation and business activities at this landing site, such as boat riding, sightseeing and fish eating.

An interview with local traders and residents highlighted that these know that it's harmful to throw plastics in the lake for their health and that of the ecosystem, but find it difficult to stop. Meso and micro-plastics represented the principal fractions of plastic litter that are found worldwide in abiotic matrices and had transferred efficiently throughout the trophic web. This led to effects on detritivores and filter feeder species, while also affecting marine foodstuffs and humans. Recent research highlighted that plastics interact at different levels with feeding responses in tested species. Nonetheless, other important biological functions had been impacted such as spore settlement and aggregation in Ulva tepid and settlement and growth in bryozoans. It was also noted that plastic litter such as plastic leaches had the ability to release both micro particles and chemicals into marine water that able to affect marine species. Previous research evidenced effects on fertilization and larval survival rates of echinoderms as a consequence of ocean acidification. Changes in the Eco toxicity of chemicals with marine water chemical features were reported. According to the International, global plastic production continued to increase rapidly because it is versatile, hygienic, flexible, highly durable and suitable for many applications (Roberta Stefanini, 2021). Robertson (2012) added that since plastic is often used in food packaging, thanks to its ability to preserve food and today numerous packaging as containers, bottles, trays and cups are made of it, a great amount of their production causes environmental problems all over the world in every steps of its life as extraction, production, consumption and disposal.

2.3 The impact of supplier relationship management on customer satisfaction

Supplier relationship management (SRM) refers to the systematic approach of identifying, evaluating and managing relationships with suppliers to enhance overall performance and achieve strategic business goals. According to Remko van Hoek 2013, SRM is focused on joint value creation based on trust, open communication and collaboration with a limited number of key suppliers while leveraging on supplier capabilities. The International issue 1 and volume 146 asserts that Supply chain management (SCM) seeks to enhance competitive performance by closely integrating the internal functions within a company and effectively linking them with the external operations of suppliers, customers, and other channel members(Wantao Yu, 2013). Only through cross-functional integration within a firm and integration with suppliers and customers, can superior supply chain performance be achieved. Flynn et al. 2010 recognized that integration and according supply chain partners have benefits in many industries and supply chain integration has been considered to be one of the major factors in improving performance. Nonetheless, Steve (1989 & 1990) conceptually described the relationship between internal and external integration, but empirical studies investigating the relationship however, offered limited evidence and insight. Since one of the goals of supply chain integration is to improve customer satisfaction, it is this customer satisfaction that has been linked to performance (Wantao Yu, 2013).

Customer satisfaction is the art of making the customer happy by listening to them and responding to their needs (Zhang et al., 2003). Customer satisfaction involves managing the business with the prime intention of satisfying customer needs rather than the needs of management (Herrmann, Huber and Braunstein, 2000). It is delivering to customers more than they request and consistently exceeding their expectations (Matzler and Hinterhuber, 1998). Customer satisfaction achieves for SMEs an increased level of customer loyalty, an increase in cash flow and a decrease in operating costs (Gosling, Shang and Marlow, 2005). As a result, customers will be willing to pay more for high quality products and services (Venter, 2006). Effective strategic supply chain decisions have a profound impact on competitive position, profitability, market share, as well as impact on the specific needs of the consumer (Song, Dong and Xu, 2014). Examples of these needs are consumer trends, type of products, services, quantities, qualities and time (Hugo, Babenhorst-weiss and Van Rooyen, 2002). As observed by Saura et al. (2008), SCM is the connection between production and consumption, a cost-reduction technique and a product differentiation strategy that brings greater customer satisfaction. Furthermore, SMEs tend to view themselves as entities that must improve on their supply chain service quality in order to compete effectively, enhance customer

satisfaction and improve overall business performance (Millen, Sohal and Moss, 1999). This leads to the following hypotheses:
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According to Zhang et al. 2003, customer satisfaction is the art of making the customer happy by listening to them and responding to their needs. This therefore, means, customer satisfaction involves managing the business with the prime intention of satisfying customer needs rather than the needs of management (Herrmann, 2014). Matzler and Hinterhuber 1998 added that customer satisfaction is delivering to customers more than they request and consistently exceeding their expectations. Therefore, as a result, customers will be willing to pay more for high quality products and services (Venter, 2006). Song, Dong and Xu (2014) argued that effective strategic supply chain decisions have a profound impact on competitive position, profitability, market share, as well as impact on the specific needs of the consumer. According to Choy et al. (2008), increasing customer satisfaction in the supply chain can be regarded as a strategy for improving the system's responsiveness to change and a requirement to face increasing variety in its environmental needs and expectations without incurring excessive costs, time, organizational disruptions and performance losses.

Ahmed (1996) highlighted that quick responses to customer orders are the reason for the implementation of a SCM strategy in the increasingly competitive environment. As a result, satisfaction produces a different way of thinking in order to serve each distinct customer's needs

and for meeting time-based constraints (Duclos et al., 2003). Sanchez (2005) added that customer satisfaction in supply chain systems can be regarded as a strategy for improving the responsiveness of businesses particularly in the decision making process. Spiteri and Dion (2004) identified two types of satisfactions: transactional and overall (or cumulative) satisfaction. Of these, transactional customer satisfaction is a short-term onetime purchase evaluating a specific purchase after its implementation. Transactional satisfaction is short-term, is based on the evaluation of one purchase, narrowly focused on the purchased product and is subjective within the aforementioned definition of customer satisfaction. It therefore, according to Wangenheim (2003) applies to new customers who, however, focus on different attributes compared with customers with repeated experience of a product. Conversely, cumulative customer satisfaction according to Fornell (1992) is a long-term based on repeated purchase that comes with overall customer experience with a particular product.

