RELATIONSHIP BETWEEN SUSTAINABLE PRACTICES AND NON-FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN NAIROBI METROPOLITAN

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DECLARATION

I hereby affirm that this study proposal is my original work and has not been submitted to any other university for academic purposes. All references cited in this proposal acknowledge the contributions of previous authors whose works have informed this study. The research has been conducted with integrity and in accordance with academic ethical standards.

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ABSTRACT

The banking sector has become highly conscious of sustainability, with institutions seeking to balance financial, environmental, social, and economic aspects. This research established the relationship between sustainability practices and non-financial performance (NFP) among commercial banks in Nairobi Metropolitan. Although sustainability has gained attention recently, prior research mainly concentrated on financial outcomes, with limited evidence on non-financial returns including customer loyalty, corporate image, and service quality. This research addressed this gap by examining sustainability practices and their impact on NFP indicators. The study employed a convergent parallel mixed-methods approach. Quantitative data were collected from 148 bank customers through structured questionnaires (98.7% response rate), while qualitative insights were gathered from 15 bank executives and sustainability officers through Key Informant Interviews. The study included all 38 commercial banks across three tiers. Multiple regression analysis assessed statistical relationships, while thematic analysis examined qualitative data. The combined regression model incorporating economic, social, and environmental sustainability dimensions explained 51.2% of variance in non-financial performance (R^2=0.512, p=0.000). Social sustainability practices demonstrated the strongest effect (β=0.459, p = 0.000), followed by economic sustainability (β=0.325, p=0.000) and environmental sustainability (β=0.237, p=0.000). Qualitative findings revealed implementation challenges including resource constraints, varying customer awareness levels, and tensions between commercially-driven versus altruistic sustainability programs. The research makes three key contributions. First, it provides empirical evidence from an African banking context, addressing the geographical gap in sustainability-performance literature. Second, it demonstrates that disaggregated sustainability dimensions have differential effects on non-financial performance. Third, through mixed-methods integration, it reveals that successful sustainability implementation requires balancing commercial viability with stakeholder expectations in emerging market contexts. Important limitations include the cross-sectional design constraining causal inference, highly educated sample (97.9% university-level) limiting generalizability, reliance on perceptual measures potentially introducing bias, and geographic focus on Nairobi Metropolitan limiting rural applicability. The study concludes that sustainability practices significantly influence non-financial performance in Kenyan commercial banks, with integrated approaches yielding superior outcomes. Key recommendations include strengthening pricing transparency within economic sustainability frameworks, developing comprehensive diversity and inclusion roadmaps for social sustainability, and implementing formal operational environmental management protocols. Banks should develop integrated sustainability management frameworks aligning economic, social, and environmental functions through shared objectives to optimize non-financial performance outcomes.

TABLE OF CONTENTS

DECLARATION ..... **ii**

ABSTRACT ..... **iii**

TABLE OF CONTENTS ..... **iv**

LIST OF TABLES ..... **ix**

LIST OF FIGURES ..... **x**

LIST OF ABBREVIATIONS ..... **xi**

DEFINITION OF TERMS ..... **xii**

CHAPTER ONE: INTRODUCTION **1**

1.1 Background of the Study 1

1.1.1 Sustainable Practices 4

1.1.2 Non-Financial Performance 7

1.1.3 Commercial Banks 10

1.2 Statement of the Problem 13

1.3 Research Objectives 15

1.3.1 General Objective 15

1.3.2 Specific Objectives 15

1.4 Research Questions 15

1.5 Scope of the Study 16

1.6 Significance of the Study 16

CHAPTER TWO **18**

LITERATURE REVIEW **18**

2.1 Introduction 18

2.2 Theoretical Review 18
2.2.1 The Three-Pillar Model of Sustainability 19
2.2.2 Stakeholder Theory 21
2.2.3 Resource-Based View 23
2.3 Empirical Review 24
2.3.1 Economic Sustainability Practices and Non-Financial Performance 24
2.3.2 Social Sustainability Practices and Non-Financial Performance 27
2.3.3 Environmental Sustainability Practices and Non-Financial Performance 30
2.4 Summary of Research Gaps 33
2.5 Conceptual Framework 37
CHAPTER THREE 40
RESEARCH METHODOLOGY 40
3.0 Introduction 40
3.1 Research Philosophy 40
3.2 Research Design 41
3.3 Population and Sampling 43
3.3.1 Target Population 43
3.3.2 Sampling Technique and Sample Size 43
3.4 Data Collection Instruments and Procedure 46
3.4.1 Quantitative Data Collection 46
3.4.2 Qualitative Data Collection 46
3.4.3 Data Collection Procedures 46
3.5 Data Analysis 47
3.5.1 Quantitative Data Analysis 47

3.5.2 Qualitative Data Analysis 48
3.5.3 Integration of Data 49
3.6 Research Quality – Validity, Reliability and Objectivity of the Research 49
3.6.1 Validity 49
3.6.2 Reliability 50
3.6.3 Pilot Testing 50
3.7 Ethical Considerations 51
CHAPTER FOUR 52
PRESENTATION OF RESEARCH FINDINGS 52
4.1 Introduction 52
4.2 Background Information 52
4.2.1 Response Rate 52
4.2.2 Gender of Respondents 53
4.2.3 Age of the Respondents 53
4.2.4 Level of Education for the Respondents 54
4.2.5 Duration of Relationship with the Bank 55
4.2.6 Frequency of Interaction with the Bank 56
4.3 Descriptive Analysis 57
4.3.1 Economic Sustainability Practices 57
4.3.2 Social Sustainability Practices 59
4.3.3 Environmental Sustainability Practices 60
4.3.4 Non-Financial Performance 62
4.4 Correlation Analysis 64
4.5 Diagnostic Tests 66

4.5.1 Test for Normality 66
4.5.2 Test for Multicollinearity 67
4.5.3 Linearity Test 68
4.6 Regression Analysis 69
4.6.1 Economic Sustainability Practices and Non-Financial Performance 69
4.6.2 Social Sustainability Practices and Non-Financial Performance 70
4.6.3 Environmental Sustainability Practices and Non-Financial Performance 72
4.6.4 Multiple Regression Analysis - Combined Sustainability Practices and Non-Financial Performance 73
4.7 Chapter Summary 75
CHAPTER FIVE 76
DISCUSSION, CONCLUSION AND RECOMMENDATION 76
5.1 Introduction 76
5.2 Discussion of Findings 76
5.2.1 Economic Sustainability Practices and Non-Financial Performance 76
5.2.2 Social Sustainability Practices and Non-Financial Performance 79
5.2.3 Environmental Sustainability Practices and Non-Financial Performance 81
5.3 Conclusion 82
5.4 Recommendation 84
5.5 Limitations of the study 86
5.6 Area for Further Research 87
REFERENCES 88
APPENDICES 102
Appendix I: Letter of Introduction 102

Appendix II: Questionnaire for Customers 103

Appendix III: Key Informant Interview Guide 106

Appendix IV: List of Commercial Banks 109

Appendix V: NACOSTI Permit 111

Appendix VI: SBS Ethical Approval 112

LIST OF TABLES

Table 2.1: Summary of Research Gaps 34

Table 2.2: Operationalization of the Study Variables 38

Table 3.1: Target Population 43

Table 3.2: Sample Size Distribution 45

Table 4.1: Duration of Banking Relationship 55

Table 4.2: Economic Sustainability Practices 57

Table 4.3: Social Sustainability Practices 59

Table 4.4: Environmental Sustainability Practices 61

Table 4.5: Non-Financial Performance 63

Table 4.6: Correlation Analysis 65

Table 4.7: Tests of Normality 66

Table 4.8: Multicollinearity Test Results 67

Table 4.9: Regression Analysis for Economic Sustainability Practices and Non-Financial Performance 69

Table 4.10: Regression Analysis for Social Sustainability Practices and Non-Financial Performance 70

Table 4.11: Regression Analysis for Environmental Sustainability Practices and Non-Financial Performance 72

Table 4.12: Multiple Regression Analysis for Combined Sustainability Practices and Non-Financial Performance 73

LIST OF FIGURES

Figure 2.1: Conceptual Framework 38

Figure 4.1: Gender Distribution of Respondents 53

Figure 4.2: Age Distribution of Respondents 54

Figure 4.3: Educational Level of Respondents 55

Figure 4.4: Frequency of Bank Interaction 56

Figure 4.5: Linearity Results 68

LIST OF ABBREVIATIONS

SD	Sustainable Development
GDP	Gross Domestic Product
NFP	Non-Financial Performance
CBK	Central Bank of Kenya
KBA	Kenya Bankers Association
SFGPs	Sustainable Finance Guiding Principles
SFI	Sustainability Finance Initiative
GCF	United Nations Green Climate Fund
PMS	Performance Measurement System
CSD	Commission on Sustainable Development
SSP	Socially Sustainable Practices
ESP	Economically Sustainable Practices
GSP	Environmentally Sustainable Practices
RBV	Resource-Based View
SRBT	Stakeholder Resource-Based Theory
ROA	Return on Assets
ROE	Return on Equity

DEFINITION OF TERMS

Sustainable Practices: Actions, initiatives, and operational approaches that organizations implement to minimize negative environmental impacts, foster social equity, and ensure economic viability without compromising the ability of future generations to meet their needs (Ioannou & Serafeim, 2019).

Economically Sustainable Practices (ESP): Banking activities and strategies that ensure long-term financial viability while promoting responsible business conduct, including responsible lending, financial inclusion, transparent disclosure, fair pricing, and comprehensive risk management (Weber & Feltmate, 2016).

Environmentally Sustainable Practices (ESP): Banking initiatives aimed at reducing environmental degradation, promoting conservation, and addressing climate change, including green financing, energy efficiency measures, waste reduction strategies, and environmental risk assessment in lending decisions (Sardianou et al., 2021).

Non-Financial Performance (NFP): Qualitative aspects of an organization's performance that cannot be directly measured in monetary terms but are critical for long-term success and sustainability, providing a forward-looking perspective on organizational performance (Israel et al., 2022).

Commercial Banks: Financial institutions licensed by the Central Bank of Kenya to provide a range of financial services, including accepting deposits, providing loans, facilitating payments, and offering investment services to individuals, businesses, and other organizations (Central Bank of Kenya, 2023).

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The global banking sector faces mounting pressure to balance profitability with responsible business practices amid rising stakeholder expectations and environmental concerns. A 2023 McKinsey report reveals that 71% of banking customers now consider sustainability factors when selecting financial service providers, yet only 43% of banks effectively communicate their sustainability initiatives to stakeholders (Bhattacharyya et al., 2023). This disconnect affects customer acquisition and employee engagement, with banks experiencing 23% higher turnover rates among millennial employees when sustainability programs are perceived as inadequate (Cooke et al., 2022). As climate-related financial risks intensify, financial institutions worldwide face unprecedented scrutiny regarding their environmental footprints and social accountability.

In Africa, sustainable banking adoption presents unique challenges and opportunities. The continent's banking sector must address climate vulnerabilities while simultaneously expanding financial access to underserved populations. According to the Global Economy (2023), while Kenya has achieved significant progress with 79.2% of adults having bank accounts, approximately 5.5 million Kenyans remain financially excluded. This presents a critical economic sustainability challenge as financial institutions balance profitability goals with inclusive growth mandates. Furthermore, environmental concerns are intensifying across the continent, with the financial sector increasingly expected to mitigate climate-related risks. Research by the United Nations Green Climate Fund (GCF) indicates that African financial institutions currently allocate only 2.7% of their portfolios toward climate-friendly investments, substantially below the global average of 8.4% (CBK, 2023).

