

# **BINDURA UNIVERSITY OF SCIENCE EDUCATION**

## **DEPARTMENT OF ENVIRONMENTAL SCIENCE**

### **ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICES (KAP) ON ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) IN CONSTRUCTION INDUSTRY. A CASE STUDY OF LEENGATE CONSTRUCTION.**



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## DECLARATION

I, Mangezi Runyararo (B212129B), hereby declare that this research titled “Assessment of Knowledge, Attitude and Practices (KAP) on Environmental, Social and Governance (ESG) In Construction Industry. A case study of Leengate construction” is entirely the outcome of my research and has not been submitted before. Information obtained from previously published studies has been clearly stated and referenced.

Student signature :



Date : 30 June 2025

### To be compiled by the supervisor

This dissertation is suitable for submission to the faculty and has been checked for conformity with faculty guidelines

Supervisor Signature :



Date : 7 October 2025

Signature of faculty department Chairman :  
October 2025



Date 13



## **DEDICATION**

I dedicate this project to my parents, Mr and Mrs Mangezi, for their unwavering support and for guiding me throughout this academic journey. Your love, patience and wisdom have shaped me into the person I am today. I dedicated this thesis to you as a statement of your impact on my life, with love and appreciation.

## **ACKNOWLEDGEMENTS**

Above all, I give thanks to God for granting me the strength, wisdom and perseverance to complete this project. I want to thank my parents for being supportive, encouraging and trusting me in studying this degree of my choice. Without forgetting to appreciate my colleague Nderere Absolom. T for being a constant source of encouragement, advice and support. My greatest gratitude goes to my supervisor, Nhokovedzo P, for his expert guidance, patience, and unwavering support throughout the research process.

## ABSTRACT

The global construction industry is a major driver of economic growth and infrastructure development, but also a significant contributor to environmental degradation, social inequality and governance challenges. In response, Environmental, Social, and Governance (ESG) principles have emerged as a critical framework for fostering sustainability and ethical practices. However, the adoption and effective implementation of ESG within the construction sector remain low, hindered by numerous barriers. This study assessed the Knowledge, Attitudes, and Practices (KAP) on Environmental, Social, and Governance (ESG) principles among management and employees at Leengate Construction Company in Harare, Zimbabwe, while identifying key barriers to ESG implementation. A cross-sectional research design was employed, collecting data from 127 respondents (96% response rate) through structured questionnaires. Stratified random sampling from a population was utilised and ensured representation across management, employees, administrative and technical department. The collected data were analysed using Statistical Package for Social Sciences (SPSS) to generate descriptive and inferential statistics. Findings revealed a notable disparity in ESG awareness, with management demonstrating strong knowledge (mean=0.77), particularly in regulatory compliance, while employees show alarming low familiarity with core ESG concept (0.49), and both have low scores regarding global frameworks like GRI, SASB, and TCFD and international green building certification systems like LEED and BREAM. Technical employees scored lower (0.47) than administrative staff (0.62) on knowledge towards ESG. Most concerning is the near total lack of awareness among technical staff regarding ESG reporting frameworks (0.08), suggesting these critical sustainability tools remain confined to boardrooms rather than being operationalised on construction sites. Management and employees, technical and admin staff strongly agrees that environmental consideration should be a top priority but undervalued social equity compared to financial performance. Finding reveals that technical employee view ESG as primarily relevant for multinational corporations, not local firms like Leengate, highlighting a critical failure in communication ESGs universal importance. Analysis of practical implementation shows selective compliance, where mandatory safety protocols and pollution control measures demonstrated strong adherence, whereas voluntary sustainability initiatives, particularly sustainable materials utilisation and energy efficiency show markedly low adoption rate in Leengate construction as a whole. The most significant challenges to ESG implementation were identified as high initial cost (88.19%), lack of awareness and training (78.74%) and the complexity of ESG regulations

(75.59%) and resistance to change (72.44%). The study concludes that while Leengate has a compliance base ESG foundation, strategic gaps in knowledge dissemination, sustainable innovation and governance transparency hinders full integration.

Key words: Environmental, Social, and Governance, Knowledge, Attitudes, and Practices, Construction industry, Sustainability

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## **ACRONYMS**

ESG -Environmental, Social and Governance

KAP- Knowledge, Attitude and Practice

GRI- Global Reporting Initiative

SASB-Sustainability Accounting Standards Board

TCFD-Task Force on Climate-related Financial Disclosures

LEED-Leadership in Energy and Environmental Design

BREAM-Building Research Establishment Environmental Assessment Method

TPB-Theory of Planned Behaviour

# CHAPTER 1: INTRODUCTION

## 1.0 Background of the study

The construction industry is one of the largest sectors globally, known for driving economic growth and infrastructure development (Abah, 2024) and significantly influences our environment, society, and governance globally. Socially, it is the largest industrial employer in most countries, accounting for approximately 22.5 % of the total employment worldwide (ILO, 2020). Its labour-intensive nature presents opportunities for poverty alleviation (Wuttke, 2014), however, the highly voluminous construction industry process and its traditional practices have raised concerns about environmental impact, social dynamics and government practices (Cruz, 2023).

The construction industry plays a significant role in environmental degradation as it is responsible for a large portion of carbon emissions globally, waste production and energy consumption (Wang & Xue, 2023; Chan, 2018). It accounts for approximately 33% of greenhouse gas emissions, 25% of waste water, 30% of the world's raw material consumption, 25% of solid waste generated and 12% of land utilisation (Zulu, 2022). On social dynamics, the sector employs millions of individuals, and they are highly exposed to unsafe working conditions, low wages, inadequate protective equipment, limited access to social benefits, health and safety a pressing issues and also affects local communities through noise pollution, traffic congestion and settlement displacement (Akomea-Frimpong, 2023; Wang & Xue, 2023; Barbosa, 2023). On governance practices, it is prone to issues like corruption, mismanagement, lack of corporate transparency of ESG information, poor compliance with ESG policies, poor stakeholder engagement and ethical violations (Barbosa, 2023; Hu, 2023). In response to these challenges, ESG consideration gained valuation as a benchmark framework for assessing sustainability and fostering ethical practices to ensure long-term value creation across various industries (Hu, 2023; Chong, 2024).

Environmental considerations evaluate construction practices on their impact on energy use, management of waste and ecosystem, climate change and adherence to sustainable building standards (Baratta, 2023). The social dimension includes the company's relationships with its interested stakeholders, like employees, suppliers, clients, and communities. It encompasses the promotion of diversity, elimination of discrimination, advancement of gender equality, employee training and ensuring worker safety, and fostering community protection and

engagement (Barbosa, 2023). On the governance, it mainly includes internal issues and control, audit, leadership, anti-corruption measures, transparency and accountability and ethical decision making in construction firms (Barbosa, 2023). This shows the significance of ESG adoption in the construction industry as it improves project outcomes and enhances reputations (Hu, 2023). To assess and manage ESG factors, organisations use established frameworks and standards and this guideline facilitates reporting, and measuring ESG performance, enabling businesses to with global sustainability goals and meet the demands of investors, regulators and stakeholders’

The most prominent frameworks used include the Global Reporting Initiative(GRI), used for sustainability, focusing on stakeholder engagement (Siew, 2017; Darnall, 2022) and promote transparency by encouraging firms to disclose both positive and negative impacts on society and the environment (Agbakwuru, 2024; Siew, 2017). Sustainability Accounting Standards Board (SASB), Task Force on Climate-related Financial Disclosures (TCFD) and the International Financial Reporting Standards(IFRS) S1 and S2 frameworks primarily deliver financially relevant ESG information for investors (Agbakwuru, 2024; Oliver Yébenes, 2024). TCFD address climate-related risks and opportunities, encouraging firms to disclose how climate change influences their governance and strategies, which is vital for construction firms considering the impact of climate change on infrastructure projects (Agbakwuru, 2024; Oliver Yébenes, 2024).

ISO 26000 is another relevant standard that guides organisations in social responsibility, helping them to adopt sustainable practices that align with global expectations (Sethi, 2017) and it covers key areas like human rights, labour practices and community engagement. Similarly, the Principles for Responsible Investments (PRI) is a global network that encourages investors to integrate ESG factors into their investment decisions, promoting their inclusion in financial analysis and reporting (Yamahaki, 2019). These frameworks provide various approaches for measuring and reporting ESG performance, allowing organisations to choose the most suitable ones for their goals and stakeholder requirements. Recent research highlights the escalating importance of supply chain management within ESG frameworks, with companies increasingly scrutinising their suppliers’ adherence to environmental and social standards (Agbakwuru, 2024).

The successful implementation of ESG principles in the construction industry requires active participation and consensus among industry practitioners and stakeholders. However, the

adoption of ESG practices in the construction industry is still low (Chan, 2018; Hoang, 2018). This is largely due to the absence of standardised performance indicators, limited awareness and understanding of ESG concepts among stakeholders, insufficient regulatory frameworks, competing priorities, lack of commitment, inadequate supply chain management and financial constraints of the company (Bezerra ., 2024; Butkovic, 2024). Addressing knowledge gaps, attitudinal barriers and enhancing ESG-related practices, construction companies can develop more effective strategies to mitigate their environmental and social impacts, improve ESG compliance and performance, strengthen stakeholder engagement and trust, and inform regulatory and policy development. Therefore, this research aims to evaluate the existing gap in KAP concerning ESG within the construction industry, ultimately determining the extent to which ESG is perceived as a valuable and necessary approach for fostering sustainable growth and enhancing the industry's overall impact.

### **1.1 Problem statement**

Despite the growing importance of ESG in the 21<sup>st</sup> century, there is still a gap in understanding the current state of knowledge, attitudes and practices among the construction industry. Construction companies are struggling to balance ESG principles, often prioritising short-term gains over long-term sustainability (Kyriakogkonas, 2022). This has led to inadequate ESG implementation, resulting in environmental problems, social inequality, and governance gaps (Akomea-Frimpong, 2023). The lack of standardised ESG frameworks, training programs and performance metrics hinders the development of ESG expertise and accountability. Stakeholders, including clients, investors and regulators, increasingly demand ESG transparency and accountability yet construction companies are struggling to provide credible ESG reports (Bezerra ., 2024).

The continued neglect of ESG considerations in the construction industry threatens environmental sustainability, social responsibility, economic viability, reputational damage and regulatory non-compliance (Chopra, 2024). The consequences of the inaction are far-reaching and impacting not only the industry but also communities, ecosystems and future generations (Samans, 2022). The construction industry's failure to address ESG concerns undermines global efforts to achieve the United Nations Sustainable Development Goals (SDGs) and the Paris Agreement on climate change.