According to Rahim Dhrolia editor of the Mukwano Industries website, Mukwano has over 200 products that can be accessed in over 17 countries spanning Africa and Europe/Asia. To Mukwano, customer satisfaction is very paramount to their existence Rahim added. According to Juettner (2002) the Supplier Relationship Management function and the role it plays in revolutionising increased performance of organizations are high-profile issues. Most of Uganda's vibrant sectors have been revolutionizing at a very fast rate over the past few decades due to the widespread introduction of the Internet where benchmarking reports have been explored on outstanding cases of best performing organizations profiles and how they achieved the progress(Kalinzi, 2015). New technologies, rapidly changing consumer requirements, the need for continuously modernizing organizational infrastructure to keep pace with these requirements, peak demand in mature markets countered by rapid advancement in emerging markets, and increased outsourcing of services present a number of supplier relationship management issues. As profit warning and market forecasts are adjusted, this has triggered massive restructuring programs, lay-offs, and reduced demand for having operational- and non-core functions in place in many organizations. Firms have been evaluating repetitively a number of options to reduce costs while simultaneously improving their performance across the board. There is also a tendency according to Agrell et al. 2014 at the leading edge of the industry to redefine core services away from those traditional functions to embrace only those that can define the firm's existence into pure technology developmental ones and the non-

core ones being re-designed or closed down completely. However, according to Ernst and Young (2011), due to demand uncertainty in both level and timing, the roles and responsibilities in the supply chain are changing, often accelerated by supplier relationship management and customer, which leads to initially unclear interfaces. The strong growth and consolidation among suppliers leads to shifts in the power balance, and different business logic and clock speed among the players. This driving force has led to massive concentration of core competences and resort to outsourcing other functions in a bid to deliver different outputs and efficient service delivery.

2

2.4 The impact of sustainable sourcing on the ecosystem.

Sustainable sourcing refers to the practice of obtaining resources or raw materials in a way that minimizes negative impacts on the environment, society, and economy, while ensuring long-term availability for future generations. This approach aims to preserve ecosystems and biodiversity, reduce carbon emissions, promote fair labor practices, and support local communities. According

to Verónica H. Villena editor of a more sustainable supply chain at the Harvard Business Review, the recent years have seen a rising number of multinational corporations pledge to work only with suppliers that adhere to social and environmental standards(Gioia, 2020). Typically, multinational corporations expect their first-tier suppliers to comply with those standards, and they ask that those suppliers in turn ask for compliance from their suppliers who ideally ask the same from their suppliers. The aim is to create a cascade of sustainable practices that flows smoothly throughout the supply chain. As supply chains continue to expand globally into developing countries, seeking lower costs and greater production capacity, they expose companies to an even wider array of risks hence the criticality of sustainable sourcing. However, after the COVID-19 threat, possibilities of supply disruption, cost volatility, threats to brand reputation and challenges related to compliance with local laws and regulations, companies must meet the growing expectations of stakeholders (customers, shareholders, employees, non-governmental organizations, trade associations, labor unions, government observers) and take responsibility for their supplier's environmental, social and ethical practices. Therefore, companies are increasingly incorporating sustainable sourcing into their procurement and supply chain management process to better understand and manage risks while tapping into significant opportunities.

The Ecosystem being focal to sustainability, long-term relationships with suppliers, improving performance on environmental, social and ethical issues is vital to developing such relationships between sourcing and the ecosystem. Working toward this has become an extension of a company's commitment to corporate responsibility and as such, a key component of the overall business structure and model (EcoVadis, 2023). Effective supply chain management can foster and build competitive advantages for companies, especially in sectors like food production. This has therefore, been an admirable idea, but it's been hard to realize in practice. Many of the multinational corporations that have committed to sustainable sourcing have faced scandals brought about by suppliers that, despite being aware of sustainability standards, have nevertheless gone on to violate them. According to Ella Burroughes, the rising consumer expectations and regulatory scrutiny intensifying, pressure is mounting on consumer-packaged goods companies to ensure their supply chains are socially responsible (Ella Burroughes, 2023). Knowing where products come from**,** and being sure they were produced fairly, should be a

simple matter of tracing goods back to their source but the nature of today's complex global supply networks means ethical sourcing can be difficult to guarantee.

The growing drive across industries to become more sustainable is extending beyond carbon emissions and environmental impact to include the social element of sustainability too, that is, ecosystem. Consumers are becoming according to Ella Burroughes(2023) concerned with issues such as living wages, labor rights, and social responsibility and are willing to pay more for products that have been sustainably sourced. Regulators are more concerned too. With increasing environmental, social, and governance regulations such as the German Supply Chain Act, as well as child labor and modern slavery legislation social responsibility and compliance are likely to continue their march up the corporate agenda. The "ecosystem" component has been at the forefront of conversation, while "social" and "governance" components have seen comparatively less attention. Transparency on these fronts can be difficult to achieve and the social elements of a supply chain can be hard to quantify, with few precedents or sources for comprehensive data collection. In the consumer-packaged-goods industry, these questions are increasingly at the forefront as companies evolve their strategies in a difficult economy. The stakeholder environment is complex. On the retail side, there is an opportunity for better labeling, building trust so consumers can tell easily which products are verifiably responsibly sourced. From a regulatory perspective, simply managing the increasing number of requirements can be a challenge, given that regulations can cover everything from environmental impact to worker treatment and diversity and inclusion practices.

Many companies know that investors, regulators, and other stakeholders increasingly expect them to be ecosystem aware. According to Anna-Christina Fredershausen (2022), companies also see that rising customer demand for low-emissions offerings could allow them to widen their margins and capture large shares of growing markets. Achieving the necessary decarbonization level means cutting not just the greenhouse-gas emissions from their own operations but also the emissions from their value chains (Anna-Christina Fredershausen, 2022). Emissions associated with many end products, and large shares of these emissions occur upstream in the supply chain as a result of energy use and industrial processes. In response, companies are demanding ever greater quantities of low-emissions inputs, from raw materials to highly engineered components. However, the output of green materials isn't keeping up with the

increase in demand and the gap could widen as more companies switch to the low-emissions resources they will need to meet their climate goals. Leading businesses, such as consumer goods manufacturers, have subsequently made moves to secure supplies of green resources. The longer that others wait to devise their own strategies for procuring low-emissions resources, the more likely they will be to end up at a disadvantage.

However, according to Anna-Christina, it is still early days in the race to obtain low-emission resources and too soon for first movers' approaches to be proven successful over the long term. Nevertheless, their actions suggest that a high degree of ingenuity, along with extensive collaboration across value chains, may be required to overcome supply constraints and lock in lower costs. In addition, the fact that supply, demand and pricing always vary as market conditions change, leading companies have worked to model these factors over time. Their modeling tools often include supply cost curves, supply and demand scenarios, and pricing scenarios along with projections for suppliers' capacity build outs, cost positions and emissions intensity. They also need to be frequently updated to keep up with a dynamic market while other companies will want to update their models at least every six to twelve months. Therefore, unsettled outlook for pricing, supply, regulation, and technology, among other considerations, has prompted leading companies to devise long-term strategies for reducing carbon emissions in their supply chains.