The imperative for comprehensive climate risk assessment has become increasingly urgent as both physical and transition risks materially impact banking sector stability and performance. Physical risks manifest through extreme weather events disrupting borrowers' repayment capacity and asset valuations. The 2022 East African drought, for instance, contributed to a 15% increase in agricultural loan defaults across the region, directly impacting banks' asset quality and profitability (African Development Bank, 2023). In Kenya specifically, flooding in 2023 caused an estimated KES 12.8 billion in infrastructure damage, affecting borrowers' business continuity and collateral

values (Kenya Meteorological Department, 2023). The Bank for International Settlements (2021) estimates that unmanaged physical climate risks could result in financial losses equivalent to 10-15% of total banking sector assets in vulnerable emerging markets over the next decade.

Transition risks present equally significant challenges as Kenya advances toward low-carbon economic policies and international climate commitments. The country's Nationally Determined Contributions under the Paris Agreement target a 32% emissions reduction by 2030, necessitating fundamental shifts in energy, transport, and industrial sectors (Republic of Kenya, 2020). For banks, this creates portfolio vulnerabilities through potentially stranded assets in carbon-intensive sectors, regulatory changes affecting borrower viability, technological disruptions rendering certain business models obsolete, and shifting market preferences reducing demand for high-emission products and services. A 2023 analysis by the Network for Greening the Financial System found that Kenyan banks with significant exposure to fossil fuel-dependent sectors could face 8-12% declines in loan portfolio values under orderly transition scenarios, with higher losses under disorderly transitions (NGFS, 2023).

Despite these material risks, Nyamongo (2019) found that Kenyan banks implemented climate risk management frameworks non-homogeneously, with significant variations in assessment depth, frequency, and integration into core credit decisioning processes. Only 34% of surveyed banks conducted regular climate scenario analysis on their loan portfolios, and merely 28% integrated climate risk considerations into their credit risk rating models (Nyamongo, 2019). This gap between climate risk materiality and assessment sophistication creates vulnerabilities in both individual bank portfolios and systemic financial stability, while simultaneously constraining banks' ability to identify and capitalize on green financing opportunities that could enhance non-financial performance through improved corporate image and stakeholder relationships.

In Kenya, the banking sector faces intensifying competitive pressures alongside growing sustainability expectations. With 38 commercial banks competing in a market of 53 million people, institutions increasingly seek non-financial performance advantages to differentiate themselves. Industry efforts toward sustainability formally began in 2015 with the Kenya Bankers Association's Sustainable Finance Initiative (SFI), establishing principles encompassing economic viability, social equity, and environmental stewardship (KBA, 2015). However, implementation

has progressed unevenly, with significant disparities between different banking tiers. The 2022 Central Bank of Kenya Banking Supervision Report reveals that while 91% of Tier 1 banks have established formal sustainability frameworks, only 37% of Tier 3 institutions have comparable structures in place (CBK, 2023).

Recent regulatory developments have accelerated sustainability mainstreaming in Kenya's banking sector, creating a more structured environment for implementation while simultaneously raising performance expectations. In April 2024, the Central Bank of Kenya issued comprehensive Climate Risk Management Guidelines requiring commercial banks to integrate climate considerations into governance structures, strategy formulation, risk management frameworks, and performance measurement systems (CBK, 2024). These guidelines mandate climate scenario analysis on investment portfolios and loan books, with banks required to assess exposure to both physical and transition risks across different climate pathways. Additionally, banks must now conduct annual climate stress testing and disclose climate-related financial risks in their annual reports, aligned with the Task Force on Climate-related Financial Disclosures (TCFD) framework (CBK, 2024).

The CBK's regulatory evolution reflects Kenya's alignment with international sustainability frameworks, including participation in the Network for Greening the Financial System (NGFS) and adoption of the Sustainable Banking and Finance Network principles. Beyond climate risk management, the CBK has established requirements for sustainable finance taxonomies, enabling banks to systematically classify and report on green investments, social financing, and transition finance activities (CBK, 2024). These regulatory initiatives fundamentally reshape the sustainability landscape for Kenyan banks, transforming sustainability from voluntary corporate social responsibility to mandatory risk management and strategic imperative. However, as these requirements were introduced after this study's data collection period (November-December 2024), they represent important contextual developments for interpreting findings and considering their forward-looking implications for sustainability-performance relationships.

This uneven adoption and evolving regulatory landscape raise important questions about how sustainable practices influence key non-financial performance indicators like customer loyalty, service quality, and corporate image—factors that significantly contribute to long-term

competitiveness. While empirical evidence from global markets suggests positive correlations between sustainable banking practices and various performance measures, Kenya's unique context, characterized by rapid financial innovation, significant socioeconomic disparities, distinct environmental challenges, and emerging regulatory frameworks, requires specific investigation. Understanding the relationship between sustainable practices and non-financial performance is particularly crucial as Kenya's banking sector navigates technological disruption, changing consumer preferences, intensifying competition from Fintech entrants, and heightened regulatory expectations for sustainability integration.

This study addresses this critical knowledge gap by examining how economic, social, and environmental sustainability practices influence non-financial performance in Kenya's commercial banking sector. By evaluating these relationships, the research provides empirical insights that can inform strategic decision-making for banking institutions seeking to enhance competitiveness through sustainability initiatives while contributing to broader sustainable development goals.

1.1.1 Sustainable Practices

Sustainable practices in the business context refer to the strategic actions and initiatives that organizations implement to balance economic prosperity, social responsibility, and environmental stewardship (Islam et al., 2020). Sustainable practices involve operational approaches that promote resource efficiency, waste reduction, ethical conduct, stakeholder engagement, social inclusivity, and long-term value creation while minimizing negative environmental impacts (Greenwood, 2021). Organizations adopt sustainable practices not only to comply with regulations but also to enhance competitive advantage, improve stakeholder relationships, mitigate risks, and contribute positively to society and the natural environment (Gloet & Samson, 2020).

The conceptualization of sustainable practices is fundamentally structured around three interdependent pillars: economic, social, and environmental sustainability (Elkington, 1994). The economic pillar emphasizes financial viability, efficient resource allocation, and long-term value creation while maintaining ethical business conduct. The social pillar focuses on human rights, labor practices, community engagement, diversity and inclusion, and stakeholder welfare. The environmental pillar addresses ecological conservation, climate change mitigation, resource efficiency, and minimization of negative environmental impacts (Purvis et al., 2019). These three

pillars are interconnected and mutually reinforcing, with organizations needing to address all three dimensions to achieve genuine sustainability (Chavalittumrong & Speece, 2022).

Several frameworks exist for assessing organizational sustainability practices in contemporary business environments. The Global Reporting Initiative (GRI) Standards provide over 300 disclosure indicators across 33 topic-specific standards for comprehensive sustainability reporting (GRI, 2021). The United Nations Sustainable Development Goals (SDGs) framework comprises 17 goals and 169 targets for measuring organizational contributions to global sustainability objectives (Sachs et al., 2022). Environmental, Social, and Governance (ESG) rating systems offer standardized metrics employed by investment analysts to evaluate corporate sustainability performance (Dyllick & Muff, 2016). However, this study adopts the Three-Pillar Model of Sustainability as its primary assessment framework for examining sustainable practices in Kenya's banking sector. This framework provides conceptual parsimony suitable for investigating fundamental practice-performance relationships in academic research without confounding complexity (Purvis et al., 2019). The model aligns with the Kenya Bankers Association's Sustainable Finance Initiative principles that structure sustainability commitments around economic viability, social equity, and environmental stewardship (KBA, 2015). It enables direct comparability with international banking research employing similar theoretical constructs while maintaining contextual relevance to Kenya's banking sector (Moufty et al., 2021; Stauropoulou et al., 2023). The framework accommodates the developmental stage of sustainability practices in Kenya's banking sector where sophisticated ESG methodologies remain nascent (Sani et al., 2024).

In the banking sector, sustainable practices have evolved beyond traditional corporate social responsibility to encompass comprehensive integration of sustainability principles into core business operations and decision-making processes (Weber & Feltmate, 2016). Banks have increasingly recognized that sustainability is not merely a peripheral concern but a strategic imperative that influences risk management, competitive positioning, and long-term viability (Venanzi & Matteucci, 2021). These practices include green financing initiatives, environmental risk assessment in lending decisions, energy-efficient facilities, paperless operations, financial inclusion programs, ethical investment criteria, transparent governance structures, and community development activities (Kumar & Prakash, 2018; Gunawan et al., 2022). The adoption of sustainable practices in banking is driven by various factors including regulatory requirements,

stakeholder pressure, reputational considerations, competitive advantage, risk management, and ethical imperatives (Sani et al., 2024).

The three pillars of sustainable practices in banking are operationalized and measured through specific indicators and metrics that allow institutions to evaluate their performance across economic, social, and environmental dimensions. Economic sustainability measurements include financial inclusion ratios measuring the percentage of unbanked populations served, responsible lending metrics tracking loan default rates and percentage of loans with sustainability criteria, financial literacy program reach counting the number of beneficiaries, and fair pricing indicators comparing interest rate spreads to market averages (Pham et al., 2021). These metrics assess banks' ability to maintain financial viability while contributing to broader economic development through ethical business conduct and inclusive financial services (Rahi et al., 2022).

Social sustainability is measured through quantitative and qualitative assessments of multiple organizational dimensions. Community investment metrics track the percentage of profits allocated to community development initiatives across various social programs. Employee welfare indicators measure staff turnover rates, employee satisfaction scores, and gender pay gap ratios to assess internal social sustainability. Diversity metrics evaluate the percentage of leadership positions held by women and minorities in organizational hierarchies. Stakeholder engagement measurements assess the frequency and quality of stakeholder consultations conducted by banking institutions (Sardianou et al., 2021). These measurements evaluate banks' contributions to social equity, human rights, and community development, reflecting their commitment to creating positive social impact (Bani-Khaled et al., 2021).

Environmental sustainability is assessed through comprehensive metrics capturing both operational and financing dimensions of environmental performance. Green financing portfolio measurements track the percentage of loans supporting environmentally friendly projects and renewable energy initiatives. Operational footprint metrics monitor energy consumption per employee, water usage, and waste generation across banking facilities. Carbon emission calculations measure total emissions and progress toward reduction targets set by individual institutions. Paperless banking adoption rates compare the percentage of digital versus paper-based transactions in service delivery channels. Environmental risk assessment integration tracks the

percentage of loans screened for environmental risks during credit approval processes (Gutiérrez-Ponce & Wibowo, 2023). These indicators evaluate banks' efforts to reduce environmental degradation, promote conservation, and address climate change challenges through their operations and financing activities (Gunawan et al., 2021).

The implementation of sustainable practices and their measurement frameworks varies significantly across different banking institutions worldwide. In developed economies, banks have generally established more sophisticated sustainability measurement systems with standardized reporting protocols and third-party verification mechanisms ensuring accountability and transparency (Venanzi & Matteucci, 2021). In emerging economies like Kenya, measurement approaches remain less standardized with considerable variations in metrics, data collection methodologies, and reporting practices across different banking tiers (Sani et al., 2024). These variations are influenced by factors such as regulatory environments, market conditions, organizational culture, leadership commitment, and stakeholder expectations across different institutional contexts (Kumar & Prakash, 2018).