## **1.2 Aim of study**

This study aims to assess the Knowledge, Attitudes, and Practices (KAP) on Environmental, Social, and Governance (ESG) principles among construction workers at Leengate Construction Company.

## **1.3 Research objectives**

### **1.3.1 Main objectives**

To determine the Knowledge, Attitudes, and Practices (KAP) on Environmental, Social, and Governance (ESG) within the construction industry at Leengate Company.

### **1.3.2 Specific objectives**

- To assess the level of knowledge, attitudes, and practices (KAP) on ESG principles among Leengate Construction employees and management.
- To identify challenges associated with ESG adoption and implementation within the construction industry at Leengate Company.

## **1.4 Research Questions**

- What is the current level of knowledge, attitudes, and practices (KAP) regarding ESG principles among employees and management?
- What are the key challenges associated with the adoption and implementation of ESG principles within the construction industry at Leengate Company?

## **1.5 Justification**

The validation for assessing knowledge, attitudes, and practices on ESG in the construction industry is multifaceted. Firstly, the industry's significant environmental impact requires improved sustainability practices. The construction industry accounts for approximately 33% of global greenhouse gas emissions (Zulu, 2022), emphasizing the need for reduced carbon footprints and environmentally friendly practices.

Secondly, regulatory pressures and stakeholder expectations driving the demand for enhanced ESG performance. Increasing regulatory requirements, such as the EU's Sustainable Finance Disclosure Regulation and the Task Force on Climate-related Financial Disclosures (TCFD), requires improved ESG reporting and transparency. Clients, investors and communities are

increasingly demanding ESG accountability and transparency in all industrial sectors leading to an increase in ESG adoption.

Furthermore, existing research has primarily focused on ESG adoption in other industries and revealed that a comprehensive understanding of ESG in the construction industry is lacking. Construction stakeholders have inadequate knowledge, poor attitudes, and unsustainable practices regarding ESG. This knowledge gap hinders the development of targeted interventions to enhance industry-wide sustainability performance.

This study also aligns with the United Nations' Sustainable Development Goals (SDGs), particularly SDG 9 (Industry, Innovation, and Infrastructure), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action). Therefore, investigating knowledge, attitudes, and practices on ESG in the construction industry will provide valuable insights for promoting sustainability, social responsibility, and governance in this critical sector.

The findings of this study will inform construction stakeholders on developing companies' strategies and training programs, guide policymakers and regulators in developing effective ESG frameworks, and contribute to the development of industry-wide ESG standards and best practices.



## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

This literature review aims to critically evaluate the current state of knowledge, attitudes, and practices on ESG in the construction industry. Reviewing related literature is crucial as it gives one a deeper understanding of the subject under study and assists in assessing the knowledge, attitude and practices of relevant stakeholders on ESG, whether integration is effective or not. The chapter also presents key terms, definitions, related theories, and the empirical evidence, which form the motivation of KAP, on which embracing ESG should be anchored for it to be a successful project.

### **2.1 Definition of terms**

#### **Environmental, Social and Governance (ESG) in construction**

The idea of ESG is a crucial framework for evaluating sustainability, ethical practices, and responsible governance within various construction industries (Chong, 2024). The system of frameworks is derived from the notion of responsible investment, which encompasses the strategic and practical integration of ESG aspects into investment decision-making and active ownership (Nugroho, Hsu, Hartauer, & Hartauer, 2024). The concept of Environmental, Social, and Governance (ESG) integration has gained popularity since its introduction by the United Nations in 2004 through the report "Who Cares Wins", and it is now widely regarded as a key metric for global sustainability (Singh, 2023). This ESG idea prioritises the assessment of firms' sustainability as it allows investors and regulators to evaluate long-term viability, societal implications, environmentally sustainable risks and governance structures of construction industry operations (Barbosa, 2023). The definition of ESG is broken down into three pillars, the environmental pillar which considers companies performance on environment including its impact on air quality, biodiversity, carbon footprint and greenhouse gas emissions, waste managements and water quality (Baratta, 2023; Wang & Xue, 2023; Barbosa, 2023). The social pillar focuses on the company's relationships with employees, suppliers, customers and community people concerning human rights, privacy policies, and community engagement (Baratta, 2023). The governance pillar includes company leadership, internal controls, audits, board composition, corruption, executive compensation and policies (Cek, 2020). This

criterion is important in the construction industry, as ESG adoption improves project outcomes and enhances reputation (Hu, 2023).

### **Knowledge, Attitude and Practices (KAP) in construction**

The KAP refers to a framework used to assess and understand the behaviours and perceptions of individuals or groups related to construction practices (Walter, 2018). Knowledge encompasses cognitive process such as memory and learning, which plays a crucial role in how individuals process and retain information about construction methods, safety protocols and regulations. Attitudes refer to emotional reactions individuals have towards construction-related subjects, shaped by their values, experiences and social influences. Practices denote specific actions that arise from the interplay between cognitive knowledge and affective attitudes. These practices align with individuals' values, beliefs, reflecting their understanding of and commitment to safety and sustainability in the construction process (Walter, 2018). The KAP models serve as a framework for identifying and addressing gaps in Knowledge, attitudes and practices among construction workers and stakeholders.

## **2.2 Theoretical frameworks**

Theoretical frameworks provide the foundation for understanding the relationships between the knowledge, attitudes and practices (KAP) in implementing Environmental, Social, and Governance (ESG) principles in the construction industry. These frameworks are essential for explaining how individuals and organisations perceive, adopt and act upon sustainability-related initiatives.

### **2.2.1 Ajzen's Theory of Planned Behaviour (TPB)**

The theory of Planned Behaviour is a psychological framework that aims to predict and understand human behaviour in various contexts, including the construction industry (Ajzen, 1992). Developed by Icek Ajzen in the 1980s, TPB speculates that individual behaviour is driven by three core components, which are attitudes toward the behaviour, subjective norms, and perceived behavioural control (Sultana, 2018). These components collectively influence an individual's intention to engage in a specific behaviour, which in turn predicts actual behaviour (Godin, 1996).

Attitude toward the behaviour, refers to an individual's positive or negative evaluation of performing a specific behaviour, this includes beliefs about the potential outcomes of the

behaviour and the value assigned to those outcomes, if a person believes that the behaviour will lead to favourable results, they are more likely to develop a positive attitude towards it, thus increasing the likelihood of engagement (Ajzen, 1992). The second component is subjective norms, which reflect the perceived social pressure to perform or refrain from the behaviour; this involves individual motivation to comply with these social expectations.

The perceived behavioural control accounts for the perceived ease and difficulty of performing the behaviour. This includes factors such as available resources, skills and external constraints that might facilitate or hinder the action. A higher perceived control often leads to stronger intentions to perform the behaviour, making it a crucial element in the decision-making process (Godin, 1996). TPB has significant implications, and understanding its components, practitioners can develop strategies to modify attitudes, shift subjective norms, enhance perceived control and influence employees' behaviour (Godin, 1996). This model is widely applied in various fields, including health, environmental management and organisational behaviour, to understand how attitudes and beliefs shape actions. In construction industries, managers and policymakers can design targeted interventions to promote positive behaviours, such as adopting sustainable practices or enhancing safety measures. Thus, TPB serves as a valuable tool for fostering behavioural change in the construction sector.

### **2.2.2 Stakeholder Theory**

Stakeholder theory is a business ethics concept that posits companies should consider the interests of all parties in their operations, not just shareholders, but also includes all employees, customers, suppliers, the community, and the environment. In other words, this theory emphasises that the organisation should satisfy its stakeholders to achieve a competitive advantage and by addressing their needs, the business can create sustainable value, foster long-term success, and enhance its reputation and loyalty. Effective stakeholder management is essential for aligning financial and operational goals; however, potential conflicts among stakeholders necessitate careful harmonisation of divergent interests to optimise outcomes. Incorporating responsible investment strategies and embracing ESG activities is vital for ensuring ethical operations and achieving better financial results. In other words, corporations are expected to embrace ESG practices in their day-to-day operations and firms that implement and manage ESG issues well will have better financial performance. Thus, stakeholder theory underscores the importance of a holistic approach to business, integrating ethical considerations into decision-making processes to drive sustainable success.

## **2.3 Empirical evidence**

### **2.3.1 Assessment of knowledge, attitudes and practices (KAP) on ESG principles in the construction industry.**

#### **Knowledge of ESG principles in the construction industry**

According to (Siew, 2017) most construction firms acknowledge ESG's potential benefits, including improved project efficiency, reduced environmental impact, and enhanced corporate reputation. Nowadays, the construction industries are now under pressure to disclose its ESG performance and practices on voluntary or regulatory requirements (Khamisu, 2024). However, knowledge and awareness are still limited, hindering the successful implementation of ESG practices (Khamisu, 2024).

A study by (Siew, 2017) revealed that Malaysian property and construction companies have poor ESG disclosure. There is a lack of transparency in reporting ESG issues, and the adoption of sustainable reporting tools such as GRI is severely lacking among Malaysian property and construction companies.

Studies by (Chopra, 2024; CPEA, 2023), underpinned that there is limited knowledge and awareness in various domains on ESG reporting frameworks such as the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB). This lack of knowledge and awareness is directly correlated with poor ESG performance. Similarly, (Ratnasingam, 2023) examined ESG knowledge among Malaysian industries and discovered that small- and medium-sized firms often lacked the expertise to integrate ESG principles into project workflows, and only 31 % of them were aware of ESG requirements, and micro-sized enterprises were unaware of the ESG practices (Gopi, 2023) and resulting in missed opportunities for environmental and social improvements, as well as delayed and poor decision-making.

In the construction industry, training programs have been shown to improve ESG knowledge significantly. Construction firms with higher ESG knowledge levels were more likely to integrate technologies like Building Information Modelling (BIM) to track environmental performance and governance metrics (Jing, 2024). A survey by the CFA Institute revealed that only 31% of respondents indicated that employees at their firms receive training on ESG issues in investment analysis and decisions (CFAInstitute, 2017).

## **Attitudes towards ESG in Construction**

Construction stakeholders recognise the importance of ESG, but their attitudes toward its adoption often vary. Literature revealed that top management with positive attitudes or who have strong attention towards environmental issues allocate more resources towards environmental practices since they have total control over resource production and utilisation (Ajibike, 2021). However, a study by (Kim & Chang, 2022) highlighted that some project managers in construction discourage ESG-related activities. These managers perceive ESG as a regulatory burden rather than a business opportunity, making it difficult to achieve widespread adoption in the construction industry.