CHAPTER THREE

METHODOLOGY

3.0Introduction

This chapter presents the specific procedures that were employed to investigate the research design, study population, sampling design, data sources data collection techniques, research instruments, validity and reliability, research procedure, data analysis methods, and limitations regarding the impact of Sustainable Procurement on Environmental management.

3.1Research design

This research took the form of a case study design which focused on in-depth analysis of a single individual, group, or event, providing a detailed and holistic understanding. This design was chosen because it enabled one to see a relationship between phenomena, context, and people while allowing flexibility to collect data through various means and capture the context and lived reality of participants. However, using case study research design had its own shortfalls which included difficulty generalizing findings from one case study to other settings while running the risk of bias as one's opinion could influence the research.

3.2Study population

For purposes of this research, our research population was 100 respondents from the procurement, product packaging and management.

3.3.Sample size

Therefore, the sample size for this study was determined using Slovin's formula (1960) to be 80 employees.

3.3.1 Sampling techniques

For this research purpose, the researcher used simple random sampling because it facilitated choosing a subset of individuals from a larger population in a completely random and unbiased manner. Therefore, it ensured representation from each individual in the population allowing comparisons and analysis across different segments. This, despite the fact the obtaining a true simple random sample could be impractical, time-consuming, and expensive as it involves

creating a comprehensive list of the entire population and then selecting samples from it, which might not always be feasible.

3.4. Data sources

Data for this research purpose was sourced mainly from primary as well as secondary sources.

Primary Data Sources

Conducting Surveys and questionnaires among procurement department staff, distribution managers, warehouse and other stakeholders involved in the internal processes at Mukwano industries.

Secondary Data Sources

Reviewing and analyzing published research articles, academic journals as well as dissertations related to theimpact of Sustainable Procurement on Environmental management.

3.5 Data collection methods

Given the fact that this research aimed at both gaining insight on the impact of Sustainable Procurement on Environmental management as well as understanding the experiences of respondents, the researcher used questionnaire surveys to gather quantitative data on product packaging, supplier relationship management and sustainable sourcing.

Despite the fact that respondents may not always provide accurate or truthful information due to social desirability bias leading to skewed or inaccurate results, surveys questionnaires were preferred because they provide a structured and standardized way of collecting data ensuring consistency and comparability across respondents which could be relatively straightforward to analyze data, especially when using statistical software allowing researchers to apply various statistical techniques to identify patterns, relationships, and trends within the data.

3.5.1 Data collection instruments

The researcher distributed questionnaires. In addition, the interviewer used interview guides with a set of questions or prompts designed to guide the researcher during interviews with key informants.

3.5.2 Data validity and reliability of data collection instruments

To test the validity of the data collection instruments, the researcher used subject matter expert review while the reliability was tested using the test-retest method.

To ensure the validity of the questionnaire, a Content Validity Index (CVI) was performed(Ellen, 2020).

$$\text{CVI} = \frac{\text{Correct Items in the Instrument}}{\text{Total Number of Items.}}$$

The accepted index was 0.6 and above.

3.6 Data presentation and analysis

After collection of data using questionnaires, the data was corrected of errors, inconsistencies, and missing values to ensure its accuracy.

Regression analysis was used to establish the relationship between variables so as to predict the outcomes. In addition, graphs, charts, and other visual representations were used to communicate your findings effectively.

3.7 Ethical consideration

The researcher was committed to ensure that studies are conducted with integrity, respect for participants, and adherence to moral principles so as to protect the rights and well-being of research subjects and the broader community.

3.8 Limitations

Due to purposes of confidentiality, limited data about the organization and their employees in different departments had been availed making it hard to have necessary information later on the actual number of respondents.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION OF THE FINDINGS.

4.0 Introduction.

This chapter presents the findings of the research on The Impact of Sustainable Procurement on the Environment taking Mukwano Industries as the case study. It was presented in accordance with the study themes developed from the objectives of the study. The researcher used a questionnaire as a tool to obtain data from the field, and the response rate was 80 just like the sample space. Some of the characteristics considered include the gender of the respondents, academic qualifications, age, and departments of work in the organization.

4.1Findings on bio data of the respondents.

4.1.1 Findings on the gender of the respondents.

Table 1: Showing Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	32	39.5	40.0	40.0
	Female	48	59.3	60.0	100.0
	Total	80	98.8	100.0	
Missing	System	1	1.9		
Total		81	100.0		

Source: Primary data

Interpretation.

From the information above, the distribution of respondents according to their gender shows that the majority of the respondents were females at 60%and the minority were male at 40% because ladies have proved to be good at price negotiations which is an essential activity in the procurement process. The findings also indicates that there is gender inclusion and diversity at the industry.

4.1.2 Findings on the age bracket of the respondent.

Table 2: Showing Age Brackets

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 – 23	09	11.1	11.2	11.2
	24 – 29	32	39.5	40.0	51.2
	30 – 35	22	27.2	27.5	78.7
	36 - 41	05	6.2	6.3	85.0
	42 - 47	10	12.3	12.5	97.5
	48 – above	2	2.5	2.5	100.0
	Total	80	98.8	100.0	
Missing	System	1	1.2		
Total		81	100.0		

Source: Primary data

Interpretation

From the table above, most of the respondents are between the age bracket of 24 – 29 years (40%). This shows that the organization hires energetic and vibrant people in the procurement and disposal department.

4.1.3 Findings on the level of education of respondents.

Table 3: Showing level of education

Level of Education	**frequency**	**Percentage (%)**
Certificate level	**5**	**6**
Diploma level	**9**	**11**
Bachelor's Degree	**56**	**70**
Masters	**10**	**13**
other	**0**	**0**
TOTAL	**80**	**80**

Source: Primary data

Interpretation.

Findings shows that, most of the employees under the procurement and disposal department are Degree holders (70%) as compared to Masters (13%), Diploma (11%) and Certificate holders (6%). This also shows that the respondents are eligible to read and identify different road signs and laws.

4.1.4 Findings on the Working Experience of Respondents.

Table 4 Showing the working experience of respondents

Years of driving experience	Frequency	Percentage (%)
Less than 1year	**1**	**1**
1 – 3	**4**	**5**
4 - 6	**10**	**13**
7 – 10	**24**	**30**
11 – above	**41**	**51**
TOTAL	**80**	**100**

Source: Primary data

Interpretation.