Despite this progress in sustainability measurement and reporting, several challenges persist in effectively capturing banks' sustainability performance. Data availability and quality limitations constrain comprehensive assessment of sustainability impacts across all three dimensions. Methodological inconsistencies create comparability issues across different institutions operating in similar or different markets. Difficulties in quantifying certain social and environmental impacts limit the comprehensiveness of sustainability measurement systems. Integration challenges prevent effective incorporation of sustainability metrics into core performance management systems used for strategic decision-making (Ndalamba & Manuel, 2025). Addressing these measurement challenges requires collaborative efforts to develop standardized frameworks, enhance data collection capabilities, establish industry benchmarks, and create integrated reporting mechanisms that effectively capture banks' sustainability performance across all three dimensions (Mara, 2023).

1.1.2 Non-Financial Performance

Non-financial performance encompasses the qualitative aspects of an organization's operations that cannot be directly measured in monetary terms but are crucial for long-term success and

sustainability. These aspects include customer satisfaction, employee engagement, operational efficiency, innovation capability, corporate reputation, social responsibility, and environmental impact (Pratama & Segaf, 2023). Non-financial performance indicators provide forward-looking insights that help predict future financial performance, offering a more comprehensive view of organizational performance beyond traditional financial metrics such as profit margins, return on assets, and revenue growth (Fakunmoju & Olukayode, 2021). In today's complex business environment, non-financial performance has gained increasing importance as organizations recognize that sustainable success depends not only on financial results but also on effectively managing relationships with various stakeholders and addressing broader social and environmental concerns (Tsintsadze et al., 2019).

In the banking sector, non-financial performance has become a critical dimension of overall performance evaluation, particularly as banks face growing pressure to balance financial objectives with social and environmental responsibilities. Non-financial indicators offer valuable insights into banks' relationships with key stakeholders, operational effectiveness, and strategic positioning, which are crucial for achieving a sustainable competitive advantage (Salehi & Arianpoor, 2021). The importance of non-financial performance in banking has been amplified by various financial crises, which highlighted the inadequacy of focusing solely on financial metrics and the importance of considering broader performance dimensions such as risk management, corporate governance, and stakeholder relationships (Asghar et al., 2020). Banks with strong non-financial performance tend to demonstrate greater resilience during economic downturns, maintain stronger relationships with customers and employees, and achieve more sustainable financial results over the long term (Bani-Khaled et al., 2021).

This study focuses on three key non-financial performance indicators in banking: service quality, customer loyalty, and corporate image. Service quality represents the comparison between customer expectations and the actual service performance delivered by banking institutions, encompassing dimensions such as reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman et al., 2018). In the banking sector, service quality is particularly important as a differentiating factor in a competitive marketplace where financial products are often similar across institutions (Ozretic-Dosen & Zizak, 2020). High service quality leads to enhanced customer retention, reduced complaints, increased cross-selling opportunities, and improved

market share, contributing to sustainable competitive advantage and long-term profitability (Kant & Jaiswal, 2017). Banks that prioritize service quality through staff training, efficient processes, technological innovation, and personalized attention demonstrate superior performance across various business metrics compared to competitors (Al-Hawari & Ward, 2022). The measurement of service quality provides banks with actionable intelligence for operational improvements while serving as a leading indicator of future financial performance and market positioning (Loureiro & Sarmento, 2019).

Customer loyalty refers to customers' commitment to continue doing business with an organization, reflected in repeat purchases, resistance to switching to competitors, and willingness to recommend the organization to others (Bani-Khaled et al., 2021). In the banking sector, customer loyalty is essential for maintaining a stable deposit base, cross-selling financial products, and ensuring sustainable revenue streams (Pratama & Segaf, 2023). Loyal customers typically have higher lifetime value, are less price-sensitive, and contribute to positive word-of-mouth, enhancing a bank's market position (Tsintsadze et al., 2019). Banks can foster customer loyalty through excellent service quality, personalized offerings, transparent communication, competitive pricing, convenient access channels, and demonstrated commitment to sustainability and social responsibility (Gunawan et al., 2022). In an increasingly competitive banking environment with low switching costs, maintaining high levels of customer loyalty has become a strategic imperative for banks seeking sustainable growth and profitability (Sani et al., 2024).

Corporate image represents the overall impression that an organization creates in the minds of its stakeholders, encompassing perceptions about its products, services, operations, and contributions to society (Asghar et al., 2020). A positive corporate image enhances stakeholder trust, attracts and retains customers and employees, facilitates access to capital, and provides a buffer against reputational threats (Bani-Khaled et al., 2021). In the banking sector, corporate image is particularly important due to the trust-based nature of banking relationships and the significant impact of reputation on customer acquisition and retention (Moufty et al., 2021). Banks can enhance their corporate image through consistent delivery of high-quality services, ethical business practices, transparent communication, demonstrated commitment to sustainability, meaningful community engagement, and responsible risk management (Sardianou et al., 2021). A strong corporate image can differentiate a bank from competitors, command premium pricing,

reduce marketing costs, and create a foundation for long-term stakeholder relationships (Gutiérrez-Ponce & Wibowo, 2023).

These three non-financial performance indicators are interconnected and collectively influence a bank's overall sustainability and strategic positioning. Service quality contributes to customer loyalty, which in turn enhances corporate image (Pratama & Segaf, 2023). Similarly, a positive corporate image attracts and retains both customers and employees, creating a virtuous cycle of improved non-financial performance (Tsintsadze et al., 2019). Understanding and effectively managing these non-financial performance indicators is essential for banks to achieve sustainable competitive advantage in an increasingly complex and demanding business environment (Fakunmoju & Olukayode, 2021). By integrating non-financial performance considerations into strategic planning and performance evaluation, banks can create long-term value for all stakeholders while addressing broader social and environmental challenges (Salehi & Arianpoor, 2021).

Measuring and managing non-financial performance in banking presents several challenges, including developing appropriate metrics, establishing clear linkages between non-financial indicators and financial outcomes, addressing potential trade-offs between different performance dimensions, ensuring consistent measurement and reporting, and integrating non-financial considerations into strategic decision-making processes (Asghar et al., 2020). Addressing these challenges requires banks to adopt comprehensive performance management frameworks that balance financial and non-financial objectives, implement robust measurement systems, align incentives with desired outcomes, foster a culture that values holistic performance, and engage systematically with key stakeholders (Moufty et al., 2021). By effectively addressing these challenges, banks can enhance their ability to create sustainable value and navigate the complex landscape of stakeholder expectations and regulatory requirements (Gunawan et al., 2022).

1.1.3 Commercial Banks

Commercial banks are financial institutions that provide a wide range of financial services to individuals, businesses, and government entities. These services include accepting deposits, extending loans, facilitating payments and transfers, offering investment products, providing foreign exchange services, and supporting trade finance (Muriithi & Louw, 2017). Commercial

banks play a crucial role in economic development by mobilizing savings, allocating capital efficiently, facilitating transactions, managing risks, and implementing monetary policy (Mara, 2023). As intermediaries between savers and borrowers, they help channel funds from surplus units to deficit units in the economy, supporting investment, consumption, and overall economic growth (Ndalamba & Manuel, 2025). The stability and efficiency of commercial banks are essential for maintaining financial system integrity and promoting sustainable economic development (Arhin, 2023).

The banking sector has undergone significant transformation in recent decades, driven by factors such as technological advancement, regulatory changes, globalization, changing customer expectations, and growing emphasis on sustainability (Chuma, 2024). These changes have reshaped banks' business models, operational strategies, risk management approaches, and stakeholder relationships (Engwa et al., 2021). In particular, digitalization has revolutionized banking operations and service delivery, enabling online and mobile banking, automated processes, data-driven decision-making, and innovative financial products (Gatauwa et al., 2024). Similarly, regulatory reforms following various financial crises have strengthened capital and liquidity requirements, enhanced risk management standards, improved consumer protection, and promoted greater transparency and accountability in banking operations (Sani et al., 2024).

In Kenya, the banking sector has evolved significantly since independence, expanding from a few institutions primarily serving colonial interests to a diverse ecosystem of financial institutions serving various market segments. As of 2024, the banking sector in Kenya comprises 38 commercial banks, 14 microfinance banks, and 1 mortgage finance company (Omare, 2023). The commercial banks vary in size, ownership structure, target market, and business focus, with the Central Bank of Kenya classifying them into three tiers based on their asset base: Tier 1 (large banks), Tier 2 (medium-sized banks), and Tier 3 (small banks) (Mwendwa, 2023). The banking sector contributes significantly to Kenya's economy, accounting for a substantial portion of the service sector's GDP contribution (Wabwile, 2023). Commercial banks in Kenya offer a wide range of financial services and have witnessed significant technological advancements in recent years, with increased adoption of digital banking platforms, mobile banking applications, and agency banking networks to enhance financial inclusion and service delivery (Nyamongo, 2019).

In response to global sustainability trends and increasing regulatory pressure, Kenyan commercial banks have increasingly integrated sustainable practices into their operations. These principles encompass economic viability, resource scarcity management, social and environmental risk management, inclusive growth, and business ethics (Nyamongo, 2019). Following the adoption of these principles, commercial banks in Kenya have implemented various sustainable practices, including green banking initiatives, financial inclusion programs, and corporate social responsibility activities (Muriithi & Louw, 2017).

The implementation of sustainable practices varies significantly across different banks in Kenya. Larger banks (Tier 1) have generally made more progress in integrating sustainability into their operations, with comprehensive sustainability frameworks, dedicated sustainability departments, and regular sustainability reporting (Omare, 2023). Medium-sized banks (Tier 2) have adopted moderate sustainability initiatives, while smaller banks (Tier 3) generally lag in sustainability implementation due to resource constraints and limited capacity (Mwendwa, 2023). This variation in implementation raises questions about the relationship between sustainable practices and bank performance, particularly non-financial performance indicators such as customer loyalty, service quality, and corporate image (Wabwile, 2023).

The regulatory environment has also played a crucial role in promoting sustainable banking practices in Kenya. The Central Bank of Kenya, through its Bank Supervision Department, has incorporated environmental and social risk assessment in its prudential guidelines for banks (Nyamongo, 2019). Additionally, other regulatory bodies have introduced guidelines for environmental, social, and governance (ESG) reporting for listed companies, including banks (Omollo & Wanyoike, 2023). These regulatory initiatives have provided a framework for integrating sustainability into banking operations, although enforcement and monitoring mechanisms remain limited (Gatauwa et al., 2024).

Despite these efforts, Kenyan commercial banks face various challenges in implementing sustainable practices, including limited technical capacity, inadequate metrics for measuring sustainability impacts, competing business priorities, and in some cases, customer resistance to certain green banking initiatives (Muriithi & Louw, 2017). Additionally, the relationship between sustainable practices and non-financial performance remains unclear, with limited empirical

evidence on how specific sustainable practices influence customer loyalty, service quality, and corporate image in the Kenyan banking context (Nyamongo, 2019). This study aims to address this gap by examining the relationship between sustainable practices and non-financial performance indicators in Kenya's commercial banks, providing valuable insights for banks, regulators, and other stakeholders seeking to enhance both sustainability and performance in the banking sector (Omollo & Wanyoike, 2023).