A study by (Siew, 2017) examined that disclosure of non-financial data among Australian construction companies has low levels of ESG reporting, and those that issued sustainability reports outperformed their competitors. Further explained that a few stakeholders embrace the idea of ESG, largely due to the fragmentation and diverse nature of the industry.

## **ESG Practices in the Construction Industry**

Despite growing awareness, the actual adoption of ESG practices remains limited in the construction sector. According to (Siew, 2017) stated that companies with reasonable corporate social responsibility indicators and disclosures have a better reputation and performance, disclosures enhance transparency, reduce information asymmetry and improve investment efficiency. However, (Akomea-Frimpong, 2023) highlighted that some firms present misleading and substandard ESG reports to stakeholders and manipulate annual reports on ESG to portray that they are embracing sustainable practices, yet they are not.

A study by (Darnall, 2022) revealed that companies that adhere to ESG frameworks reported 39% more data than companies which do not follow guidelines. This shows that there are limited practices in following ESG guidelines. Firms in the construction industry are complying with ESG policies and practices due to the increasing pressure from investors, employees and companies, thereby shaping their perception, performance, and evaluation beyond financial measures (Barbosa, 2023).

Additionally, (Bezerra et al., 2024) identified that green building certifications (e.g., LEED, BREEAM) improved ESG compliance, yet adoption rates remained low due to concerns over high costs and lengthy certification processes. These findings suggest that while ESG adoption

is increasing, more structured efforts are needed to integrate sustainability into all aspects of construction.

## **2.4 Challenges associated with ESG adoption and implementation in the construction industry.**

### **Regulatory and Policy Barriers**

One of the primary challenges in ESG adoption within the construction industry is the lack of clear and consistent regulations (Loko & Schiehl, 2025) (Xingbo, 2024) (Aldowaish, Kokuryo, Almazyad, & Goi, 2022). A report by (CPEA, 2023) highlighted that construction firms struggle with ESG compliance due to fragmented regulatory frameworks (Alhoussari, 2024) or unclear sectoral policy definition of ESG, introduction of a set of new regulations and revision of key policies, making it difficult for stakeholders to adopt and implement ESG in the Construction Industry (Xingbo, 2024).

A report by (CPEA, 2023), explained that government policies on ESG are often reactive rather than proactive, meaning that regulatory changes occur in response to crises rather than as part of a long-term sustainability strategy. This inconsistency discourages investment in ESG initiatives, as construction firms face uncertainty about future regulatory requirements (Wang & Xue, 2023).

### **Financial Constraints**

According to (Wang & Xue, 2023; Lei & Zhao, 2024; Wei, He, & Wu, 2025) highlighted that a major barrier to ESG adoption in construction is the perceived high cost of implementing sustainable practices such as adopting environmentally friendly technologies and materials, improving social welfare measures, and improving corporate governance. (Bezerra et al., 2024), highlighted that many companies, particularly small and medium-sized enterprises (SMEs) in South Africa, lack the financial resources to invest in ESG initiatives. These SMEs face difficulties in obtaining bank credit due to a lack of tangible collateral, and their credit application are rejected, thus making it difficult for them to transition toward sustainable practices.

### **Resistance to Change and Lack of Leadership Commitment**

The implementation of ESG requires cooperation and coordination between construction companies and other relevant stakeholders such as governments, community organisations, suppliers, and customers (Wang & Xue, 2023). A study by (Bezerra et al., 2024) revealed that

organisations resistant to change are a significant obstacle to effectively implementing ESG practices in the construction sector. However, issues such as cultural changes (Carreno, 2024), conflicting goals, immature cooperation mechanisms, additional costs associated with implementing sustainable practices, different interests among different stakeholders and a lack of understanding of the benefits of adopting ESG approaches lead to resistance in the adoption and implementation of ESG (Bezerra et al., 2024; Wang & Xue, 2023; Alhoussari, 2024) . Organisational resistance to implementing ESG practices can arise when organisations do not adequately value stakeholder engagement and transparency in communicating environmental performance, since executives in construction firms view ESG as a compliance issue rather than a business opportunity, resulting in weak leadership commitment to sustainability and ESG initiatives failing to gain traction within organisations without strong leadership support as underpinned by (Bezerra et al., 2024).

### **Limited ESG Training and Skills**

According to (Wang & Xue, 2023) successful implementation of ESG requires the participation and consensus of construction industry practitioners and relevant stakeholders. However, there is still an inadequate trained staff on ESG implementation and adoption, and a lack of expertise within construction firms is a critical barrier (Hoff, 2015; Wang & Xue, 2023). Similarly (Bezerra et al., 2024) highlighted that both internal and external stakeholders have limited knowledge, skill, experience and awareness of ESG, signifying a deep lack of understanding among clients, professionals, and other stakeholders with the idea of ESG, leading to leading to non-compliance with sustainability policies and lack of motivation among construction industry practitioners in implementing ESG practices.

### **2.5 Gap of study**

Despite the growing attention to ESG (Environmental, Social, and Governance) principles in the construction industry, there remains a significant disconnect between awareness and effective implementation among industry players. Empirical evidence consistently points out that while some firms recognise the potential advantages of ESG, the overall level of knowledge, especially concerning global standards and reporting frameworks, is still insufficient, particularly among small and medium-sized enterprises. Many construction professionals and organisations lack access to targeted ESG training, resulting in a poor understanding and weak application of ESG practices on projects. Attitudinally, there is a fragmentation, with management in some companies viewing ESG as a compliance obligation

rather than a strategic opportunity, which dampens motivation and leads to minimal, sometimes superficial, adoption. In practice, this translates into inconsistent ESG reporting, limited uptake of green certifications, and, in some cases, greenwashing, where firms exaggerate their sustainability credentials. Furthermore, regulatory ambiguity, financial constraints, and lack of leadership commitment continue to hinder real progress. While previous studies have highlighted these challenges, there is limited research that holistically examines the interplay between knowledge, attitudes, and practices regarding ESG in the construction sector, especially at the firm and individual levels. This gap makes it difficult to design effective interventions or policies that address the root causes of slow, poor ESG adoption and implementation. Therefore, this comprehensive study aims to assess the actual knowledge, prevailing attitudes, and current practices relating to ESG among construction stakeholders and the research will provide actionable insights for industry leaders, policymakers, and educators to bridge the gap between ESG awareness and genuine, impactful implementation.



## CHAPTER 3: METHODOLOGY

### 3.0 Introduction

This chapter outlines the research methodology adopted to examine the Knowledge, Attitudes, and Practices (KAP) regarding Environmental, Social, and Governance (ESG) within the Leengate Construction Industry. The chapter covers the research philosophy, approach, strategy, data collection methods, sampling techniques, and data analysis procedures.

### 3.1 Study Area

The research was conducted at Leengate PVT Ltd, located at 3rd Prince Edward St, Harare, Zimbabwe. It specialises in housing and property development infrastructure in all cities. The company was incorporated in 1996 and has gained substantial experience in the provision and supply of products in the structural, mechanical, electrical, and civil fields. Data was collected from 4 sites, Spitzkop site 17°47'10.11"S latitude and 30°52'15.24"E longitude; Penrose site 17°40'24.39"S latitude and 30°47'41.84"E longitude; Arlington 17°54'17.22"S latitude and 31° 4'35.07"E longitude; Leengate HQ 17°48'14.73"S latitude and 31° 2'0.13"E longitude.

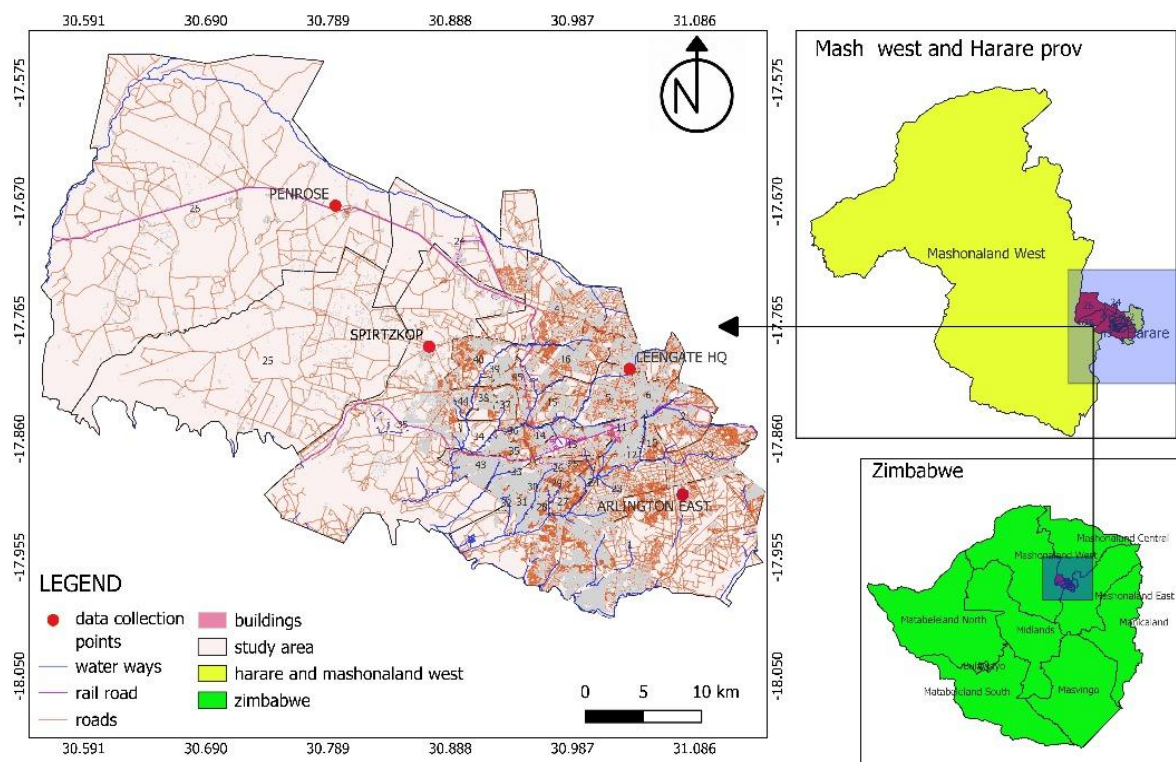


Figure 3.1.1 Map showing the locations of study areas in Harare, Zimbabwe

### **3.2 Study design**

The study employed a cross-sectional research design for assessing Knowledge, Attitudes, and Practices (KAP) on Environmental, Social, and Governance (ESG) in the construction industry. The cross-sectional study collects information from a large population at a single point in time, providing a snapshot of the current KAP on ESG among construction employees. The data was gathered through surveys and was analysed using both quantitative and qualitative approaches because the study is descriptive.