According to the findings, Most of the respondents have a work experience of 11 years and above (51%) followed by 7 to 10 years' experience (30%) This shows that they are well conversant with the job though resistant to change.

4.2. The impact of product packaging on marine life

Below are the responses from the respondents in relation to the of product packaging on marine life.
1 Strongly agree (S/A) 2. Agree (A) 3. Neutral (N) 4. Disagree (D) 5. Strongly disagree (S/D)

Table 5

S/N	Question	S/A		A		N		D		S/D		TOTAL	
	Marine life	**F**	**P %**	**F**	**P %**	**F**	**P%**	**F**	**P %**	**F**	**P%**	**T/F**	**T/P %**
1	Customers judge the value of the product based on its packaging.	**43**	59	**22**	28	**5**	6	**2**	3	**3**	4	**80**	**100**
2	Agricultural land has been contaminated by plastics more than the surrounding.	**23**	29	**51**	64	**5**	10	**2**	10	**0**	0	**80**	**100**
3	The establishments of Namanve Industrial park has raised environmental concerns.	**44**	55	**25**	31	**7**	9	**4**	5	**0**	0	**80**	**100**
4	Industrial packaging waste renders the surrounding areas unacceptable for residents.	**51**	64	**23**	29	**2**	3	**4**	5	**0**	0	**80**	**100**
5	Food wrappers represent a consistent slice of marine litter.	**43**	59	**22**	28	**5**	6	**2**	3	**3**	4	**80**	**100**
6	Polluting Nakivubo channel can affect wildlife and marine environment in general.	**30**	38	**21**	26	**25**	31	**4**	5	**0**	0	**80**	**100**
7	Local traders and residents know that it's harmful to throw plastics in the lake but find it difficult to stop.	**23**	29	**51**	64	**5**	10	**2**	10	**0**	0	**80**	**100**
8	Legal and illegal dumping of waste in surrounding environment make preservation of marine ecosystems hard.	**15**	19	**30**	38	**15**	19	**13**	16	**4**	5	**80**	**100**
9	Plastics are preferred to other packaging material because it is durable and suitable.	**51**	64	**23**	29	**2**	3	**4**	5	**0**	0	**80**	**100**
10	Use of plastic for packaging is a source of income for locals who collect them for recycling.	**4**	5	**14**	18	**15**	19	**30**	38	**17**	20	**80**	**100**

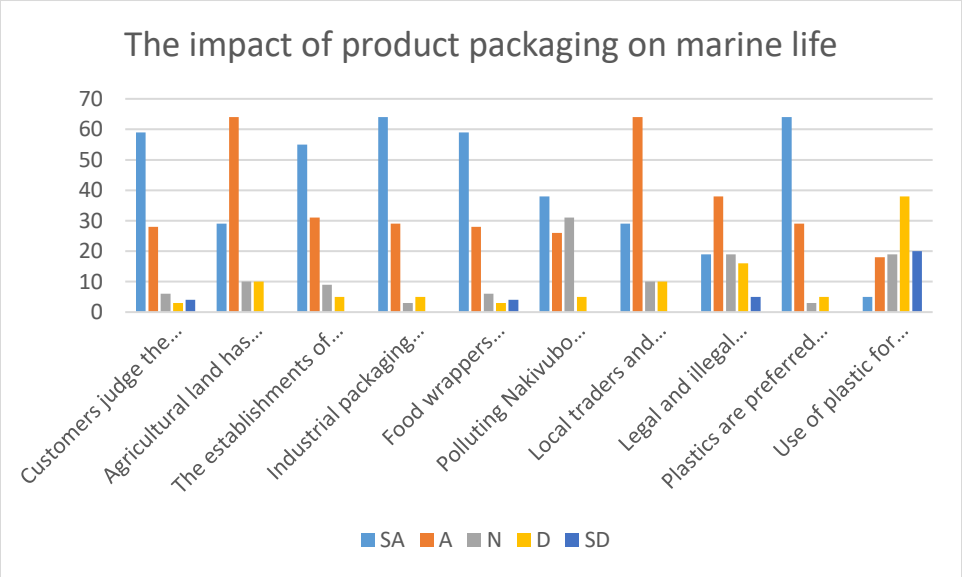
Source: Primary data

Interpretation

From the table above, the research revealed that a higher percentage of respondents strongly agree and agree on the impact of product packaging on marine life. Considerations like customers judging the value of the product based on its packaging (87%), Agricultural land being contaminated by plastics more than the surrounding (93%), establishment of Namanve Industrial park raising environmental concerns (86%) and Industrial packaging waste rendering the surrounding areas unacceptable for residents (93%). These responses alone are enough to shown that as Mukwano goes about their business; they should rethink packaging of products so as to minimize their impact on marine life.

This company and others in the same category invest in research and development so as to come up with better packaging materials that are bio degradable.

Figure 1. Distribution of the impact of product packaging on marine life.



4.2.1 Findings on the impact of supplier relationship management on customer satisfaction. Below are the responses from the respondents in relation to the impact of supplier relationship management on customer satisfaction.