1.2 Statement of the Problem

Kenya's banking sector faces a critical performance paradox: while the industry posted record profits of KES 215.8 billion in 2022, representing a 30.4% increase from the previous year, it simultaneously struggles with declining non-financial performance metrics that threaten long-term sustainability (Central Bank of Kenya, 2023). Kenyan banks lose approximately 18% of their customer base annually, with employee turnover rates reaching 24% at mid-level positions, significantly above the global financial industry average of 15.5% (Fulasia & Otinga, 2021; Kamau & Omondi, 2020). Public trust metrics show only 62% of Kenyans express confidence in banking institutions, compared to 78% in other service industries (Sheikh & Odock, 2019). This paradox suggests that while banks achieve strong financial results, they struggle with non-financial performance dimensions service quality, customer loyalty, and corporate image that serve as leading indicators of future financial sustainability (Fakunmoju & Olukayode, 2021). Traditional financial metrics such as profitability reflect past performance, whereas non-financial indicators provide forward-looking insights into competitive positioning (Tsintsadze et al., 2019). The disconnect between increasing sustainability disclosures and persistent trust deficits suggests an implementation gap where sustainability communications may not translate into tangible stakeholder experiences (Omollo & Wanyoike, 2023).

Implementation of sustainable practices remains inconsistent across Kenya's banking sector despite the Kenya Bankers Association's Sustainable Finance Initiative launched in 2015 (Omollo & Wanyoike, 2023). Social sustainability initiatives often lack strategic integration with business operations, limiting effectiveness in building customer satisfaction (Ruttoh & Waruguru, 2022). Economic sustainability practices show moderate adoption but insufficient depth, with many Kenyans remaining financially excluded (Central Bank of Kenya, 2023). Environmental

sustainability practices demonstrate particular weakness in operational implementation, with banks prioritizing commercially viable green financing while neglecting energy conservation and carbon footprint management (Kitonga et al., 2023).

Previous studies have predominantly focused on financial outcomes rather than non-financial performance dimensions. Siueia et al. (2019) examined corporate social responsibility in Sub-Saharan African banking but did not address how sustainability practices influence customer loyalty or corporate image. Mangwa and Jagongo (2022) investigated green financing and financial performance in Kenyan banks, neglecting non-financial outcomes. International studies by Moufty et al. (2021) established relationships between sustainability and financial performance in European and US contexts, but contextual differences limit applicability to Kenya's unique environment characterized by advanced mobile banking penetration (over 80% of adults), persistent financial exclusion affecting 5.5 million Kenyans, and emerging climate vulnerabilities (Central Bank of Kenya, 2023; Global Economy, 2023).

Four critical research gaps persist. First, theoretical gaps: existing research treats sustainability as a unified construct (Ruttoh & Waruguru, 2022; Omollo & Wanyoike, 2023) without disaggregating how economic, social, and environmental dimensions individually influence non-financial performance through distinct mechanisms. Limited empirical evidence validates theoretical propositions in African banking contexts (Siueia et al., 2019). Second, methodological gaps: studies examine either quantitative relationships or qualitative experiences, rarely integrating both approaches (Mangwa & Jagongo, 2022). Geographical concentration in developed economies constrains methodological adaptability to sub-Saharan African contexts where data availability and stakeholder expectations differ substantially (Moufty et al., 2021; Stauropoulou et al., 2023).

Third, practical gaps: banks lack evidence-based guidance on which specific sustainability practices yield the strongest non-financial performance returns in resource-constrained contexts (Sani et al., 2024). Managers face prioritization challenges without disaggregated evidence for strategic resource allocation across sustainability dimensions (Kumar & Prakash, 2018; Kitonga et al., 2023). Fourth, policy gaps: regulators require enhanced understanding of how sustainability practices influence banking sector stability to design effective policies (CBK, 2024). The CBK's 2024 Climate Risk Management Guidelines represent regulatory evolution, yet limited empirical

evidence demonstrates how sustainability dimensions affect non-financial performance critical to long-term stability (Nyamongo, 2019; Omollo & Wanyoike, 2023).

This study addresses these gaps by examining how each sustainability dimension distinctly influences multiple non-financial performance indicators within Kenya's banking context using convergent parallel mixed methods. Therefore, this study establishes the relationship between sustainable practices (economic, social, and environmental) and the non-financial performance of commercial banks in Nairobi Metropolitan, addressing these theoretical, methodological, practical, and policy gaps.

1.3 Research Objectives

1.3.1 General Objective

This study aims to assess the relationship between sustainable practices and non-financial performance among commercial banks in Nairobi Metropolitan.

1.3.2 Specific Objectives

i. To assess the relationship between economically sustainable practices and non-financial performance of commercial banks in Nairobi Metropolitan.
ii. To evaluate the relationship between socially sustainable practices and the non-financial performance of commercial banks in Nairobi Metropolitan.
iii. To evaluate the relationship between environmentally sustainable practices and non-financial performance of commercial banks in Nairobi Metropolitan.

1.4 Research Questions

i. What is the relationship between economically sustainable practices and the non-financial performance of commercial banks in Nairobi Metropolitan?
ii. What is the relationship between socially sustainable practices and the non-financial performance of commercial banks in Nairobi Metropolitan?
iii. What is the relationship between environmentally sustainable practices and the non-financial performance of commercial banks in Nairobi Metropolitan?

1.5 Scope of the Study

This study focused on commercial banks operating within Kenya's banking sector, specifically examining those registered and licensed by the Central Bank of Kenya as of 2024. The research excluded microfinance banks, mortgage finance companies, and other non-bank financial institutions due to their different operational and regulatory frameworks. Geographically, the study concentrated on commercial banks with operations in the Nairobi Metropolitan area, which includes Nairobi, Kiambu, Machakos, and Kajiado counties, as this region hosts the headquarters of all commercial banks in Kenya and accounts for the highest concentration of banking activities. The research examined three dimensions of sustainable practices: economic sustainable practices (responsible lending, financial inclusion, fair pricing), social sustainable practices (corporate social responsibility, employee welfare, community engagement), and environmentally sustainable practices (green finance, energy conservation, waste reduction). For non-financial performance, the study focused on three key indicators: service quality, customer loyalty, and corporate image. The unit of analysis for this study was commercial banks, with data collected from bank customers and key informants (bank executives and sustainability officers) on sustainability practices and non-financial performance indicators.

1.6 Significance of the Study

This study addresses the theoretical, methodological, practical, and policy gaps identified in the research problem, providing valuable knowledge to multiple stakeholders in Kenya's financial sector regarding how sustainability practices influence non-financial performance outcomes in commercial banking.

(a) Practitioners

This study addresses the practical gap by providing evidence-based guidance on which specific sustainability practices yield the strongest non-financial performance returns in resource-constrained contexts (Sani et al., 2024). By disaggregating the effects of economic, social, and environmental sustainability dimensions on service quality, customer loyalty, and corporate image, the research enables banking practitioners to strategically prioritize sustainability investments for maximum stakeholder value creation (Kumar & Prakash, 2018). The findings address the implementation gap where sustainability communications fail to translate into tangible

stakeholder experiences, helping banks allocate resources across different sustainability initiatives more effectively to optimize non-financial performance outcomes (Omollo & Wanyoike, 2023; Kitonga et al., 2023).

(b) Policymakers

This study addresses the policy gap by providing empirical evidence on how sustainability practices influence banking sector stability and non-financial performance (CBK, 2024). The findings support implementation of the CBK's 2024 Climate Risk Management Guidelines by demonstrating how economic, social, and environmental sustainability dimensions affect non-financial performance critical to long-term banking stability (Nyamongo, 2019). Evidence on implementation disparities across banking tiers and stakeholder responsiveness enables policymakers to develop differentiated regulatory approaches that balance prescriptive requirements for large banks with capacity-building support for smaller institutions (Omollo & Wanyoike, 2023).

(c) Researchers

This study addresses theoretical and methodological gaps by providing empirical validation of the Three-Pillar Model of Sustainability and Stakeholder Theory in an African banking context, demonstrating how sustainability dimensions individually and collectively influence non-financial performance through distinct mechanisms (Siueia et al., 2019). By employing a convergent parallel mixed methods approach, the study addresses the methodological gap where existing research examines either relationships or implementation experiences but rarely both (Mangwa & Jagongo, 2022). The research contributes evidence from a sub-Saharan African context characterized by advanced mobile banking penetration, persistent financial exclusion, and emerging climate vulnerabilities addressing the geographical concentration in developed economy contexts (Moufty et al., 2021; Staroupoulou et al., 2023).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter critically reviews theoretical and empirical literature surrounding sustainable practices and their relationship with non-financial performance in the banking sector. The chapter begins with a theoretical framework that establishes the foundation for understanding how sustainability practices influence organizational performance, particularly in financial institutions. Two complementary theories are reviewed: The *Three-Pillar Model of Sustainability and Stakeholder Theory,* alongside the *Resource-Based View*, to provide a comprehensive conceptual foundation for examining the multifaceted relationship between sustainability practices and non-financial performance measures. The empirical review examines existing studies that have investigated the relationships between economic, social, and environmental sustainability practices and various aspects of non-financial performance in banking and related sectors. The chapter concludes by identifying research gaps in the existing literature, presenting a conceptual framework that guides this study, and operationalizing the key variables.

2.2 Theoretical Review

This section presents the theoretical underpinnings that frame this research. Multiple theories are necessary for this study because the relationship between sustainable practices and non-financial performance is complex and multidimensional. While the Three-Pillar Model of Sustainability provides a framework for conceptualizing the dimensions of sustainability, it does not adequately explain how these practices translate into organizational performance outcomes. Stakeholder Theory complements this by elucidating how sustainability practices influence relationships with various stakeholders, thereby affecting non-financial performance. The Resource-Based View further enhances the theoretical foundation by explaining how sustainable practices can serve as strategic resources that contribute to competitive advantage. Together, these theories provide a comprehensive foundation for understanding the mechanisms through which sustainable practices influence non-financial performance in the banking sector.

2.2.1 The Three-Pillar Model of Sustainability

The Three-Pillar Model of Sustainability emerged from the concept of sustainable development introduced in the Brundtland Report (1987), with John Elkington (1994) first proposing the economic, environmental, and social dimensions of corporate sustainability, commonly referred to as the "triple bottom line." According to Elkington (1994), long-term organizational sustainability requires balancing social responsibility, financial stability, and environmental stewardship. This model conceptualizes economic sustainability as focusing on financial growth, profitability, and efficient resource utilization for business viability; social sustainability as emphasizing equal participation, fair labor practices, community engagement, and equitable resource access; and environmental sustainability as addressing resource conservation, waste reduction, and environmental protection (Purvis et al., 2019).

The Three-Pillar Model has been applied in the banking sector internationally with various studies validating its utility in formulating corporate sustainability strategies and enhancing organizational performance (Dyllick & Muff, 2016). Moufty et al. (2021) employed the model to examine sustainability dimensions and banking performance in the United States and European Union, finding that internal social sustainability dimensions significantly affected operational efficiency and liquidity, though they focused primarily on financial performance indicators. Staroupoulou et al. (2023) applied the three-pillar framework to examine how sustainability practices related to Sustainable Development Goals influence customer attitudes in Greek banking, establishing that economic sustainability initiatives enhanced customer trust and loyalty. Gutiérrez-Ponce and Wibowo (2024) utilized the model to analyze sustainability practices and financial performance in Southeast Asian banks, demonstrating that environmental initiatives delivered long-term financial implications.