### **3.3 Research approach**

In this study, the positivist philosophy was employed as it assumes that KAP on ESG can be objectively measured and quantified. This approach enables researchers to use statistical methods to analyse and identify patterns and relationships. It also adopts a deductive approach, which involves starting with a review of literature on ESG in the construction industry, KAP studies and testing for association using statistical analysis. This approach will enable the researcher to test theories and research questions and provide a clear and structured framework for investigating KAP on ESG among construction industry employees (Saunders, 2019).

### **3.4 Target population**

Population refers to a group of individuals, objects, items or entities with common characteristics or attributes. (Etikan, 2019). The target population for the study was the management and employees of Leengate Construction. The population size used was (N=200) respondents from four sites.

### **3.5 Sampling technique**

A sampling technique determines the most appropriate approach for obtaining a sample that accurately shows the population of interest (Etikan, 2019). The researcher used a stratified random sampling technique to select a sample of participants at Leengate Company. Stratified random sampling was a probability sampling technique where participants were put into smaller groups called strata (Etikan, 2019). Then, in each stratum, participants of the sample are chosen using a simple random mechanism (Etikan, 2019). The stratified random sampling was applied as follows: firstly, Leengate construction sites were picked as main categories (strata). Secondly, in these four main sites, participants were randomly chosen. The major advantage of using random sampling is that every element has an equal chance of being selected and being part of the main sample. Also, it ensured that the selected sample from the

target population provides a meaningful analysis and generalisation of findings while minimising bias, maximising the validity and reliability of the study results.

### **3.5.1 Sample size**

The sample is termed a subset of a population or representative of the population (Etikan, 2019). The sample size was calculated using the formula as shown below

#### Formula

$$n = N / (1 + Ne^2)$$

n=expected sample size

N=population

e=level of precision

$$n = 200 / (1 + 200(0.05)^2)$$

$$n = 132$$

As shown above, the researcher used a target sample of 132 respondents, which was also in line with (Ajibike, 2021), who stated that the perfect sample should be between thirty (30) and five hundred (500).

### **3.6 Research instrument**

According to (Vitale, 2008), a questionnaire is a data collection instrument consisting of a series of questions to gather information from respondents. According to (Dewaele, 2018), the design of a questionnaire differs according to how it is delivered, returned and collected from respondents. Self-completed questionnaires are usually completed by the respondents and are often referred to as surveys.

An informed consent letter was attached to the questionnaire. Its purpose was to identify the researcher and introduce the research topic. The questionnaire was designed in a way that does not require the respondents to reveal their names but their job title, education level and gender. This was done to assure confidentiality and anonymity to respondents, encouraging them to share information more honestly. The survey questionnaire was structured into four parts. Section A contained demographic questions intended to gather data relating to the respondents' personal information, that is, the education level, gender, job title and their position in the firm. The information was used to validate the respondents' participation in the study.

Section B had closed-ended questions (using Yes or No answers), on the understanding of the Knowledge on ESG within the construction industry. Sections C and D had closed-ended questions on understanding of the attitude and practices, respectively on ESG within the construction industry. In these sections, a five-point Likert scale was used and scale ranges from 'never,' 'rarely,' 'sometimes,' 'often,' to 'always, and other ranged from 'strongly disagree,' 'disagree,' 'neutral,' 'agree,' to 'strongly agree. Section E had a closed question on identifying challenges to ESG implementation and adoption in the construction industry

The questionnaire was constructed on Google Forms. The response was automatically recorded and viewed in Google Sheets. Also, some questionnaires were physically distributed as hard copies. The researcher used questionnaires because they are relatively easy, quick and cost-effective; however, the instrument is subject to response bias and a pilot study was conducted.

### **3.7 Pilot study**

A pilot test is a small-scale preliminary study conducted to evaluate the feasibility, time, cost, and effectiveness of a research project or survey before the main study is carried out. (Thabane, 2010). A pilot test on the survey questionnaire was conducted by the researcher before the final distribution. This was done to ensure the questionnaire was generally clear and comprehensible. From the 10 questionnaires distributed through WhatsApp, only 1 wasn't completely done, showing no questions were deemed unclear, and no additional suggestions for improvement were required. Thus, the questionnaire was suitable for distribution.

### **3.8 Data collection**

Survey Questionnaires were administered both online and physically to Leengate employees. An email with a link to access the questionnaire on Google Forms was sent to Leengate employees through WhatsApp, and some were distributed as hard copies. Those who responded using Google Forms, their responses recorded automatically in Google Sheets. Results were combined into one Microsoft Excel sheet.

#### **3.8.1 Data analysis**

Data from the Microsoft Excel sheet was coded and exported to the Statistical Package for Social Sciences (SPSS) software for data analysis. SPSS was used to analyse data obtained from questionnaires for effective management of data, elimination of errors and saving time. The quantitative analysis employed SPSS to analyse the gathered data obtained using tests such as arithmetical Mean, nominal data (gender) and ordinal data (age group) were coded and

inputted through SPSS. The results were presented using frequency, percentages, mean rank, standard deviations and mode. Also, tables were used for data visualisation.

### **3.8.2 Data validity and reliability**

Validity refers to the truthfulness of the study or to the extent to which the research instruments accurately measure what they intend to measure, ensuring that questionnaires effectively capture knowledge, attitudes, and practices related to ESG. Reliability, on the other hand, relates to the consistency of a measure. Reliability assesses the consistency of these instruments over time, indicating whether repeated measurements yield similar results. In this study, the researcher ensured the questionnaire (tool) used for gathering data was valid and reliable by conducting a pilot test first. This was done to ensure high validity and reliability, strengthen the credibility of findings, and ensure that conclusions about KAP on ESG are robust and trustworthy.

### **3.9 Ethical considerations**

The researcher sought permission from the Bindura University of Science and Education before conducting the research, and there was also a consent question at the beginning of the questionnaire to verify participants' consent before they proceeded to answer the questions within the questionnaire. The researcher ensured the privacy and confidentiality of participants. During the data collection stage, respondents were assured that all data provided would be kept confidential and would be used exclusively for evaluation purposes, and results would be reported in a collective or combined manner. Questionnaires did not contain any fields for filling in personal data (which is the names of respondents) that could lead to the identification of the respondents. The researcher emphasised that the responses of participants would be kept confidential and anonymous. Also, participation was voluntary, and the participants had the right to refuse to take part in the study if not interested.

## CHAPTER 4: RESULTS

### 4.0 Introduction

The chapter presents the findings of the current study, which investigated the knowledge, attitudes, practices and challenges related to ESG (Environmental, Social, and Governance) implementation among stakeholders at Leengate Construction. The results are organised in alignment with the study's main objectives, ensuring clarity and coherence in addressing each research question. Data were analysed using SPSS, employing both descriptive statistics such as frequencies, percentages, means, and standard deviations and inferential methods.

### 4.1 Response rate of research instrument

The research employed structured questionnaires as its primary data collection tool. A total of 132 questionnaires were distributed to targeted participants.

Table 4.1.1 Research Tools Response Rate

| Research Tools              | Frequency | Rate |
|-----------------------------|-----------|------|
| Questionnaires administered | 132       | 100% |
| Questionnaires returned     | 127       | 96%  |

As shown in Table 4.1.1, 127 completed questionnaires were returned, resulting in a high response rate of 96%. This strong return rate reflects effective engagement with respondents and enhances the reliability and representativeness of the study's findings. It also suggests that the topic was relevant and of interest to the participants, increasing the credibility of the data gathered for analysing ESG knowledge, attitudes, practices, and perceived challenges at Leengate Construction.

Table 4.1.2 Demographic Summary

| Category                | Response | Percentage (%) |
|-------------------------|----------|----------------|
| <b>Gender</b>           |          |                |
|                         | Male     | 69.29          |
|                         | Female   | 30.71          |
| <b>Current position</b> |          |                |

|                            |                                                                                                                                                 |       |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------|
|                            | General employees (carpenters, bricklayers, Plumbers, Electricians and General hands)                                                           | 62.99 |
|                            | Management employee (Architects, Engineers, Project managers& Site managers, Quantity surveyor, Sales and Procurement/clerks, Site Supervisors) | 37.01 |
| <b>Department</b>          | Administrative (Human Resource, Finance and accounting, Project management, Receptionist, Procurement, SHEQ Officers)                           | 29.8  |
|                            | Technical (Engineers, Information Technology, Quality Assurance, Operations, Quantity surveying, Site supervisor)                               | 70.2  |
| <b>Years of experience</b> | 1 - 5 years                                                                                                                                     | 47.24 |
|                            | 6 - 10 years                                                                                                                                    | 31.5  |
|                            | More than 11 years                                                                                                                              | 21.26 |
| <b>Formal education</b>    | Bachelor's Degree and above                                                                                                                     | 15.75 |
|                            | National Diploma or Higher National Diploma                                                                                                     | 28.35 |
|                            | Secondary School Certificate (e.g., ZJC, O-Level, A-level)                                                                                      | 55.9  |

The gender distribution among respondents shows that 69.29% were male, while 30.71% were female. This reflects the traditional male dominance in the construction industry, although the presence of women, nearly a third, is a positive sign of increasing gender inclusion in a historically male-dominated sector.

In terms of professional roles, 62.99% of participants identified as general employees, which includes trades such as carpenters, bricklayers, plumbers, electricians, and general labourers. In contrast, 37.01% were categorised as management employees, including architects, engineers, project and site managers, quantity surveyors, sales, procurement clerks, and site supervisors. This suggests that the majority of feedback came from those directly engaged in on-site work, offering practical insight into ESG implementation at the operational level.

In terms of departmental roles, 29.8% of participants were identified as administrative department, which includes Human Resource, finance and accounting, project management, receptionist, procurement, SHEQ Officers and 70.2% of participants were identified as technical department which consist of Engineers, Information Technology, Quality Assurance, Operations, Quantity surveying, Site supervisor and Site foreman. This percentage difference reflects construction industry is project-based, technical expertise is crucial for project execution and technical staff are directly involved in project planning and monitoring compared to administrative employees who provides support functions and compliance.

Regarding work experience in the construction industry, nearly half of the respondents (47.24%) have between 1 to 5 years of experience, followed by 31.5% with 6 to 10 years, and 21.26% with more than 11 years. This indicates a workforce with a relatively young to mid-level experience profile, which may influence their familiarity with and attitudes toward newer frameworks like ESG.