1 Strongly agree (S/A) 2. Agree (A) 3. Neutral (N) 4. Disagree (D) 5. Strongly disagree (S/D)

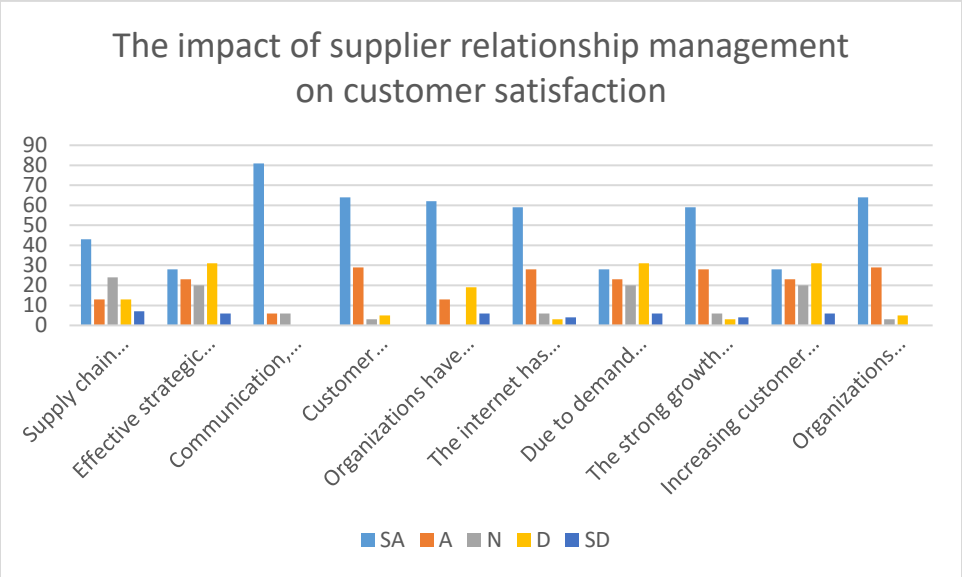
S/N	Questions	S/A		A		N		D		S/D		TOTAL	
	Customer satisfaction	**F**	**P%**	**F**	**P %**	**F**	**P %**	**F**	**P %**	**F**	**P%**	**T/F**	**T/P %**
1	Supply chain performance is only through Organization-Supplier and customer integration.	**34**	43	**10**	13	**19**	24	**10**	13	**7**	7	**80**	**100**
2	Effective strategic supply chain decisions give organizations a competitive advantage.	**22**	28	**18**	23	**10**	20	**25**	31	**5**	6	**80**	**100**
3	Communication, trust and collaboration boost Supplier Relationships.	**60**	81	**5**	6	**5**	6	**10**		**0**	0	**80**	**100**
4	Customer satisfaction is very paramount to an organization's existence	**51**	64	**23**	29	**2**	3	**4**	5	**0**	0	**80**	**100**
5	Organizations have realized increased performance due to Supplier Relationship Management	**50**	62	**10**	13	**0**	0	**15**	19	**5**	6	**80**	**100**
6	The internet has changed the way organizations do business.	**43**	59	**22**	28	**5**	6	**2**	3	**3**	4	**80**	**100**
7	Due to demand uncertainty in both level and timing, the roles and responsibilities in the supply chain are changing	**22**	28	**18**	23	**10**	20	**25**	31	**5**	6	**80**	**100**
8	The strong growth and consolidation among suppliers leads to shifts in the power balance for leading businesses.	**43**	59	**22**	28	**5**	6	**2**	3	**3**	4	**80**	**100**
9	Increasing customer satisfaction in the supply chain improve the system's responsiveness	**22**	28	**18**	23	**10**	20	**25**	31	**5**	6	**80**	**100**
10	Organizations should put customer satisfaction above the needs of management.	**51**	64	**23**	29	**2**	3	**4**	5	**0**	0	**80**	**100**

Interpretation

From the table above, the research revealed that the higher percentage of respondents strongly agree and agree on the impact of product packaging on marine life. Considerationslike communication, trust and collaboration boosting Supplier Relationships (87%), strong growth and consolidation among suppliers leading to shifts in the power balance for leading businesses. (87%), internet changing the way organizations do business (87%) and organizations putting customer satisfaction above the needs of management (93%). These responses alone are enough to shown that as Mukwano goes about their business, they should rethink packaging of products so as to minimize their impact on marine life.

This company and others in the same category invest in research and development so as to come up with better packaging materials that are bio degradable.

Figure 2. Distribution of the impact of supplier relationship management on customer satisfaction.



4.2.2 Findings on the impact of sustainable sourcing on the ecosystem.

Below are the responses from the respondents in relation to the impact of sustainable sourcing on the ecosystem.

1. Strongly agree (S/A) 2. Agree (A) 3. Neutral (N) 4. Disagree (D) 5. Strongly disagree (S/D)

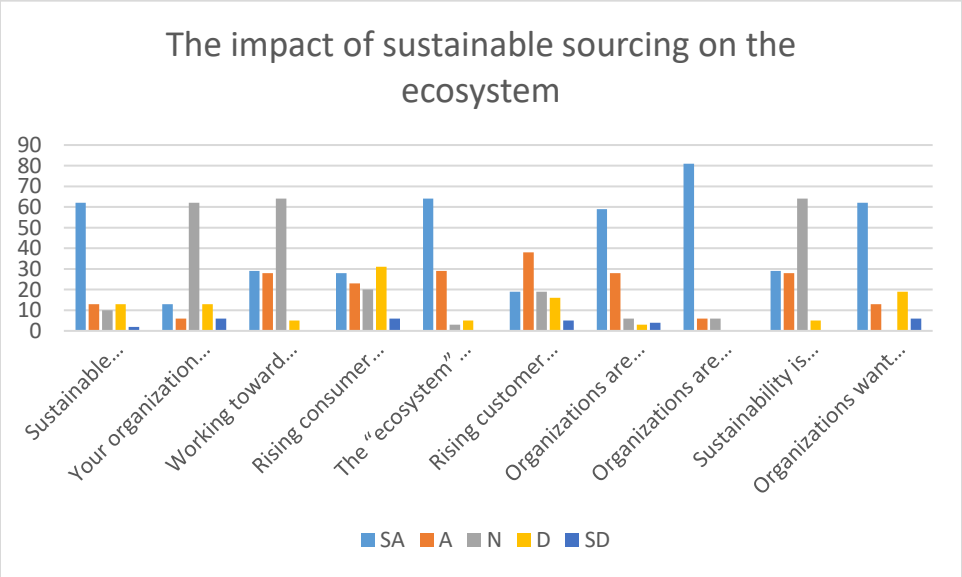
Question	**S/A**			**A**		**N**		**D**		**S/D**		**TOTAL**	
Ecosystem	**F**	**P%**	**F**	**P%**	**F**	**P%**	**F**	**P%**	**F**	**P%**	**T/F**	**T/P%**
Sustainable sourcing benefits ecosystems and biodiversity.	**49**	62	**10**	13	**8**	10	**10**	13	**2**	2	**80**	**100**
Your organization increasingly incorporating sustainable sourcing into their procurement and supply chain management	**10**	13	**5**	6	**50**	62	**10**	13	**5**	6	**80**	**100**
Working toward sustainable sourcing has become an extension of your business's commitment to corporate responsibility.	**23**	29	**22**	28	**51**	64	**4**	5	**0**	0	**80**	**100**
Rising consumer expectations and regulatory scrutiny is mounting on businesses to ensure their supply chain is socially responsible	**22**	28	**18**	23	**10**	20	**25**	31	**5**	6	**80**	**100**
The "ecosystem" component has been at the forefront of conversation.	**51**	64	**23**	29	**2**	3	**4**	5	**0**	0	**80**	**100**
Rising customer demand for low-emissions offerings can give organizations a competitive advantage	**15**	19	**30**	38	**15**	19	**13**	16	**4**	5	**80**	**100**
Organizations are now demanding for sustainable raw materials.	**43**	59	**22**	28	**5**	6	**2**	3	**3**	4	**80**	**100**
Organizations are looking supplies of green resources.	**60**	81	**5**	6	**5**	6	**10**		**0**	0	**80**	**100**
Sustainability is driving organizations to devise long-term strategies for reducing carbon emissions in their supply chains.	**23**	29	**22**	28	**51**	64	**4**	5	**0**	0	**80**	**100**
Organizations want to lower costs through extensive collaboration across value chains.	**50**	62	**10**	13	**0**	0	**15**	19	**5**	6	**80**	**100**