In Kenya, the model has informed sustainability finance initiatives and corporate social responsibility programs in the banking sector (Kenya Bankers Association, 2020). Research has demonstrated that adopting the Three-Pillar Model has led to higher customer loyalty and regulatory compliance among Kenyan banks through enhanced brand differentiation, improved operational efficiency, and strengthened stakeholder trust (Ruttoh & Waruguru, 2022). However, significant research gaps persist in how the model has been applied in African banking contexts.

First, existing studies applying the model in banking have predominantly focused on financial performance outcomes (Moufty et al., 2021; Gutiérrez-Ponce & Wibowo, 2024) rather than non-financial performance dimensions such as service quality, customer loyalty, and corporate image that serve as leading indicators of long-term competitive positioning. Second, previous applications have typically examined aggregated sustainability effects rather than disaggregating how each pillar individually and collectively influences specific non-financial performance indicators, limiting understanding of dimension-specific mechanisms (Staroupoulou et al., 2023). Third, the model's application in sub-Saharan African banking contexts remains limited, with most research concentrated in developed or Asian economies where institutional environments, stakeholder expectations, and developmental priorities differ substantially from Kenya's context (Siueia et al., 2019).

The model has significant limitations. Critics argue that it fails to specify how sustainability metrics should be operationalized, making practical implementation challenging (Purvis et al., 2019). The model also does not adequately address potential trade-offs between the three dimensions, creating difficulties in resolving conflicts between economic objectives and social or environmental goals (Chavalittumrong & Speece, 2022). Additionally, Omollo and Wanoike (2023) found that while Kenyan banks prioritize economic sustainability, they often neglect social and environmental dimensions, resulting in imbalanced sustainability adoption.

Despite these limitations, the Three-Pillar Model is appropriate for this study as it provides a framework for analyzing how economic, social, and environmental sustainability practices individually and collectively influence key non-financial performance dimensions service quality, customer loyalty, and corporate image in Kenyan commercial banks. The model addresses the identified theoretical gap by enabling disaggregated examination of dimension-specific mechanisms through which each sustainability pillar influences non-financial performance outcomes in an African banking context where previous applications have been limited. The model informs the study's first, second, and third objectives by establishing the theoretical basis for examining the relationship between each sustainability dimension and non-financial performance indicators.

2.2.2 Stakeholder Theory

Stakeholder Theory, originally developed by R. Edward Freeman (1984), provides a framework for understanding how organizations can create value for various stakeholders beyond shareholders. The theory emerged as a response to the traditional shareholder-centric view of business, proposing that organizations should consider the interests of all parties affected by or affecting organizational activities (Mahajan et al., 2023). Freeman (1984) defined stakeholders as "any group or individual who can affect or is affected by the achievement of the organization's objectives," expanding the scope of corporate responsibility beyond profit maximization to encompass broader societal impacts. The theory postulates that businesses should consider the interests of all stakeholders, including employees, customers, suppliers, communities, and the natural environment, in their strategic decision-making processes (Freeman et al., 2018).

According to Stakeholder Theory, organizations that effectively manage stakeholder relationships achieve superior performance because they develop stronger relationships with key constituencies, enhance their reputation, and reduce risks (Donaldson & Preston, 1995). The theory suggests that sustainability practices represent strategic responses to stakeholder expectations, with each sustainability dimension addressing the interests of different stakeholder groups: economic sustainability practices addressing the concerns of shareholders and customers, social sustainability practices addressing the interests of employees and communities, and environmental sustainability practices responding to the concerns of environmentally conscious stakeholders and regulatory bodies (Jones et al., 2017; Mahajan et al., 2023).

Stakeholder Theory has been applied in the banking sector to examine how institutions manage relationships with diverse constituents to achieve organizational objectives. Empirical evidence has validated the theory's applicability in sustainable banking contexts. Research on Nigerian commercial banks demonstrated that institutions with stakeholder-oriented approaches achieve more effective customer interactions and risk management compared to those focused primarily on shareholder value maximization (Bolanle et al., 2012). Similarly, studies of European banking institutions found that effective stakeholder integration correlates with higher levels of investment capital and long-term customer loyalty (Moufty et al., 2024). However, significant research gaps persist in the theory's application to African banking contexts. First, existing studies have

predominantly examined stakeholder relationships in developed economy contexts where institutional environments and stakeholder expectations differ substantially from emerging markets (Moufty et al., 2024). Second, previous applications have typically focused on financial performance outcomes rather than non-financial performance dimensions such as service quality, customer loyalty, and corporate image that reflect stakeholder relationship quality (Bolanle et al., 2012). Third, limited research has systematically examined how different sustainability dimensions economic, social, and environmental distinctly influence specific stakeholder-related performance outcomes in resource-constrained contexts (Siueia et al., 2019).

Stakeholder Theory has notable limitations. Critics argue that simultaneously addressing the diverse and sometimes conflicting interests of multiple stakeholders can be challenging, especially in competitive environments where short-term financial considerations often dominate decision-making (Hillman & Keim, 2001). The theory also does not provide clear guidelines for prioritizing different stakeholder interests, creating practical implementation challenges (Jensen, 2010). In the Kenyan context, balancing stakeholder interests can be particularly challenging due to resource constraints and competing development priorities (Siueia et al., 2019). Additionally, Mahajan et al. (2023) note that the theory's broad conceptualization can make operationalization difficult, as organizations struggle to identify which stakeholders should receive priority and how to measure stakeholder relationship quality effectively.

Despite these limitations, Stakeholder Theory provides valuable insights for this study by explaining how sustainability practices influence relationships with key stakeholders, thereby affecting non-financial performance indicators. The theory addresses the identified theoretical gap by enabling examination of how economic, social, and environmental sustainability practices serve as mechanisms for managing diverse stakeholder relationships in Kenyan banking contexts where such applications remain limited. Specifically, it supports the study's objectives by establishing theoretical connections between sustainability practices and stakeholder-related outcomes such as service quality, customer loyalty, and corporate image, providing a framework for understanding dimension-specific mechanisms through which banks create value for different stakeholder groups.

2.2.3 Resource-Based View

The Resource-Based View (RBV), developed by Barney (1991), proposes that firms derive competitive advantages from their unique internal resources and capabilities. According to this theory, resources that are valuable, rare, inimitable, and non-substitutable (VRIN) enable organizations to achieve sustainable competitive advantage (Barney, 1991). In the context of sustainability, the RBV suggests that sustainability practices represent strategic resources that can differentiate firms from competitors and enhance their competitiveness in the marketplace.

The RBV posits that investments in sustainability-driven banking models, socially responsible initiatives, and environmental management systems constitute valuable resources that can improve organizational performance by enhancing operational efficiency, reducing costs, strengthening stakeholder relationships, and improving corporate reputation (Hart, 1995). These sustainability resources enable banks to develop unique capabilities that competitors cannot easily replicate, thereby creating competitive advantages that manifest in enhanced non-financial performance outcomes (Russo & Fouts, 1997). Empirical studies have validated the applicability of the RBV in the context of sustainable banking. Research by Kusi et al. (2018) found that banking institutions with distinctive sustainability capabilities achieve higher levels of customer satisfaction, employee commitment, and brand differentiation. Similarly, studies in the European banking sector demonstrated that sustainability resources contribute to enhanced corporate reputation and market positioning (Moufty et al., 2021).

However, the RBV has limitations. The theory emphasizes the importance of internal resources but may underestimate the significance of external factors such as market conditions, regulatory frameworks, and stakeholder pressures in shaping sustainability practices and their outcomes (Priem & Butler, 2001). Additionally, the RBV does not adequately address how organizations can develop and maintain sustainability resources over time, particularly in dynamic and competitive environments (Kraaijenbrink et al., 2010). In the Kenyan context, these limitations are particularly relevant given the rapid evolution of sustainability expectations and the varying resource constraints of different banking institutions (Kitonga et al., 2023). Despite these limitations, the RBV provides valuable insights for this study by explaining how sustainability practices can serve as strategic resources that contribute to non-financial performance outcomes.

The theory supports the study's first objective by establishing theoretical connections between economic sustainability practices and resource-based competitive advantages that manifest in enhanced service quality, customer loyalty, and corporate image.

2.3 Empirical Review

This section critically examines empirical studies investigating the relationships between different dimensions of sustainable practices and non-financial performance outcomes in the banking sector. The review is organized according to the specific variable relationships identified in the research objectives, focusing on economic, social, and environmental sustainability practices and their relationships with non-financial performance indicators.

2.3.1 Economic Sustainability Practices and Non-Financial Performance

Sudusinghe and Seuring (2020) conducted a research study on how socially sustainable practices affect economic sustainability performance in supply chains within the Sri Lankan apparel-manufacturing sector. The study used a survey questionnaire with responses from 119 managers and analyzed the data using Partial Least Squares Structural Equation Modeling, grounded in Resource-Based View theory. The study found that practices ensuring social sustainability both inside the company and in society create a positive impact on economic performance, with internal practices showing a stronger effect. The study presents a contextual gap (limited to a single developing country) and a sectoral gap (focused on manufacturing rather than banking), as well as a theoretical gap while it employed Resource-Based View, it did not examine how stakeholder-oriented sustainability practices influence non-financial performance dimensions. The current study addresses these gaps by employing both the Three-Pillar Model and Stakeholder Theory to examine the relationship between economic sustainability practices and non-financial performance specifically within Kenya's banking sector.

Khattak et al. (2022) investigated the relationship between corporate sustainability practices and organizational economic performance in Pakistani organizations using survey data from 346 managerial-level employees in manufacturing and service organizations. The research, grounded in Institutional Theory, established that sustainability practices have significant relationships with financial and market performance, with non-financial performance factors serving as partial mediators. The study presents a sectoral gap (broader business context rather than banking-

specific) and a theoretical gap while Institutional Theory explains external pressures for sustainability adoption, it does not adequately address how different sustainability dimensions distinctly influence stakeholder-related non-financial outcomes. This study addresses these gaps by specifically examining how economic sustainability practices influence non-financial performance in Kenyan commercial banks using Stakeholder Theory.

Staroupoulou et al. (2023) conducted research on how sustainability practices related to Sustainable Development Goals influence customer attitudes in the Greek banking sector using structural equation modeling, anchored in Stakeholder Theory. The study established that economic sustainability initiatives, particularly financial inclusion and ethical banking practices, significantly enhanced customer trust, loyalty, and perceptions of fair pricing. The study presents a contextual gap (Greek developed economy context versus Kenyan emerging market) and a methodological gap the quantitative approach did not capture implementation experiences or contextual challenges. The current study addresses these gaps by examining the relationship between economic sustainability practices and non-financial performance within Kenya's unique banking environment using a mixed-methods approach that integrates quantitative relationships with qualitative implementation insights.

Igbudu et al. (2018) investigated the impact of fair price policies and responsible lending on corporate image and customer retention in the North Cyprus banking sector using regression analysis, grounded in Social Exchange Theory. The research found that economic sustainability practices significantly explained variance in customer loyalty and corporate image, with corporate image serving as a mediator. The study presents a methodological gap it did not control for key contextual factors such as bank size or market competition and a theoretical gap while Social Exchange Theory explains reciprocal stakeholder relationships, it does not comprehensively address how the three sustainability pillars distinctly influence non-financial performance. This study addresses these gaps by incorporating the Three-Pillar Model and Stakeholder Theory while controlling for bank tier classifications in examining the relationship between economic sustainability practices and non-financial performance in Kenya's tiered banking system.