In terms of educational attainment, the majority of respondents (55.9%) hold a Secondary School Certificate, such as ZJC or O-Level/A-Level qualifications. Another 28.35% have completed a National Diploma or Higher National Diploma, while only 15.75% possess a Bachelor's degree or higher. These results suggest that ESG training and communication strategies should be designed with a broad range of educational backgrounds in mind, potentially requiring more accessible and practical forms of learning and engagement.

#### **4.2 Level of knowledge, attitude and practices (KAP) on ESG principles among Leengate management and employees on ESG**

Table 4.2.1 Knowledge of ESG among management and employees on ESG

|                                                                                                                        | <b>Management</b> | <b>Employees</b> |
|------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|
| <b>Knowledge Item</b>                                                                                                  | Mean±Std Dev      | Mean±Std Dev     |
| Are you familiar with the United Nations' Sustainable Development Goals (SDGS) and their connection to ESG principles? | 0.35±0.48         | 0.18±0.45        |



|                                                                                                                                          |                  |                  |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| Are you aware of any specific Zimbabwean laws or regulations that require construction projects to manage their environmental impact?    | 0.98±0.32        | 0.66±0.47        |
| Are you aware of any specific Zimbabwean regulations concerning worker health and safety on construction sites?                          | 0.94±0.23        | 0.74±0.37        |
| Are you familiar with international green building certification systems such as LEED or BREEAM                                          | 0.31±0.47        | 0.18±0.38        |
| Are you familiar with ESG reporting tools such as the GRI, SASB, TCFD,                                                                   | 0.28±0.45        | 0.12±0.32        |
| Are you aware of any initiatives undertaken by Leengate Construction aimed at reducing its environmental impact                          | 0.91±0.28        | 0.88±0.40        |
| Are you aware of initiatives undertaken by Leengate Construction focused on employee welfare and development?                            | 0.85±0.36        | 0.80±0.40        |
| Are you aware of any published formal ESG or Sustainability reports detailing its performance and commitments in these areas?            | 0.44±0.5         | 0.21±0.41        |
| Leengate Construction have a formal, documented Environmental Management Plan (EMP) that is actively used for its construction projects. | 0.88±0.32        | 0.67±0.42        |
| <b>Overall mean Score</b>                                                                                                                | <b>0.77±0.38</b> | <b>0.49±0.40</b> |
| Levels: Poor (0-0.49), moderate (mean 0.5-0.69), Strong (mean 0.7-1.0)                                                                   |                  |                  |

The survey results highlight a clear ESG knowledge Gap between Leengate management (mean score 0.77) and employees (with a 0.49 mean score). Management demonstrates strong awareness of local regulations like the Environmental Act (0.98) and 0.94 for health and safety worker laws, as well as internal ESG initiatives (0.91 for environmental programs). Employees show moderate familiarity with these areas but significantly lower understanding (scores between 0.66-0.88)

Both groups display concerning knowledge gaps regarding global ESG frameworks, with particularly low scores for UN SDGs (management has 0.35, employees have 0.18), green building certification (0.31 for management and employees with 0.18) and ESG reporting standards (0.28 and 0.12, respectively). While awareness of company-specific programs is relatively high, understanding of formal ESG documentation like published reports shows room for improvement (management with 0.44 and employees with 0.21). The findings suggest Leengate have effectively implemented compliance-focused ESG practices but needs to reinforce employee training on international standards and improve communication of formal ESG policies. The disparity between local regulatory knowledge and global ESG understanding indicates an opportunity to enhance the company's strategic sustainability approach.

Table 4.2.2 Attitudes on ESG among management and employees

|                                                                                                                                          | <b>Management</b> | <b>Employees</b> |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|
| <b>Attitude Item</b>                                                                                                                     | Mean±Std Dev      | Mean±Std Dev     |
| Integrating ESG principles is essential for the long-term success and sustainability of construction companies.                          | 4.19±1.12         | 3.72±1.25        |
| Environmental considerations should be a top priority for all construction projects.                                                     | 4.74±0.44         | 4.22±0.65        |
| Social factors are just as important as financial performance in the construction industry                                               | 4.58±0.5          | 3.77±0.75        |
| Good governance practices are crucial for building trust and integrity in the construction sector.                                       | 4.45±0.71         | 3.85±0.85        |
| ESG is more of a concern for large, multinational construction firms than for smaller, local companies                                   | 3.94±1.02         | 4.08±1.15        |
| My role and actions within my company can have a direct impact on its overall ESG performance.                                           | 4.39±0.66         | 4.15±0.80        |
| The primary responsibility for ensuring a construction company meets its ESG commitments lies with its senior management and leadership. | 4.3±0.83          | 3.92±0.95        |
| Every employee has a part to play in contributing to the company's ESG goals and performance.                                            | 4.27±0.68         | 4.03±0.82        |

|                                                                                                                                                             |                  |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| Construction companies have a moral obligation to protect the environment and minimise their negative impacts, even if it involves extra costs or effort.   | 4.17±0.78        | 4.12±0.90        |
| Construction companies should actively prioritise the well-being and concerns of local communities in their project planning and execution phases.          | 4.21±0.62        | 4.05±0.75        |
| It is primarily the government's responsibility to address and fund solutions for broad environmental and social issues related to construction activities. | 3.60±0.98        | 3.42±1.10        |
| I feel personally motivated to contribute to better ESG practices in my work and within my company.                                                         | 4.23±0.71        | 4.00±0.85        |
| <b>Overall Score</b>                                                                                                                                        | <b>4.27±0.75</b> | <b>3.94±0.90</b> |

The table reveals significant differences in how management and employees perceive ESG principles at Leengate Construction Company. Management demonstrates stronger conviction about ESG's strategic importance, especially on environmental priorities such as minimising environmental pollution with means scores (management has 4.74 and employees have 4.22) and governance practices such as ethical bidding process, anti-corruption measures, management has 4.45 but employees have 3.85. This 0.5-0.8 gap across core ESG pillars suggests leadership sees these factors as more critical to business than frontline workers do. Both groups show the highest agreement on environmental considerations being a top priority, though employees are notably less convinced about social factors (worker health and safety, fair wages, positive community relations, diversity), equivalent to financial performance (management's 4.58 and employees' 3.77)

Employees and Management alignment occurs in three areas: personal beliefs (management 4.39 and employees 4.15), moral environmental obligations (management 4.17 and employees 4.12), and community focus (4.21 and 4.05 respectively). This shows shared recognition of operational ESG responsibilities within the organisation. However, employees show more scepticism about the governance role and are more likely to view ESG as relevant mainly for multinationals (employees 4.08 and management 3.94). These gaps suggest employees may view ESG as a compliance-driven rather than a strategic approach. The results suggest Leengate has successfully communicated environmental and community priorities but needs

to strengthen employee buy-in for social governance. On average, management has a strong positive attitude (4.26) and employees (3.95), indicating a moderate to positive attitude on ESG in the whole organisation.

Table 4.2.3 Practices on ESG among management and employees

|                                                                                                                                                                              | <b>Management</b> | <b>Employees</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|
| <b>Practices Item</b>                                                                                                                                                        | Mean±Std Dev      | Mean±Std Dev     |
| How often does your company implement measures for the segregation of waste                                                                                                  | 4.23±0.87         | 3.85±0.92        |
| How often are sustainable or recycled buildings prioritised and used in your company's projects?                                                                             | 3.45±1.14         | 2.90±1.20        |
| How often does your company actively monitor and implement measures to reduce energy consumption on construction sites                                                       | 3.94±0.72         | 3.60±0.85        |
| How often are specific measures taken to control air pollution?                                                                                                              | 4.29±0.77         | 3.95±0.88        |
| How often does your company ensure there are clear procedures for the safe handling, storage, and disposal of hazardous materials                                            | 4.48±0.84         | 4.10±0.90        |
| How often are water conservation techniques practised on your construction sites?                                                                                            | 4.00±0.92         | 3.55±1.05        |
| Does your company actively engage with local communities before and during construction projects?                                                                            | 4.21±0.32         | 3.75±0.65        |
| Does your company assess the ethical labour practices of its key suppliers or employees?                                                                                     | 4.54±0.11         | 4.20±0.45        |
| Does your company regularly communicate its overall performance to its employees?                                                                                            | 3.28±0.23         | 2.85±0.70        |
| Is there a clear, confidential, and accessible process for employees to report unethical behaviour, other grievances (whistleblowing mechanism) without fear of retaliation? | 4.44±0.78         | 4.00±0.82        |

|                                                                                                             |                  |                  |
|-------------------------------------------------------------------------------------------------------------|------------------|------------------|
| Are employees provided with training or regular communication on ethical conduct, anti-corruption policies? | 3.81±0.57        | 3.30±0.75        |
| <b>Overall score</b>                                                                                        | <b>4.06±0.66</b> | <b>3.64±0.83</b> |

The results shows that management demonstrates stronger performance across all measured ESG practices, with an average score of approximately 4.1 compared to employees' 3.6. This gap is noticeable in operational sustainability practices, where employees lag significantly behind in areas like sustainability practices, where employees lag in areas like sustainable material usage (2.90 and water conservation (3.55) compared to management with (3.45) and (3.55) respectively. These findings suggest that while policies and procedures are well established at the management level, their practical application at the employee level requires improvement. Both groups show the highest scores in compliance-driven activities particularly hazardous material handling (4.48 management, 4.10 employees) and pollution (4.29 management, 4.10 employees) and pollution control (4.29 management, 3.95). These strong scores reflect companies' effective response to regulatory requirements and safety protocols. Similarly, whistle-blowing mechanisms score higher also (4.44 management, 4.00 employees), indicating a robust formal reporting system within the company. Both groups received low scores on sustainable material adoption and internal ESG communication (3.28 management, 2.85 employees). Similarly, the gap in ethnic targeting scores (3.81 management, 3.30 employees) highlights a need for effective training programs as it may undermine the company's ability to implement its ESG strategy and achieve consistent sustainability performance across all levels of operation.