Source: Primary data

Interpretation.

From the findings above, it's evident that sustainable sourcing has a strong impact on the ecosystem with most of the respondents strongly agree and agreeing to the questions regarding the topic. Working toward sustainable sourcing has become an extension of your business's commitment to corporate responsibility (75%), the "ecosystem" component has been at the forefront of conversation.(74%), organizations are now demanding for sustainable raw materials(65%) which helps level the ground for all players in the market and organizations want to lower costs through extensive collaboration across value chains.

Figure 3. Distribution of the impact of sustainable sourcing on the ecosystem.



CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION, RECOMMENDATIONS AND AREAS OF FURTHER RESEARCH.

5.0 Summary and discussion of the findings

This chapter presents the summary, discussions, conclusion and recommendations of the findings, and areas of further research.

This research paper purposed to establish the impact of Sustainable Procurement on the Environment with Mukwano Industries as the case study. To attain this therefore, the main objective was divided in to three study objectives and the findings of which address this major study objective. Further discussed in the subsequent sections are the findings.

As seen in a report, green competition establishes limits to the consumption of resources, engaging both consumers and companies and redefining the relationship between firms and their suppliers in the supply chain. Therefore, this study set out to provide relevant information to Mukwano industries on the impact of policies about product packaging on the management of marine life, how social norms and supplier relationship management impact on customer satisfaction and the impact of sustainable sourcing legislations on ecosystems. According to Robertson (2012) plastic is often used in food packaging, thanks to its ability to preserve food and today numerous packaging materials such as containers, bottles, trays and cups are made of plastic of which a great amount of their production causes environmental problems all over the world in every steps of its life at extraction, production, consumption and disposal.

It has been noted, that despite the versatility, durability of plastics (the most highly used packaging material) businesses out to invest more in research and innovation to come up with more environmentally friendly packaging materials that will favor the environment so as for the future generation to also have an environment to fall back to. According to Betty Bugusu (2007), advances in food processing and food packaging play a primary role in keeping the food supply among the communities in Uganda and the world over. So when the respondents said there should be more research in the area, it is true. According to Ernst and Young (2011), the demand uncertainty, the roles and responsibilities in the supply chain are changing, often accelerated

by supplier relationship management and customer, which leads to initially unclear interfaces. The strong growth and consolidation among suppliers leads to shifts in the power balance and different business logic and clock speed among the players. This driving force has led to massive concentration of core competences and resort to outsourcing other functions in a bid to deliver different outputs and efficient service delivery.

The uncertainty that accompanies pricing, supply, regulation, and technology, among other considerations, has prompted leading companies to devise long-term strategies for reducing carbon emissions in their supply chains. Therefore, there needs to be frequent updating of systems to keep up with a dynamic market. According to Mukwano, they have revised their Sustainable Sourcing programme to focus on an updated set of key products and food commodities because of their importance to their business and brands, and their ability to use scale to deliver greater positive impact.

5.1Conclusion

Since its inception, Mukwano has been known for implementing ecologically sound processes and practices to leave a positive impact on its immediate community and the nation at large.

Research results show that renewable plastics give the lowest contribution to global warming, stratospheric ozone depletion, terrestrial acidification, fossil resource scarcity, water consumption and human carcinogenic toxicity and PET bottles used in packaging of bottled water. Given the way a product is packaged will immensely determine customer response towards that product with much marketing promotions geared towards how the product looks meaning how it is packaged. The company has packaged well their products including potties for children who enjoy doing their number two seated comfortably, cooking oil containers that are easily handled as well as golden tea packs that are attractive to the adults as well. This kind of packaging is meant to cater for both adults and children.

Secondly, supplier relationship management play a vital role in customer satisfaction. The procurement function in the buyer firm should emphasize building up the required capabilities and capacities to support enduring relationships with the supplier firms. The engagement of the buyer firm with its suppliers through smooth cooperation appears to be the factor most influencing supplier satisfaction. It's important that their creativity and innovativeness are appreciated much, which is seen as an antecedent for satisfaction. It's also important that personal contacts with supplier's representatives and empathy with each other is established so that a close relationship among the two partners develop.

Lastly, it has surely been proven to be true that strong growth and consolidation among suppliers leads to shifts in the power balance and different business logic and clock speed among the players as demand is ever volatile. Thus, this driving force has led to massive concentration of core competences and resort to outsourcing other functions in a bid to deliver different outputs and efficient service delivery.Nonetheless, with all this said and done, it is our eco-system that is the recipient of all the human activities. This is dependent on both internal factors of which are decisions made by management that comprises of top management that greatly affect strategic procurement. This calls for the company to set their priorities where research showed that customers preferred their concerns be put ahead of the concerns of the company itself.

5.2 Recommendations

Sustainability has been widely discussed in the literature above. Consumers increasingly care about sustainability and demand more transparency about the way that products have been sourced. Nonetheless, taking a look at Mukwano's entire supply chain is becoming more popular. This study aimed at adding the impact of sustainability on the company/customer effect. Results point out that it actually does matter to the customer where the focal company and supplier are located. It therefore is imperative for Mukwano to package their products responsibly.