Ntarmah et al. (2018) conducted a study on banking system stability and economic sustainability using panel data analysis. The research examined the effect of banking system stability on

sustainability across 37 developing countries for the period 2000-2016 using fixed effects and random effects models. The study found that banking system z-scores have a positive effect on economic sustainability of developing economies, while banking system regulatory capital and bank credit have negative effects. The findings also revealed that banking stability indicators have differing effects on economic sustainability across different economic groups (BRICS vs. non-BRICS, Asian vs. Non-Asian). The study focused on macro-level banking system stability rather than institutional-level sustainability practices, creating a unit-of-analysis gap in understanding firm-level relationships. This study aims to address this gap by examining institutional-level economic sustainability practices and their relationship with non-financial performance in Kenyan commercial banks.

Kumar and Prakash (2018) researched sustainable banking adaptations in India's banking sector. The study used a mixed-methods approach combining document analysis of sustainability reports from public and private sector banks with interviews of banking executives. The research established that while banks had made significant progress in implementing sustainability initiatives, adoption levels varied considerably, with public sector banks showing stronger implementation of inclusive banking practices. The study mainly focused on sustainability adoption levels rather than their relationship with performance outcomes, presenting a conceptual gap in understanding the causal links between sustainability practices and organizational outcomes. This study aims to address this gap by specifically examining the relationship between economic sustainability practices and non-financial performance in Kenyan commercial banks.

Taha and Taha (2022) examined the role of human resources management in enhancing the economic sustainability of Jordanian banks. The study collected data from 23 Jordanian banks listed on the Amman Stock Exchange from 2014 to 2019 and employed regression analysis. The research found that all human resource management variables are positively correlated with economic sustainability. The study focused primarily on human resource practices rather than comprehensive economic sustainability initiatives, presenting a conceptual gap in understanding the full spectrum of economic sustainability practices. The current study aims to fill this gap by examining a broader range of economic sustainability practices in relation to non-financial performance in Kenyan commercial banks.

In Kenya, Nyamongo (2019) investigated the influence of sustainability on regulation and credit risk management among commercial banks. The study employed a qualitative design with data from interviews with risk managers and document analysis of banks' risk frameworks. The research found that Kenyan banks implemented climate risk management non-homogeneously, with significant variations in integration depth across different institutions. The study primarily focused on risk management implications rather than broader non-financial performance outcomes, creating a variable-related gap in understanding the comprehensive impacts of sustainability practices. The current study aims to fill this gap by examining how economic sustainability practices influence multiple non-financial performance dimensions including service quality, customer loyalty, and corporate image.

2.3.2 Social Sustainability Practices and Non-Financial Performance

Rathnayake (2022) conducted a study on the impact of corporate social responsibility on customer loyalty in the banking sector in Sri Lanka. The research employed a quantitative approach analyzing data from 306 Central Bank customers using regression analysis. The study found a positive relationship between CSR initiatives and customer loyalty, with community development initiatives and educational support programs having the strongest relationships with loyalty, explaining 42% of the variance in customer retention. The study was conducted in a post-conflict environment with unique social needs, presenting a contextual gap as findings may not directly apply to Kenya's different socioeconomic context. This study aims to address this gap by examining the relationship between social sustainability practices and non-financial performance within Kenya's specific banking environment.

Fatma and Khan et al. (2024) investigated the relationship between CSR and customer loyalty in the Indian banking sector. The study used structural equation modeling with data from 428 customers. The research found no direct correlation between CSR and customer loyalty but revealed that brand credibility and corporate identity fully mediated this relationship, suggesting that social sustainability practices influence loyalty indirectly through reputation-based mechanisms. The study focused primarily on urban banking customers, creating a sampling gap by potentially overlooking rural perspectives relevant to Kenya's diverse banking market. The current study seeks to fill this gap by including a more representative sample when examining the

relationship between social sustainability practices and non-financial performance in Kenyan commercial banks.

Jang and Ardichvili (2020) researched the connections between socially sustainable banking practices and customer relationships in Pakistan's Islamic banking industry. The study employed a mixed-methods approach with 312 customers and 15 bank managers. The findings showed that banks integrating social sustainability principles developed stronger customer relationships and enhanced long-term brand equity, with religious and cultural alignment significantly strengthening these relationships. The study was conducted in an Islamic banking context, presenting a contextual gap as it differs substantially from Kenya's predominantly conventional banking system. This study aims to address this gap by investigating how social sustainability practices affect non-financial performance in Kenya's conventional banking environment.

Russo and Perrini (2010) investigated how CSR strategies influence customer satisfaction and loyalty in Saudi banking institutions. The study used quantitative research with 624 banking customers and employed regression analysis. The findings showed that CSR strategies led to significantly higher customer satisfaction (24% higher scores) and loyalty (31% greater willingness to recommend) among customers, who were more attracted to banks operating on CSR principles and contributing to social causes. The study was conducted in a context with distinct cultural and religious factors, creating a contextual gap in applying findings to Kenya's different sociocultural environment. This study seeks to explore this gap by examining how social sustainability practices relate to non-financial performance in Kenya's specific cultural context.

Moufty et al. (2021) analyzed the relationship between sustainability dimensions and banking performance in the United States and European Union. The study examined 483 sustainability reports from 71 banks using content analysis and regression modeling. The research found that internal social sustainability dimensions including employee training, labor practices, and human rights initiatives had significant positive effects on operational efficiency ($R^2 = 0.37$) and liquidity ($R^2 = 0.29$), though environmental sustainability showed no significant effects on financial performance. The study focused predominantly on developed economies with established sustainability frameworks, creating a contextual gap in understanding these relationships in emerging markets. This study seeks to address this concern by examining the relationship between

social sustainability practices and non-financial performance in Kenya's developing banking sector.

Palmieri et al. (2023) investigated the joint effect of banking models and ESG sustainability on risk assessment in European banks. The study analyzed data from 639 European investment banks over the 2013–2022 period using panel regression techniques. The findings indicated that social sustainability resulted in higher default probability in the short term ($\beta = 0.28$, $p < 0.01$) but lower risk in the long term ($\beta = -0.31$, $p < 0.01$), consistent with the time-varying nature of sustainability-driven financial decision-making. The study focused primarily on investment banking, presenting a sectoral gap as it differs substantially from the commercial banking focus of the current research. This study aims to fill this gap by specifically examining commercial banks in Kenya and their social sustainability practices in relation to non-financial performance.

Bani-Khaled et al. (2021) conducted research on the relationship between corporate social responsibility expenditures and performance in Jordanian commercial banks. The study employed panel data analysis of 16 banks over a 10-year period. The findings showed that CSR expenditures had a significant positive impact on both financial indicators and customer trust metrics, with each percentage increase in CSR spending associated with a 0.73% increase in customer retention rates. The study primarily focused on CSR expenditures rather than comprehensive social sustainability practices, creating a conceptual gap in understanding the full spectrum of social sustainability initiatives. This study aims to fill this gap by examining a broader range of social sustainability practices in relation to non-financial performance in Kenyan commercial banks.

Bolaños et al. (2022) studied the effect of CSR on corporate reputation in Peruvian banks. The research analyzed survey data from 1,745 executives using structural equation modeling. The study found that CSR significantly affected corporate reputation, with educational support programs most strongly influencing corporate image (path coefficient = 0.58), while healthcare initiatives and environmental programs showed moderate effects (0.42 and 0.37, respectively). The study focused primarily on managerial perspectives rather than customer viewpoints, presenting a methodological gap in understanding comprehensive stakeholder perceptions. The current study aims to understand this disparity by incorporating both management and customer perspectives

when examining the relationship between social sustainability practices and non-financial performance.

In Kenya, Omare (2023) investigated the effect of sustainability finance practices on the organizational performance of commercial banks. The study used a descriptive design with data from 86 banking executives and sustainability reports from 31 banks. The findings showed that active engagement in sustainability practices, including sustainability reporting, environmental policy statements, staff training programs, and diverse board compositions, demonstrated potential for positive organizational performance impacts through responsible and ethical operations. The study primarily focused on sustainability practice implementation rather than specific performance outcomes, creating a variable-related gap in understanding these relationships.

2.3.3 Environmental Sustainability Practices and Non-Financial Performance

Sharma et al. (2024) conducted a study on the relationship between environmentally sustainable banking technologies and customer satisfaction in Punjab, India. The research employed structural equation modeling to analyze data from 300 banking customers. The study found a significant positive correlation between environmentally sustainable banking technologies and customer satisfaction. The research demonstrated that green financing initiatives, including energy-efficient project loans, digital banking platforms, and waste management programs, substantially contributed to increased customer trust and satisfaction. The study was conducted in a predominantly agricultural region with specific environmental concerns, presenting a contextual gap as these conditions may differ from Kenya's more diverse economic landscape. The current study aims to address this gap by examining how environmental sustainability practices affect non-financial performance within Kenya's unique economic context.

Ibe-enwo et al. (2019) investigated the impact of green banking practices on bank loyalty in the Swedish banking sector. The study used a mixed-methods approach combining surveys of 415 customers with 12 managerial interviews. The research established that green banking practices significantly enhanced customer loyalty and generated stronger word-of-mouth recommendations. In competitive banking markets, this propensity for customer referrals served as an effective organic marketing strategy, contributing to the sustainability of institutions driven by triple bottom line considerations. The study was conducted in a developed economy with advanced

environmental regulations and high public environmental awareness, creating a contextual gap in understanding these relationships in emerging markets. This study seeks to fill this gap by examining how environmental sustainability practices influence non-financial performance in Kenya's emerging banking sector.

Khan et al. (2023) examined how green banking practices affect corporate reputation in Pakistani Islamic banks. The research used regression analysis with data from 390 respondents. The study found that green banking practices including LED lighting implementation, paperless transactions, and digital file processing significantly strengthened corporate reputation. This finding aligned with research by Atan et al. (2018), who established that environmental sustainability policies significantly improved banks' reputations across various financial markets in Malaysia. Both studies demonstrated that institutions offering sustainable energy solutions built stronger trust with environmentally conscious customers. The studies focused on Islamic banking contexts with distinct religious motivations for sustainability, presenting a contextual gap as these may not fully translate to Kenya's conventional banking environment. The current study aims to address this gap by examining environmental sustainability practices in Kenya's predominantly conventional banking system.

González-Viralta et al. (2023) studied green practice adoption in Chilean retail banking. The research surveyed 458 consumers and analyzed the data using structural equation modeling. The study revealed positive relationships between green practices, customer satisfaction, and willingness to pay premium fees for environmentally sustainable banking services. The research reinforced the competitive advantage derived from positive public perception and confidence generated by sustainability commitments. While this study provided valuable insights from a developing economy context, Chile's environmental regulatory framework differs significantly from Kenya's, creating a contextual gap in understanding these relationships. This study seeks to address this gap by examining how environmental sustainability practices influence non-financial performance within Kenya's specific regulatory context.

Salim et al. (2023) conducted a large-scale study on the effect of corporate environmental performance on financial stability across multiple countries. The research examined 473 banks in 73 countries from 2007 to 2016 using panel regression analysis. The study found that institutions

making higher investments in corporate environmental performance experienced higher non-performing loans in the short term but improved financial stability over longer periods. This temporal dimension suggested that environmental sustainability investments required time to generate positive returns. The study focused primarily on financial outcomes rather than non-financial performance dimensions, creating a variable-related gap in understanding comprehensive impacts. The current study aims to fill this gap by specifically examining the relationship between environmental sustainability practices and non-financial performance indicators in Kenyan commercial banks.