### 4.3 Level of knowledge, attitude and practices (KAP) on ESG principles among Leengate's administrative and technical department on ESG

Table 4.3.1 Knowledge among the administrative and technical departments on ESG

|                | <b>Administrative</b> | <b>Technical</b> |
|----------------|-----------------------|------------------|
| Knowledge Item | Mean±Std Dev          | Mean±Std Dev     |

|                                                                                                                                          |                  |                  |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| Are you familiar with the United Nations' Sustainable Development Goals (SDGS) and their connection to ESG principles?                   | 0.28±0.45        | 0.12±0.33        |
| Are you aware of any specific Zimbabwean laws or regulations that require construction projects to manage their environmental impact?    | 0.95±0.22        | 0.70±0.46        |
| Are you aware of any specific Zimbabwean regulations concerning worker health and safety on construction sites?                          | 0.90±0.30        | 0.82±0.39        |
| Are you familiar with international green building certification systems such as LEED or BREEAM                                          | 0.25±0.43        | 0.15±0.36        |
| Are you familiar with ESG reporting tools such as the GRI, SASB, TCFD,                                                                   | 0.27±0.46        | 0.08±0.27        |
| Are you aware of any initiatives undertaken by Leengate Construction aimed at reducing its environmental impact                          | 0.85±0.36        | 0.78±0.42        |
| Are you aware of initiatives undertaken by Leengate Construction focused on employee welfare and development?                            | 0.80±0.40        | 0.75±0.44        |
| Are you aware of any published formal ESG or Sustainability reports detailing its performance and commitments in these areas?            | 0.50±0.50        | 0.18±0.39        |
| Leengate Construction have a formal, documented Environmental Management Plan (EMP) that is actively used for its construction projects. | 0.82±0.39        | 0.65±0.48        |
| <b>Overall mean Score</b>                                                                                                                | <b>0.62±0.39</b> | <b>0.47±0.39</b> |
| Levels: Poor (0-0.49), moderate (mean 0.5-0.69), Strong (mean 0.7-1.0)                                                                   |                  |                  |

The table shows a clear division in ESG knowledge between administrative and technical employees. Administrative employees scored moderately higher overall (0.62) compared to technical employees (0.47), showing their stronger grasp of governance and compliance aspects. This aligns with their job functions, as they demonstrated near-perfect awareness of

Zimbabwe's laws and regulations (EMA) (0.95) and worker safety regulations (0.90), along with company documentation like published reports and a better understanding of the ESG reporting tool (0.35). Their role in policy implementation and compliance monitoring gives them an advantage in these areas.

The most concerning gaps appear in technical employees, who have extremely low scores for ESG reporting tools (0.08), indicating that they are not aware of how their work connects to the company's broader sustainability reporting. Similarly, they have limited awareness of published ESG reports (0.18), suggesting these documents aren't reaching the frontline teams. Administrative employees have stronger awareness overall; however, comparatively low scores for LEED certification awareness (0.25). These results demonstrate that the company need to build a shared understanding of strategic ESG goals.

Table 4.3.2 Attitudes among the administrative and technical departments on ESG

|                                                                                                                                          | <b>Administrative</b> | <b>Technical</b> |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------|
| <b>Attitude Item</b>                                                                                                                     | Mean±Std Dev          | Mean±Std Dev     |
| Integrating ESG principles is essential for the long-term success and sustainability of construction companies.                          | 4.32±0.70             | 3.85±0.92        |
| Environmental considerations should be a top priority for all construction projects.                                                     | 4.65±0.50             | 4.25±0.75        |
| Social factors are just as important as financial performance in the construction industry                                               | 4.40±0.65             | 3.70±0.88        |
| Good governance practices are crucial for building trust and integrity in the construction sector.                                       | 4.50±0.60             | 3.90±0.85        |
| ESG is more of a concern for large, multinational construction firms than for smaller, local companies                                   | 3.60±1.05             | 4.10±1.10        |
| My role and actions within my company can have a direct impact on its overall ESG performance.                                           | 4.45±0.65             | 4.15±0.80        |
| The primary responsibility for ensuring a construction company meets its ESG commitments lies with its senior management and leadership. | 4.25±0.80             | 3.95±0.95        |
| Every employee has a part to play in contributing to the company's ESG goals and performance.                                            | 4.30±0.70             | 4.05±0.85        |

|                                                                                                                                                             |                  |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| Construction companies have a moral obligation to protect the environment and minimise their negative impacts, even if it involves extra costs or effort.   | 4.20±0.75        | 4.10±0.90        |
| Construction companies should actively prioritise the well-being and concerns of local communities in their project planning and execution phases.          | 4.35±0.65        | 4.00±0.80        |
| It is primarily the government's responsibility to address and fund solutions for broad environmental and social issues related to construction activities. | 3.30±1.10        | 3.60±1.15        |
| I feel personally motivated to contribute to better ESG practices in my work and within my company.                                                         | 4.40±0.70        | 4.05±0.85        |
| <b>Overall Attitude Score</b>                                                                                                                               | <b>4.23±0.74</b> | <b>3.98±0.90</b> |

The knowledge reveals that administrative employees place substantially greater importance on social factors such as worker welfare and community relations (4.40) as compared to technical employees (3.70), suggesting technical employees may prioritise immediate productivity over social considerations. Secondly, technical employees are more likely to view ESG as primarily relevant for large multifunctional firms (4.10 compared to administrative, with a mean of 3.60), indicating a potential perception that sustainability requirements don't apply equally to local operations. Administrative staff show stronger belief in leadership accountability (4.26) compared to technical employees (3.95), and personal motivation (4.40) compared to technical employees (4.05)

Both share recognition of environmental obligations (4.20 administrations, 4.10 technical) and consensus that all employees contribute to ESG outcomes (4.30 and 4.05, respectively). The findings suggest that while organisations have successfully communicated ESG principles across functions, meaningful perception gaps remain.

Table 4.3.3 Practices among the administrative and technical departments on ESG

|                      | <b>Administrative</b> | <b>Technical</b> |
|----------------------|-----------------------|------------------|
| <b>Practice item</b> | Mean±Std Dev          | Mean±Std Dev     |

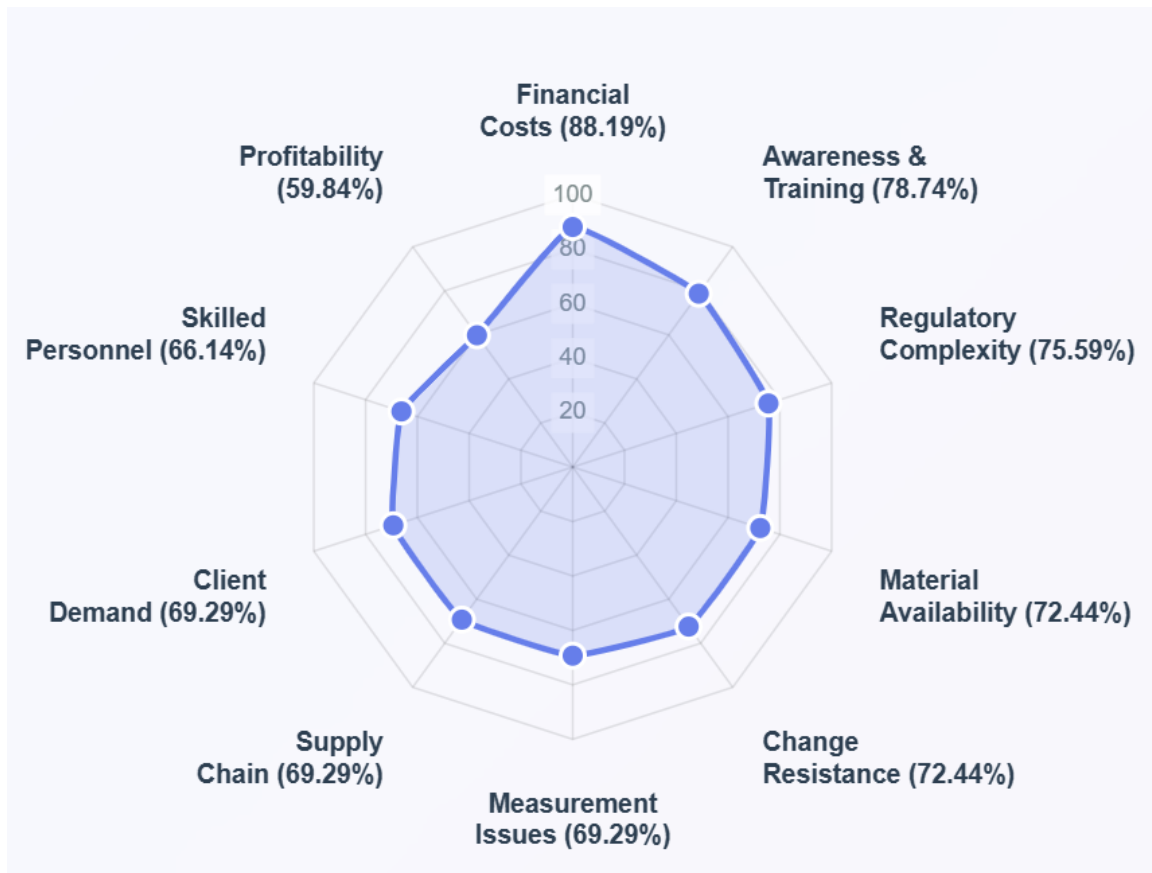


|                                                                                                                                                                              |                  |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| How often does your company implement measures for the segregation of waste                                                                                                  | 4.25±0.72        | 3.80±0.95        |
| How often are sustainable or recycled buildings prioritised and used in your company's projects?                                                                             | 3.85±0.80        | 3.20±1.05        |
| How often does your company actively monitor and implement measures to reduce energy consumption on construction sites                                                       | 4.10±0.68        | 3.75±0.85        |
| How often are specific measures taken to control air pollution?                                                                                                              | 4.30±0.62        | 4.00±0.78        |
| How often does your company ensure there are clear procedures for the safe handling, storage, and disposal of hazardous materials                                            | 4.50±0.58        | 4.30±0.65        |
| How often are water conservation techniques practised on your construction sites?                                                                                            | 4.05±0.75        | 3.50±0.92        |
| Does your company actively engage with local communities before and during construction projects?                                                                            | 4.20±0.65        | 3.60±0.88        |
| Does your company assess the ethical labour practices of its key suppliers or employees?                                                                                     | 4.55±0.52        | 4.10±0.72        |
| Does your company regularly communicate its overall performance to its employees?                                                                                            | 3.80±0.83        | 3.00±1.05        |
| Is there a clear, confidential, and accessible process for employees to report unethical behaviour, other grievances (whistleblowing mechanism) without fear of retaliation? | 4.40±0.65        | 4.00±0.82        |
| Are employees provided with training or regular communication on ethical conduct, anti-corruption policies?                                                                  | 3.85±0.78        | 3.30±0.95        |
| <b>Overall practice score</b>                                                                                                                                                | <b>4.15±0.45</b> | <b>3.70±0.60</b> |

The results reveal significant differences in how administrative and technical employees implement ESG practices, administrative employees consistently report stronger adherence to formal ESG protocols, particularly in areas like waste segregation (4.25 compared to technical 3.80), sustainable material use (3.85 compared to technical 3.20), and ethical supplier assessments (4.55 compared to technical 4.10). These higher scores align with their responsibilities for compliance monitoring and the procurement process. The relatively low standard deviations (0.45-0.82) in administrative responses suggest consistent application of these policies across their functions. Technical employees demonstrate more variable performance (SDs 0.60-1.05), with these strengths in hands-on implementation of hazardous material handling (4.30) and pollution control (4.00). However, they show notable gaps in sustainability-focused practices like water conservation (3.50) and sustainable materials (3.20), likely due to field-level challenges such as cost constraints and competing operational priorities. The largest disparity appears in ESG performance communication (3.80 administrative, 3.00 technical employees), indicating that technical employees receive insufficient feedback about how their work contributes to broader sustainability goals.