To start with, the company ought to address the increasing demands of their customers as these are now more interested in procuring products that have been sustainably sourced, processed and have a return value. Today, most if not all plastic products are recycled to make plastic chairs, cups, tables, potties for children and plates among others. Therefore, Mukwano needs to reconsider their supplier ties and their sustainability measures to avoid suffering from association by guilt. The perceived sustainability of the country of origin of the focal company and its suppliers seem to influence customer perceptions of the focal company itself. While customers tend to perceive countries of low psychic distance as more sustainable, they also expect them to act more sustainably, and to show greater interest in local initiatives.

Secondly, the need for supplier relationship management was stressed beyond measure as this is the make or break point for sustainable sourcing. Keeping a close look at one's suppliers gives the company a competitive advantage and if they are to survive is this robust economic environment, the needs of customer should be addressed without fail. This doesn't mean the end user only but it encompasses those of the regulating bodies and the international community at large given the fact that this company distributes their products beyond the borders of Uganda.

Lastly, this study questioned the benefit of sourcing sustainably to the ecosystem. The results show that in response to unsustainable behavior, customers are not willing to continue buying from Mukwano. They are, however, generally willing to pay more for sustainable products, even if the company used to be associated with unsustainability. This, therefore, means that Mukwano as a manufacturing company ought to keep up with changes in the market especially on the retail side where exists opportunities for better labeling, building trust so consumers can tell easily which products are verifiably responsibly sourced. From a regulatory perspective, though simply managing the increasing number of requirements can be a challenge, following regulations can

cover everything from environmental impact to worker treatment and diversity and inclusion practices.

5.3 Areas of further research

Although supplier relationship management (SRM) and its purported benefits have been widely studied in the literature, most of the studies have focused on examining its direct relationship with firm performance. Interestingly, there is scare research on the applicability and effectiveness of such relationships in less developed countries. According to Zhang and Cao (2018), Supplier Relationship Management has become vital in the buyer-supplier advancement because of the dynamics inherent in the global supply chain environment. Additionally, suppliersmay not perform unless there are measures and establishment of collaboration, open communication, and shared long-term interests.

These dynamics, such as changes in demand patterns, inflationary pressures, currency fluctuations, governmental policies, among others, create conditions of supply uncertainty. Furthermore, all scandals involved first-tier suppliers. The practices of lower-tier suppliers are almost always worse, increasing companies' exposure to serious financial, social, and environmental risks. Research then ought to be done to look at this effect.

APPENDICES

A QUESTIONNAIRE FOR THE STAFF OF MUKWANO INDUSTRIES THE DEPARTMENT OF LOGISTICS AND PROCUREMENT

I am Nakimpi Aidah, a student at Uganda Christian University carrying out a study on the "the impact of Sustainable Procurement on the Environment" in partial fulfillment of the requirements for the award of a Bachelor's Degree in Procurement and Logistics management of Uganda Christian University

You have been selected to participate in the study by filling in this questionnaire. Your responses shall be kept anonymous and will never be linked to you and everything is strictly for academic purposes

Thank you for your cooperation.

Section: A

Bio Data.

Please TICK the most appropriate response.

1. Gender.

A. Male ☐ B. Female ☐

2. Age group.

18 years – 23 ☐ years 24 ye☐
– 29 years ☐ ☐
30 years – 35 years 36 years – 41 years
42 years – 47 years ☐ 48 years – Above ☐

3. Education Level.

A. Certificate level ☐ B. Diploma Level ☐ C. Bachelor's Degree ☐
D. Masters ☐ E. Others. ☐

4. Working Experience.

A. Less than 1year B. 1years – 3years ☐ C. 4years – 6years ☐ D. 7years – 9years ☐ E. More than 10years ☐

Section: B

Part 1: The impact of product packaging on marine life
(Please TICK your level of Agreement with the statements below).

SA – Strongly Agree, A – Agree, NS – Not Sure, SD – Strongly Disagree, D - Disagree

No.		SA	A	NS	SD	D
1.	Customers judge the value of the product based on its packaging.					
2.	Agricultural land has been contaminated by plastics more than the surrounding.					
3.	The establishments of Namanve Industrial park has raised environmental concerns.					
4.	Industrial packaging waste renders the surrounding areas unacceptable for residents.					
5.	Food wrappers represent a consistent slice of marine litter.					
6.	Polluting Nakivubo channel can affect wildlife and marine environment in general.					
7.	Local traders and residents know that it's harmful to throw plastics in the lake but find it difficult to stop.					
8.	Legal and illegal dumping of waste in surrounding environment make preservation of marine ecosystems hard.					
9.	Plastics are preferred to other packaging material because it is durable and suitable.					
10.	Use of plastic for packaging is a source of income for locals who collect them for recycling.					

Part 2: The impact of supplier relationship management on customer satisfaction

(Please TICK your level of Agreement with the statements below).

SA – Strongly Agree, A – Agree, NS – Not Sure, SD – Strongly Disagree, D - Disagree

No.		SA	A	NS	SD	D
1.	Supply chain performance is only through Organization-Supplier and customer integration.					
2.	Effective strategic supply chain decisions give organizations a competitive advantage.					
3.	Communication, trust and collaboration boost Supplier Relationships.					
4.	Customer satisfaction is very paramount to an organization's existence					
5.	Organizations have realized increased performance due to Supplier Relationship Management					
6.	The internet has changed the way organizations do business.					
7.	Due to demand uncertainty in both level and timing, the roles and responsibilities in the supply chain are changing					
8.	The strong growth and consolidation among suppliers leads to shifts in the power balance for leading businesses.					
9.	Increasing customer satisfaction in the supply chain improve the system's responsiveness					
10.	Organizations should put customer satisfaction above the needs of management.					

Part 3: The impact of sustainable sourcing on the ecosystem

(Please TICK your level of Agreement with the statements below).

SA – Strongly Agree, A – Agree, NS – Not Sure, SD – Strongly Disagree, D - Disagree

No.		SA	A	NS	SD	D
1.	Sustainable sourcing benefits ecosystems and biodiversity.					
2.	Your organization increasingly incorporating sustainable sourcing into their procurement and supply chain management					
3.	Working toward sustainable sourcing has become an extension of your business's commitment to corporate responsibility.					
4.	Rising consumer expectations and regulatory scrutiny is mounting on businesses to ensure their supply chain is socially responsible					
5.	The "ecosystem" component has been at the forefront of conversation.					
6.	Rising customer demand for low-emissions offerings can give organizations a competitive advantage					
7.	Organizations are now demanding for sustainable raw materials.					
8.	Organizations are looking supplies of green resources.					
9.	Sustainability is driving organizations to devise long-term strategies for reducing carbon emissions in their supply chains.					
10.	Organizations want to lower costs through extensive collaboration across value chains.					