Gutiérrez-Ponce and Wibowo (2024) analyzed the impact of sustainability practices on financial performance in Southeast Asian banks. The study examined 19 banks during 2010-2020 using panel regression. The findings showed that environmental initiatives initially negatively impacted financial performance measures but delivered positive long-term implications for sustainability-oriented banking models. This suggests that environmental sustainability represents a long-term strategic investment rather than an immediate performance driver. The study focused on financial performance without examining non-financial outcomes, creating a variable-related gap in understanding comprehensive impacts. The current study aims to address this gap by specifically examining the relationship between environmental sustainability practices and non-financial performance indicators in Kenyan commercial banks.

In the Kenyan context, Sheikh and Odock (2019) investigated the effects of green operations on the financial performance of commercial banks. The study used a descriptive survey of 11 listed banks. The research found positive relationships between environmental initiatives and financial indicators. The study did not address non-financial performance outcomes such as service quality, customer satisfaction, or corporate image, representing a significant variable-related gap in understanding comprehensive impacts. This study seeks to fill this gap by examining how environmental sustainability practices affect multiple dimensions of non-financial performance in Kenyan commercial banks.

Mangwa and Jagongo (2022) studied green financing practices among Kenyan commercial banks. The research employed a descriptive research design with data from 11 listed institutions. The findings indicated positive financial impacts but did not establish relationships with non-financial

performance dimensions. Additionally, the sample was limited to listed banks, creating a methodological gap by potentially overlooking smaller institutions that comprise a significant portion of Kenya's banking sector. The current study aims to address these gaps by including banks across all tiers when examining the relationship between environmental sustainability practices and non-financial performance in Kenyan commercial banks.

Chuma (2024) explored the factors driving banks to integrate sustainability in their banking business in markets where green banking is a novel concept. The study used a case study approach focused on Standard Chartered Bank Zambia. The research found that while regulatory pressures and international trends influenced sustainability adoption, implementation faced challenges including limited technical capacity, inadequate sustainability metrics, competing business priorities, and customer resistance to certain green banking initiatives. The study focused on drivers and challenges rather than performance outcomes, presenting a conceptual gap in understanding the impacts of environmental sustainability practices. This study aims to fill this gap by specifically examining how environmental sustainability practices influence non-financial performance in Kenyan commercial banks.

2.4 Summary of Research Gaps

This literature review has synthesized theoretical and empirical findings on the relationships between economic, social, and environmental sustainability practices and non-financial performance in the banking sector. The review has employed the Three-Pillar Model of Sustainability, Stakeholder Theory, and the Resource-Based View to conceptually ground sustainability's influence on organizational outcomes. The empirical review has demonstrated that banks frequently prioritize economic and social sustainability while neglecting environmental dimensions. Stakeholder Theory explains how sustainability involves managing bank relationships with various stakeholders, while the Resource-Based View elucidates how sustainability practices can constitute strategic resources that enhance competitive advantage.

Table 2.1: Summary of Research Gaps

Authors & Year	Context	Methodology	Key Findings	Research Gap	How the Current Study Addresses the Gap
Stauropoulou et al. (2023)	Greek banking sector	Quantitative survey with 1,084 participants; structural equation modeling	Economic sustainability practices positively impacted customer loyalty, trust, and perceived fair pricing	Limited applicability to developing economies like Kenya; it did not examine service quality	Conducts research in Kenya's distinct banking environment; includes customer satisfaction as a key non-financial performance indicator
Igbudu et al. (2018)	North Cyprus banking	Quantitative survey with 511 customers; regression analysis	Fair price policies and responsible lending positively affected corporate image and customer retention	Did not control for bank size or market competition; different regulatory context from Kenya	Incorporates bank tier classification as a control variable; examines relationships within Kenya's unique regulatory framework
Rathnayake (2022)	Sri Lankan banking	Quantitative analysis of 306 customers; regression analysis	Positive relationship between CSR initiatives and customer loyalty	The post-conflict context differs from Kenya; limited examination of employee outcomes	Studies Kenya's stable banking environment; comprehensively examines customer satisfaction dimensions through both

					quantitative and qualitative methods
Fatma & Khan (2024)	Indian banking sector	Structural equation modeling with 428 customers	No direct correlation between CSR and customer loyalty; the relationship is mediated by brand credibility	Focus on urban customers; it may not represent Kenya's diverse banking market	Employs stratified sampling to ensure representation across different banking tiers and customer segments throughout Kenya
Khan et al. (2023)	Pakistani Islamic banks	Quantitative study with 390 respondents; regression analysis	Green banking practices strengthened corporate reputation	The Islamic banking context differs from Kenya's conventional system	Examines conventional commercial banking in Kenya; includes both Islamic and non-Islamic banks in appropriate proportions
Salim et al. (2023)	473 banks in 73 countries	Panel regression analysis (2007-2016)	Higher CEP investments led to more non-performing loans short-term but improved stability long-term	Focused on financial rather than non-financial outcomes	Specifically investigates non-financial performance outcomes including customer loyalty, service quality, and corporate image

Ruttoh & Waruguru (2022)	Kenyan commercial banks	Qualitative exploratory design; 15 large banks	Banks incorporated sustainability into procurement practices	Limited to procurement aspects; no statistical relationships established	Examines comprehensive sustainability practices beyond procurement; establishes statistical relationships through regression analysis
Siueia et al. (2019)	Sub-Saharan African banking	Panel data from 47 banks; regression analysis	Positive relationship between CSR disclosures and financial performance	Did not examine non-financial performance indicators	Focuses explicitly on non-financial performance indicators rather than financial metrics
Mangwa & Jagongo (2022)	Kenyan listed banks	Descriptive research design; 11 listed banks	Green financing positively impacted financial performance	Limited to listed banks; did not address non-financial performance	Includes both listed and unlisted banks across all three tiers; specifically examines relationships with non-financial performance

2.5 Conceptual Framework

The conceptual framework provides the interrelationship between the study variables, illustrating the directional relationship of the independent variable's economic sustainability practices, social sustainability practices, and environmental sustainability practices on the dependent variable of non-financial performance. The framework is grounded in the Three-Pillar Model of Sustainability and Stakeholder Theory, which provide the theoretical foundation for understanding how each sustainability dimension influences non-financial performance outcomes through stakeholder relationship mechanisms (Elkington, 1994; Freeman et al., 2018).

Economic sustainability practices encompass fair pricing, financial inclusion, and responsible lending initiatives that address the interests of customers and shareholders while promoting long-term financial viability (Staroupoulou et al., 2023). Social sustainability practices include CSR programs, employee welfare, and community engagement activities that respond to the expectations of employees, communities, and society at large (Bani-Khaled et al., 2021). Environmental sustainability practices comprise green finance, energy conservation, and paperless banking initiatives that address environmental stakeholder concerns while managing climate-related risks (Khan et al., 2023). The inclusion of climate-related considerations in environmental sustainability practices is particularly critical, as climate stress testing and environmental risk assessment have become essential components of banking sustainability frameworks for identifying physical and transition risks that affect long-term institutional viability (Acharya et al., 2023; CBK, 2024). These three sustainability dimensions are expected to influence non-financial performance indicators customer loyalty, corporate image, and service quality through their effects on stakeholder relationships, organizational reputation, and service delivery effectiveness (Fakunmoju & Olukayode, 2021). Figure 2.1 below shows the study variables with their measurable indicators.

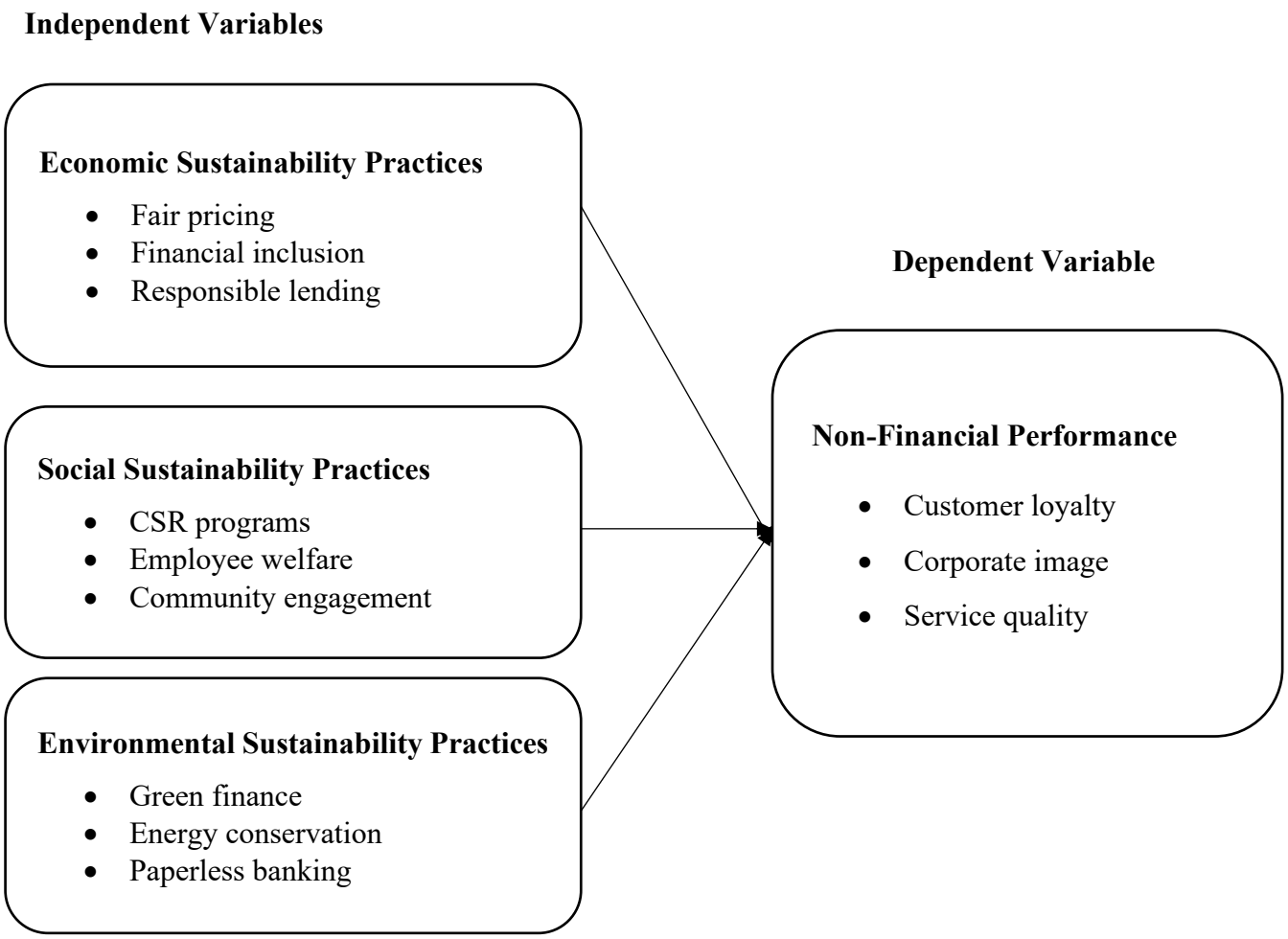

Figure 2.1: Conceptual Framework

Table 2.2: Operationalization of the Study Variables

Variable	Type of Variable	Indicator	Data Collection Method	Source of Measurement
Economic Sustainability Practices	Independent	• Fair pricing • Financial inclusion • Responsible lending	• Quantitative : Customer questionnaire (5-point Likert scale) • Qualitative: Key informant interviews with bank executives	• Stauropoulou et al. (2023) • Kumar & Prakash (2018) • Rahi et al. (2022)
Social Sustainability Practices	Independent	• CSR programs	• Quantitative : Customer	• Rathnayake (2022)