#### **4.4 Challenges to ESG adoption and implementation**

The study investigated the challenges or barriers they perceive in implementing ESG practices in the construction industry. The radar chart summarises the percentage of respondents who identified each challenge.



*Figure 4.4.1 Challenges to ESG adoption and implementation*

The analysis of challenges and barriers to implementing ESG practices reveals several key concerns shared by respondents in the construction industry. The most frequently cited challenge, reported by 88.19% of respondents, is the high initial financial cost of adopting sustainable technologies and materials. This indicates that cost remains a major deterrent, particularly in resource-constrained environments where short-term budgeting often overrides long-term environmental and social considerations.

Closely following, 78.74% of respondents cited both a lack of awareness and insufficient training and understanding of ESG principles among staff and management. This suggests a widespread gap in knowledge dissemination and capacity building, limiting the effective implementation of ESG strategies at both operational and leadership levels. Compounding this is the complexity or lack of clarity in ESG regulations and standards, identified by 75.59% of respondents, which may create uncertainty and reduce compliance motivation.

Access to sustainable materials and technologies was another commonly noted issue, with 72.44% highlighting limited local availability as a constraint. This challenge, alongside resistance to changing traditional practices (also 72.44%), points to systemic and cultural barriers within the industry. Despite growing global trends toward sustainability, entrenched methods and supply limitations continue to hinder progress.

Further notable concerns include difficulties in measuring and reporting ESG performance accurately (69.29%), complexity in managing ESG compliance within supply chains (69.29%), and insufficient client demand or willingness to pay for ESG-aligned features (69.29%). These factors underscore the broader market and logistical obstacles companies face.

Lastly, 59.84% of respondents indicated a perceived conflict between ESG efforts and short-term profitability goals, revealing tension between ethical/environmental priorities and immediate financial pressures. The small percentages selecting "Don't know" or "None of the above" affirm that most respondents recognise ESG challenges, emphasising the urgency for practical, regulatory, and cultural support to improve adoption.

## CHAPTER 5: DISCUSSION

### 5.0 Level of knowledge, attitudes and practices (KAP) on ESG principles among Leengate Construction management and employees

The study findings reveal a significant gap in knowledge, attitudes and practices (KAP) regarding ESG principles within the construction industry, particularly between management and employees, as well as between administrative and technical staff. The overall knowledge score of management (0.77) reflects strong awareness as compared to employees (0.49), which is poor. These knowledge gaps confirm that ESG knowledge is concentrated at the leadership level and this limited awareness hinders the effectiveness of successful ESG implementation (Khamisu, 2024).

Both management and employees scored highest in local, mandatory requirements, which are environmental laws (0.98 management, 0.66 employees) and safety laws (0.94 management, 0.74 employees), and this reflects a shared strength in compliance. This shows that within the organisation, basic operational policies are being communicated equally throughout the organisation. This aligns with the observation that construction firms are increasingly pressured by regulatory requirements to manage their ESG performance. (Khamisu, 2024).

The most concerning finding is the shared limited awareness of the global strategy and the ESG framework. Both groups have poor scores for Sustainable Development Goals (SDG), ESG reporting tools such as the GRI, SASB, TCFD, and the IFRS, indicating limited awareness of global ESG frameworks. This aligns with findings from (Chopra, 2024; CPEA, 2023; Xingbo, 2024) underpinned that there is limited knowledge and awareness in various domains on ESG reporting frameworks such as the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB). Also, the study shows low scores on international green building certification systems such as LEED and BREEAM. This level of awareness aligns with findings from (Bezerra et al., 2024) Who identified that green building certifications improved ESG compliance, yet awareness and adoption rates remained low in the construction industry due to concerns over high costs and lengthy certification processes.

Also, the study results highlighted a gap in regular communication on ESG performance within the organisation, as there is limited awareness of the formal ESG report. This points out that Management is not effectively sharing the company's formal commitments with the workforce, resulting in a lack of transparency on a shared language for sustainability. On attitude, both groups have a positive attitude towards ESG, though management conviction is significantly stronger and more strategically aligned. Management with an overall score of 4.27 (strongly positive) clearly shows that they view ESG as integral to business success. Their high scores on the importance of ESG factors are consistent with the literature stating that top management with positive attitudes towards environmental issues will allocate more resources to these practices (Ajibike, 2021). Employees have a moderate to positive attitude (3.94); however, a large gap is identified in both groups in viewing social factors as equal to financial performance (4.58 management, 3.77 employees). This operational viewpoint aligns with the finding that some project managers perceive ESG prioritising as a regulatory burden rather than a strategic opportunity, which hinders its adoption (Kim & Chang, 2022). Also, employees believe that ESG is a concern for larger firms (4.08 employees; 3.9 management), this mindset creates a passive resistance towards ESG implementation.

The practice scores reveal (4.06 management, 3.64 employees) show that positive attitudes are not fully embedded into action, as adoption of ESG practices remains limited in the construction sector (Siew, 2017). In both groups, compliance practices are strong, highest scores on hazardous material handling, waste segregation and pollution control. This reinforces that Leengate have a mature understanding of managing its most immediate and tangible risks, and it appears that the company have robust systems in place to address them effectively. The lagging scores for the use of sustainable materials and energy measures in both groups reflected a strategic gap. This indicates that in the absence of legal mandates, Leengate is hesitant to invest in sustainability due to perceived financial barriers and a focus on short-term project profitability and aligning with studies by (Bezerra et al., 2024) who underpinned that green building certificates improve the ESG adherence rate, but remain low due to the perceived high cost.

### **5.1 Level of knowledge, attitudes and practices (KAP) on ESG principles among Leengate's administrative and technical departments**

The analysis reveals that ESG knowledge and practice are not just determined by hierarchy but also by job function. Administrative employees have moderate knowledge (0.62) and are

significantly more knowledgeable than technical employees (0.47), which is poor. Administrative staff have a strength in governance, where they excel in awareness of Zimbabwean laws and documentation of formal environmental management plans. This aligns with their job function as they are superior in policy implementation and planning.

Technical employees have the highest scores on safety and health laws (0.82), which shows that they are aware of hazards and risks they encounter in their fields, but are disconnected from the broader strategy. Their critically low scores for ESG reporting tools (0.08) and published performance reports mean they execute tasks without understanding the strategic context. This knowledge deficit is directly linked to a lack of targeted training (Wang & Xue, 2023) and this knowledge gap impacts the technical employees.

While both groups have a positive overall attitude, their underlying beliefs differ in ways that impact the executional phenomenon explained by the fragmented and diverse nature of the construction (Siew, 2017). Administrative staff have a stronger belief in leadership accountability and the importance of social factors (4.40 administrative, 3.70 technical), which shows that administrative staff align more closely with the corporate ESG vision. Technical employees are more sceptical, their strong belief in ESG is for large firms (4.10), and a low score on social factors suggests a practical, field-level perspective where operational targets overshadow broader sustainability goals, leading ESG to be viewed as a burden. Practice scores clearly show a gap between policy setting and field-level implementation of ESG. Administrative employees report stronger adherence to formal processes like supplier and subcontractors' ethics assessments (4.55), which fall under their view. Technical staff lag in practices that require proactive effort beyond basic compliance, such as water conservation (3.50). This is not due to unwillingness, but likely stems from their documented knowledge gaps and lack of performance feedback.

The massive gap in ESG performance communication (3.80 administrative, 3.00 technical) is the most critical finding. Technical score reveals that there is a breakdown in communication and transparency, which is vital, as studies show that companies adhering to ESG frameworks report significantly more information and achieve better investment efficiency (Darnall, 2022; Siew, 2017) and without this communication, feedback practices remain limited.

Overall, Leengate ESG implementation is characterised by a compliance-driven culture that is well understood by management but fails to translate into strategic awareness or consistent practice at the frontline and in technical roles. The gap between attitude and behaviour is also

well explained by the Theory of Planned Behaviour (Ajzen, 1992) which postulates that intention alone doesn't always translate into action, particularly when perceived behavioural control (e.g., resources, support) is lacking. In general, while Leengate Construction demonstrates promising knowledge and attitudes toward ESG, these must be complemented with stronger practical enforcement and leadership-driven initiatives to close the practice gap and ensure consistent ESG application across all sites and roles.

## **5.2 Challenges associated with ESG adoption and implementation within the construction industry at Leengate**

The challenges identified in this study regarding ESG adoption in the construction industry echo barriers found in other empirical research. Chief among these is the high upfront financial cost of sustainable technologies (88.19%), which remains a universal constraint. Studies by (Bezerra et al., 2024; Wang & Xue, 2023; Lei & Zhao, 2024) , reports that the initial capital outlay often deters firms from pursuing green construction practices, especially in low to middle-income economies where cost-efficiency frequently takes precedence over long-term environmental benefit.

Equally critical is the lack of ESG awareness and training, cited by nearly 79% of respondents. This aligns with findings from (Sulaiman, Omar, Pakir, & Mohamad, 2024), who observed that without deliberate education and capacity-building efforts, even well-intentioned ESG policies are poorly implemented. The limited internal expertise leads to fragmented strategies and token compliance. Additionally, the complexity and ambiguity of ESG regulations, noted by 75.59% of participants, reflect a common concern across developing markets, where unclear policy frameworks hinder enforcement and discourage proactive adoption. (Loko & Schiehl, 2025). Further barriers like local unavailability of sustainable materials (72.44%), resistance to change (72.44%), and difficulties in ESG reporting were also consistent with empirical observations made by (Ratnasingam, 2023), who emphasised that infrastructure limitations and industry inertia are major hindrances, especially among SMEs.

Challenges related to supply chain complexity and limited client demand reveal how external market forces can dampen ESG momentum, even in firms that are internally motivated. This is reinforced by (Ajibike, 2021), who found that client awareness and willingness to invest in sustainability are often pivotal to a project's ESG performance. The perception that ESG threatens short-term profitability also confirms broader findings that financial sustainability



and ESG priorities are still seen as conflicting goals. Collectively, these findings highlight the pressing need for a multilevel approach, policy clarity, financial incentives, education, and cultural change to truly embed ESG in the construction sector.