--End--

References

1. Anna-Christina Fredershausen, E. H. (2022). *It's not easy buying green: How to win at sustainable sourcing*. Retrieved from https://www.mckinsey.com/capabilities/sustainability/our-insights/its-not-easy-buying-green-how-to-win-at-sustainable-sourcing.
2. Asiimwe, J. (2020). *Plastic Pollution of Lake Victoria in Uganda*. Retrieved from https://infonile.org/en/2021/04/plastic-pollution-of-lake-victoria-in-uganda-who-is-to-blame/.
3. Britannica. (2023). *environment*. Retrieved from https://www.britannica.com/science/environment.
4. Christopher, D. K. (2023). *An ABC of Industrialisation in Uganda: Achievements, Bottlenecks and Challenges*. Retrieved from https://archive.uneca.org/publications/abc-industrialisation-uganda-achievements-bottlenecks-and-challenges.
5. CIPS. (2023). *Procurement Definition*. Retrieved from https://www.cips.org/intelligence-hub/procurement/what-is-procurement.
6. CIPS. (2023). *sustainable procurement*. Retrieved from https://www.cips.org/intelligence-hub/sustainability/sustainable-procurement.
7. DANIEL THOMAS MOLLENKAMP, J. R. (2023). *What is Sustainability? How Sustainabilities Work, Benefits, and Example*. Retrieved from https://www.investopedia.com/terms/s/sustainability.asp.
8. Daniel Thomas, J. R. (2023). *What is Sustainability? How Sustainabilities Work, Benefits, and Example*. Retrieved from https://www.investopedia.com/terms/s/sustainability.asp.
9. Dhanani, R. (2022). *Industrial Revolution: concerns for the environment grew*. Retrieved from https://thesustainableagency.com/blog/the-history-of-sustainability/.
10. Dhrolia, R. (2023). *About Us*. Retrieved from https://www.mukwano.com/about-us/.
11. Dijkmeijer, J. (2023). *What Relationship Management*. Retrieved from https://relationshipmanagement.eu/en/what-is-relationship-management/.
12. EcoVadis. (2023). *What is Sustainable Sourcing?* Retrieved from https://ecovadis.com/glossary/sustainable-sourcing/.
13. Ella Burroughes, J. R. (2023). *Enabling socially responsible sourcing throughout the supply chain*. Retrieved from https://www.mckinsey.com/capabilities/operations/our-insights/enabling-socially-responsible-sourcing-throughout-the-supply-chain.
14. Ellen, S. (2020). *Slovin's Formula Sampling Techniques*. Retrieved from https://sciencing.com/slovins-formula-sampling-techniques-5475547.html.
15. Gioia, V. H. (2020). *A More Sustainable Supply Chain*. Retrieved from https://hbr.org/2020/03/a-more-sustainable-supply-chain.
16. Herrmann, A. H. (2014). Service Quality, Relationship Quality and Customer Loyalty (Case Study: Banking Industry in Iran). *Open Journal of Social Sciences, Vol.2 No.4*,.
17. ISO. (2017). *Sustainable Procurement*. Retrieved from https://www.iso.org/files/live/sites/isoorg/files/store/en/ISO%2020400_Sustainable_procur.pdf.
18. James. (2023). *sustainability*. Retrieved from https://www.britannica.com/science/sustainability.

19. James. (2023). *sustainability*. Retrieved from https://www.britannica.com/science/sustainability.
20. Kalinzi, C. (2015). *OUTSOURCING (LOGISTICS) SERVICES AND SUPPLY CHAIN EFFICIENCY - A CRITICAL REVIEW OF OUTSOURCING FUNCTION IN MUKWANO GROUP OF COMPANIES*. Retrieved from https://www.researchgate.net/publication/279924516_OUTSOURCING_LOGISTICS_SERVICES_AND_SUPPLY_CHAIN_EFFICIENCY_-_A_CRITICAL_REVIEW_OF_OUTSOURCING_FUNCTION_IN_MUKWANO_GROUP_OF_COMPANIES.
21. Learn.org. (2023). *What Is Environmental Management?* Retrieved from https://learn.org/articles/What_is_Environmental_Management.html.
22. M.C. Zijp, L. K. (2018). *Measuring the effect of Sustainable Procurement*. Retrieved from https://www.rivm.nl/bibliotheek/rapporten/2018-0069.pdf.
23. Manuela Piccardo, F. P. (2021). Impacts of Plastic-Made Packaging on Marine Key Species: Effects Following Water Acidification and Ecological Implications. *Journal of Marine Science & Engineering* .
24. Mishra, T. (2022, July 13). *Environmental Management*. Retrieved from https://www.safeopedia.com/definition/693/environmental-management.
25. Muyanja, T. O. (2019). *Characterization and Prognostication of Wastes Generated by Industries in Kampala Industrial and Business Park-Namanve*. Retrieved from https://www.academia.edu/68738910/Characterization_and_Prognostication_of_Wastes_Generated_by_Industries_in_Kampala_Industrial_and_Business_Park_Namanve.
26. REPORT, R. (2018). *Measuring the effect of Sustainable Procurement*. Retrieved from https://www.rivm.nl/bibliotheek/rapporten/2018-0069.pdf.
27. Roberta Stefanini, G. B. (2021). Plastic or glass: a new environmental assessment with a marine litter indicator for the comparison of pasteurized milk bottles. *The International Journal of Life Cycle Assessment volume* .
28. Semedo, M. H. (2021). *Plastics in soil threaten food security, health, and environment: FAO*. Retrieved from https://news.un.org/en/story/2021/12/1107342.
29. Tonny Ograh, J. A.-A. (2021). SUSTINERE. *Journal of Environment and Sustainability*.
30. Wallace, A. F. (2023). *Industrial Revolution*. Retrieved from https://www.britannica.com/event/Industrial-Revolution.
31. Wantao Yu, M. A. (2013). The effects of supply chain integration on customer satisfaction and financial performance: An organizational learning perspective. *International Journal of Production Economics*.

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Mukisa Simon Peter
Research coordinator