## **CHAPTER 6: CONCLUSION AND RECOMMENDATIONS**

### **6.0 Conclusion**

This study successfully assessed the Knowledge, attitudes and practices (KAP) regarding Environmental Social and Governance (ESG) principles among stakeholders at Leengate construction, revealing a company at a critical juncture in its sustainability journey. The findings indicated that Leengate construction has established a dependable baseline in ESG compliance, particularly excelling in areas mandated by regulations such as ethical labour practices and safety standards. Employees and management display strong support and a positive attitude towards ESG principles, demonstrating a workplace culture that is receptive to sustainability.

This robust foundation is undermined by a deficiency in key strategic areas. The company lacks proactive measures in environmental innovation, such as in sustainable materials and green technologies, which limits its ability to lead in sustainability rather than follow regulations. Governance structure appears underdeveloped, especially in terms of formal ESG strategy, performance tracking and reporting, and transparent communication. Compounding these challenges are significant knowledge gaps around global ESG frameworks such as GRI, SASB, and TCFD. These KAP gaps identified are also coupled by the most identified challenges within the company, which are financial constraints, insufficient training and regulatory complexities

### **6.1 Recommendations**

#### **ESG Training and Awareness Programs**

Construction management professionals and employees should be trained, focusing on identified gaps; on global ESG frameworks (GRI, SASB, TCFD), international green building standards (LEED, BREEAM), and the business case for using sustainable materials.

#### **Bridge the attitude-practice gap by overcoming financial barriers**

Leengate must mandate the use of life cycle cost analysis for projects to demonstrate the long-term financial viability of sustainable materials and energy-efficient technologies, moving the focus from short-term cost.

### **Strengthening ESG Regulations and Compliance Monitoring**

Governments, policy makers and industrial leaders must establish clear, enforceable ESG regulations, ensuring consistency across regions, and legal frameworks should mandate a comprehensive ESG, with penalties for non-compliance and rewards for exceeding benchmarks.

### **Leadership Commitment and ESG Integration in Corporate Strategy**

Top management should foster a culture of sustainability within the organisation through clear communication, enabling leadership and employees to understand the long-term value of ESG integration.

### **Improve communication**

The organisation should develop strategies to enhance transparency and communication regarding ESG initiatives and performance.

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## **APPENDIX**

### **Appendix 1: Questionnaire**

My name is Mangezi Runyararo. I am a final year student at Bindura University of Science Education (Registration No: B212129B), pursuing a BSc (Hons) degree in Safety, Health and Environmental Management (SHEM). I am conducting research entitled ‘Assessment of Knowledge, Attitude, and Practices (KAP) on Environmental, Social, and Governance (ESG) in the Construction Industry: A Case Study of Leengate Construction’.

### **Section A: Socio-Demographic and Professional Profile of Respondents**

#### **A1. Gender**

☐ Male

☐ Female

#### **A2. What is your current role?**

☐ Senior Management (Director, CEO, General Manager)

☐ Project Manager

☐ Site Manager/Supervisor

☐ Engineer (Civil, Structural, Electrical, Mechanical)

☐ Architect/Designer

☐ Quantity Surveyor

☐ Procurement

☐ SHEQ Officer

☐ Skilled Labourer/Tradesperson (Bricklayer, Carpenter, Electrician, Plumber)

☐ Semi-Skilled or Unskilled Labourer

☐ Administrative Staff

☐ Other (Please specify): \_\_\_\_\_

A3. How many years of experience do you have in the construction industry?

☐ 1 - 5 years

☐ 6 - 10 years

☐ More than 11 years

A5. What is your highest level of formal education?

☐ Secondary School Certificate (e.g., ZJC, O-Level, A-Level)

☐ National Diploma or Higher National Diploma

☐ Bachelor's Degree and above

#### **SECTION B: Knowledge (K) Assessment of ESG in the Construction Industry**

B1. Are you familiar with the United Nations' Sustainable Development Goals (SDGs) and their connection to ESG principles?

☐ Yes

☐ No

B2. Are you aware of the concept of a "circular economy" as it applies to the construction industry?

☐ Yes

☐ No

B3. Are you aware of any specific Zimbabwean laws or regulations that require construction projects to manage their environmental impact (e.g., the Environmental Management Act)?

☐ Yes

☐ No

B4. Are you aware of any specific Zimbabwean regulations concerning worker health and safety on construction sites (e.g., requirements under NSSA, Factories and Works Act)?

☐ Yes

☐ No

B5. Are you familiar with international green building certification systems such as LEED (Leadership in Energy and Environmental Design) or BREEAM (Building Research Establishment Environmental Assessment Method)?

☐ Yes

☐ No

B6. Are you familiar with ESG reporting tools such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), Task Force on Climate-related Financial Disclosures (TCFD), and the International Financial Reporting Standards (IFRS) S1 and S2

☐ Yes

☐ No

B7. Are you aware of any specific programs or initiatives undertaken by Leengate Construction aimed at reducing its environmental impact

☐ Yes

☐ No

B8. Are you aware of any specific programs or initiatives by Leengate Construction focused on employee welfare and development that go beyond basic legal requirements

☐ Yes

☐ No

B9. Has Leengate Construction published any formal ESG or Sustainability reports detailing its performance and commitments in these areas?

☐ Yes

☐ No

**Attitudes towards ESG in Construction**

Please use the following scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

| Statement                                                                                                                                                                                                        | Rating (1-5) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| C1. Integrating ESG principles is essential for the long-term success and sustainability of construction companies.                                                                                              |              |
| C2. Environmental considerations (e.g., minimising pollution, using sustainable materials, conserving resources) should be a top priority for all construction projects.                                         |              |
| C3. Social factors are just as important as financial performance in the construction industry.                                                                                                                  |              |
| C4. Good governance practices (e.g., ethical bidding processes, anti-corruption measures, transparency) are crucial for building trust and integrity in the construction sector.                                 |              |
| C5. ESG is more of a concern for large, multinational construction firms than for smaller, local companies.                                                                                                      |              |
| C6. My role and actions within my company can have a direct impact on its overall ESG performance.                                                                                                               |              |
| C7. The primary responsibility for ensuring a construction company meets its ESG commitments lies with its senior management and leadership.                                                                     |              |
| C8. Every employee in a construction company, regardless of their role, has a part to play in contributing to the company's ESG goals and performance.                                                           |              |
| C9. Construction companies have a moral obligation to protect the environment and minimise their negative impacts, even if it entails additional costs or effort.                                                |              |
| C10. Construction companies should actively prioritise the well-being and concerns of local communities in their project planning and execution phases.                                                          |              |
| C11. It is primarily the government's responsibility, not that of individual construction companies, to address and fund solutions for broad environmental and social issues related to construction activities. |              |

|                                                                                                          |  |
|----------------------------------------------------------------------------------------------------------|--|
| C12. I feel personally motivated to contribute to better ESG practices in my work and within my company. |  |
|----------------------------------------------------------------------------------------------------------|--|

#### **D. Practices (P) Assessment related to ESG in the Construction Industry**

Please use the following frequency scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always

| Environmental Practice                                                                                                                                                                           | Rating (1-5) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| D1. How often does your company/project site implement measures for the segregation of different types of waste for appropriate disposal or recycling?                                           |              |
| D2. How often are sustainable or recycled building materials prioritised and used in your company's projects, where feasible?                                                                    |              |
| D3. How often does your company actively monitor and implement measures to reduce energy consumption on construction sites?                                                                      |              |
| D4. How often are specific measures taken to control dust, noise, and other forms of air/site pollution originating from construction activities on your sites?                                  |              |
| D5. How often does your company ensure there are clear procedures for the safe handling, storage, and disposal of hazardous materials (e.g., chemicals, fuels, asbestos if encountered) on site? |              |
| D6. How often are water conservation techniques practised on your construction sites?                                                                                                            |              |

#### **Social Practices**

D7. Does your company actively engage with local communities before and during construction projects to inform them about the project, listen to their concerns, and address potential negative impacts?

☐ Yes

☐ No

D8. Does your company assess the ethical labour practices of its key suppliers or subcontractors as part of its procurement process?

☐ Yes

☐ No

## **Governance Practices**

D9. Are employees in your company provided with training or regular communication on ethical conduct, anti-corruption policies, and the company's Code of Conduct?

☐ Yes

☐ No

D10. Is there a clear, confidential, and accessible process for employees to report suspected unethical behaviour, corruption, or other grievances within the company (e.g., a whistleblowing mechanism) without fear of retaliation?

☐ Yes

☐ No

D11. Does your company regularly communicate its overall performance, including financial and relevant non-financial aspects (which might include ESG elements), to its employees? 21

☐ Yes

☐ No

## **Challenges ON ESG adoption and implementation in Construction**

D2. From the list below, please select ALL items you consider to be potential CHALLENGES to implementing ESG practices in the construction industry. (Select all that apply.) 16

☐ High initial financial costs for sustainable technologies/materials

☐ Lack of awareness and understanding of ESG among staff and management

☐ Complex or unclear ESG regulations and standards

☐ Resistance to changing traditional construction practices

☐ Difficulty in measuring and reporting ESG performance accurately

☐ Complex supply chains make it hard to ensure ESG compliance from suppliers



- ☐ Perceived conflict with short-term profitability goals
- ☐ Insufficient client demand or willingness to pay for ESG features
- ☐ Lack of skilled personnel to implement ESG initiatives
- ☐ Limited availability of sustainable materials or technologies locally
- ☐ None of the above
- ☐ Don't Know

DEPARTMENT OF ENVIRONMENTAL SCIENCE



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**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

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05 December 2024

Dear Sir/Madam

**REQUEST FOR PERMISSION TO COLLECT DATA FOR ACADEMIC RESEARCH PROJECT**

**PROJECT TITLE:** *ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICES (KAP) ON ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) IN CONSTRUCTION INDUSTRY. A CASE STUDY OF LEENGATE CONSTRUCTION.*

**ACADEMIC SUPERVISORS:**

This letter serves to inform you that **Mangezi Runyararo, Registration Number (B212129B)** is a fourth year student at Bindura University of Science Education, in the Department of Environmental Science. During her fourth year of study she is supposed to do a research project in her area of specialisation.

Please assist in any possible way. Data collected will be used for academic purposes only and will not be published without your prior consent.

Thank you for your assistance.

Yours faithfully.

**Mr T. Nyamugure**  
**DEPARTMENT OF ENVIRONMENTAL SCIENCE**