		• Employee welfare • Community engagement	questionnaire (5-point Likert scale) • Qualitative: Key informant interviews with sustainability officers	• Fatma & Khan (2024) • Bani-Khaled et al. (2021)
Environmental Sustainability Practices	Independent	• Green finance • Energy conservation • Paperless banking	• Quantitative : Customer questionnaire (5-point Likert scale) • Qualitative: Key informant interviews with bank executives	• Khan et al. (2023) • Sardianou et al. (2021) • Gutiérrez-Ponce & Wibowo (2023)
Non-Financial Performance	Dependent	• Customer loyalty • Corporate image • Service quality	• Quantitative : Customer questionnaire (5-point Likert scale) • Qualitative: Key informant interviews with bank executives and sustainability officers	• Fakunmoju & Olukayode (2021) • Tsintsadze et al. (2019) • Sheikh & Odock (2019)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the methodological framework employed to investigate the relationship between sustainable practices and the non-financial performance of commercial banks in Nairobi Metropolitan. The chapter presents a comprehensive overview of the research approach, detailing the research philosophy, research design, target population, sampling procedures, data collection methods, and analytical techniques. Additionally, this chapter addresses validity, reliability, and ethical considerations to ensure the integrity and credibility of the research findings. The methodological choices align with the research objectives and are informed by the theoretical framework established in the previous chapter.

3.1 Research Philosophy

This study adopts a pragmatist research philosophy, which is most appropriate for mixed methods research designs. Pragmatism rejects the forced choice between positivist and interpretivist paradigms, instead emphasizing that research approaches should be determined by the nature of the research problem and the practical consequences of inquiry (Creswell & Plano Clark, 2018). According to Morgan (2014), pragmatism focuses on "what works" to address research questions, valuing both objective measurement and subjective interpretation as complementary rather than contradictory approaches to knowledge generation.

This philosophical stance is well-suited for this study, which examines the relationship between sustainable practices and non-financial performance through both quantitative measurement of associations and qualitative exploration of implementation mechanisms. While positivism would limit the study to measurable variables and observable relationships, and interpretivism would focus exclusively on subjective meanings, pragmatism enables the researcher to employ both approaches strategically (Shannon-Baker, 2016). The quantitative component provides generalizability through statistical analysis of relationships across 148 bank customers, while the qualitative component offers contextual depth through insights from 15 key informants who implement sustainability strategies.

Pragmatism's emphasis on practical problem-solving aligns with this study's applied objective of providing actionable insights for banking practitioners, policymakers, and researchers. By valuing multiple methods and perspectives, pragmatism supports the integration of complementary data sources to develop comprehensive understanding of complex organizational phenomena that cannot be fully captured through single-method approaches (Johnson & Onwuegbuzie, 2004). This philosophical foundation acknowledges that sustainability-performance relationships involve both measurable outcomes amenable to statistical analysis and contextual mechanisms requiring interpretive understanding.

3.2 Research Design

This study utilized a mixed methods approach within a descriptive research design to examine the relationship between sustainable practices and non-financial performance of commercial banks in Nairobi Metropolitan. Specifically, the research employs a convergent parallel mixed methods design (also termed concurrent triangulation design), wherein quantitative and qualitative data are collected simultaneously, analyzed independently using methods appropriate to each data type, and then merged during the interpretation phase to provide comprehensive understanding of the research problem (Creswell & Plano Clark, 2018).

The convergent parallel design is characterized by four defining features present in this study (Fetters et al., 2013). First, concurrent data collection: quantitative questionnaires were distributed to 148 bank customers while qualitative Key Informant Interviews were conducted with 15 bank executives and sustainability officers during the same timeframe (November-December 2024), ensuring temporal consistency. Second, independent analysis: quantitative data underwent statistical analysis (descriptive statistics, correlation, multiple regression) using SPSS, while qualitative data were analyzed thematically using NVivo, with each dataset analyzed according to its methodological traditions without premature integration. Third, equal priority: both quantitative and qualitative components received comparable emphasis in data collection, analysis, and reporting, with neither relegated to supplementary status (designated as QUAN + QUAL in mixed methods notation). Fourth, integration through comparison: findings from both datasets were merged during interpretation to identify areas of convergence (where qualitative insights corroborate quantitative patterns), divergence (where findings conflict, revealing measurement or

implementation gaps), and complementarity (where qualitative data explains mechanisms underlying quantitative relationships).

This design was selected over sequential explanatory (where qualitative follows quantitative to explain results) or sequential exploratory (where quantitative tests qualitative findings) designs because the research objectives required both breadth of measurement across the banking sector and depth of understanding regarding implementation mechanisms simultaneously. The convergent approach enabled efficient data collection within the constraints of a master's thesis timeline while providing robust triangulation of findings through multiple data sources and methods (Morse & Niehaus, 2009). The design's emphasis on integration during interpretation rather than during data collection or analysis preserved the methodological integrity of each component while enabling comprehensive synthesis addressing all three research objectives.

The descriptive research design is appropriate when the goal is to describe the current state of variables and examine relationships between them without manipulation (Saunders et al., 2019). This design allowed the researcher to examine the relationships between the independent variables (economic sustainability practices, social sustainability practices, and environmental sustainability practices) and the dependent variable (non-financial performance). The quantitative component involved collecting data through structured questionnaires administered to bank customers within the target population of commercial banks in Nairobi Metropolitan. The questionnaire was designed to capture information related to sustainable practices and non-financial performance indicators. By employing a quantitative approach, the researcher gathered numerical data that were analyzed using descriptive and inferential statistics (Field, 2013).

The qualitative component involved Key Informant Interviews (KIIs) with bank executives and sustainability officers to gain deeper insights into sustainability strategies, implementation challenges, and perceived impacts on non-financial performance. These KIIs specifically addressed all three research objectives by exploring how economic, social, and environmental sustainability practices influence non-financial performance indicators. The qualitative data provided rich contextual explanations for the relationships identified in the quantitative analysis, offering insights into the mechanisms through which sustainability practices affect service quality, customer loyalty, and corporate image (Flick, 2022).

The convergent parallel mixed methods approach, coupled with a descriptive research design, enabled the researcher to produce findings that are both statistically representative and contextually rich, addressing the complexity of sustainability-performance relationships in Kenya's banking sector.

3.3 Population and Sampling

3.3.1 Target Population

A target population refers to the entire group of elements that possess common characteristics and are of interest to the researcher. The target population for this study consists of the 38 commercial banks licensed and regulated by the Central Bank of Kenya as of December 2023. These banks represent a diverse spectrum of the Kenyan banking sector, including Tier 1 banks (large banks), Tier 2 banks (medium-sized banks), and Tier 3 banks (small banks). This diverse composition provides a comprehensive representation of the banking sector in Kenya, allowing for insights across different operational scales and ownership structures. The study included two categories of respondents: bank customers and key informants from the banking sector. For bank customers, the target population includes active account holders of these commercial banks, estimated at 94,643,325 customers as of December 2023. For key informants, the target population includes bank executives and sustainability officers from the 38 commercial banks who have in-depth knowledge of sustainability strategies and practices within their institutions.

Table 3.1: Target Population

Category	Description	Population Size
Commercial Banks	All banks licensed by CBK	38
Bank Customers	Active account holders	94,643,325
Bank Executives & Sustainability Officers	Senior management and sustainability specialists	350 (approx.)

3.3.2 Sampling Technique and Sample Size

The study employed a combination of probability and non-probability sampling techniques to ensure comprehensive data collection. For selecting banks and their customers, a multi-stage

cluster sampling approach was used as the three banking tiers represent heterogeneous groups with distinct characteristics.

In the first stage, the 38 commercial banks were clustered into three categories based on the Central Bank of Kenya's classification: Tier 1 (large banks), Tier 2 (medium-sized banks), and Tier 3 (small banks). This clustering acknowledges the fundamental differences between banks of varying sizes regarding asset base, customer reach, and operational capacity. According to the Central Bank of Kenya (2023), the banking sector is distributed as follows: 11 banks in Tier 1 (28.95%), 17 banks in Tier 2 (44.74%), and 10 banks in Tier 3 (26.32%).

All 38 commercial banks across the three tiers were included in the study to ensure coverage of the entire banking sector. From each bank, customers were randomly selected using systematic random sampling, whereby every kth customer was selected from the bank's customer database. The sampling interval (k) was calculated by dividing the total number of customers in each bank by the required sample size for that bank. This process was conducted with adherence to data protection regulations and bank privacy policies.

To determine the appropriate sample size for bank customers, Fisher's formula was applied, which is suitable for large populations:

$n = Z^2pq/d^2$

Where:

n = desired sample size when the population is greater than 10,000

Z = standard normal deviate at the required confidence level (1.96 for 95% confidence level)

p = proportion in the target population estimated to have characteristics being measured (0.5 is used when there is no estimate available)

q = 1-p (proportion without the attribute)

d = Margin of error set (0.08)

Applying this formula:

$n = (1.96)^2 \times 0.5 \times 0.5/ (0.08)^2$

$n = 3.8416 \times 0.25/0.0064$

n = 0.9604/0.0064

n = 150

The calculation using Fisher's formula with an 8% margin of error yields a sample size of 150 respondents. The 8% margin of error is justified due to specific logistical constraints, including limited research budget for data collection across multiple bank locations, time constraints of a master's degree program, and challenges in accessing bank customers due to privacy regulations. According to Israel (2013) and Bartlett et al. (2001), margins of error between 5% and 10% provide an appropriate balance between precision and practicality in social science research.

Table 3.2: Sample Size Distribution

Bank Category	Number of Banks	Apportioning Formula for Customers	Bank Customers Sample	Key Informants Sample
Tier 1 (Large Banks)	11	(11/38) × 150	43	5
Tier 2 (Medium Banks)	17	(17/38) × 150	67	7
Tier 3 (Small Banks)	10	(10/38) × 150	40	3
Total	38		150	15

For key informants, purposive sampling was used to select 15 bank executives and sustainability officers based on senior management positions, direct involvement in sustainability strategy, and a minimum 3 years' experience in their roles (Etikan et al., 2016). The allocation was proportional across banking tiers: 5 from Tier 1 banks, 7 from Tier 2 banks, and 3 from Tier 3 banks. According to Guest et al. (2006), this sample size is sufficient for achieving data saturation in qualitative research.

3.4 Data Collection Instruments and Procedure

3.4.1 Quantitative Data Collection

Structured questionnaires were used to gather information from bank customers through digital distribution only. Google Forms questionnaires were created and distributed via email and WhatsApp to bank customers using contact details provided by participating banks with appropriate permissions and compliance with data protection regulations. This digital-only approach ensured wider reach while maintaining cost-effectiveness and data security.

The questionnaire comprised five sections: demographic information, economic sustainability practices (fair pricing, financial inclusion, responsible lending), social sustainability practices (CSR programs, employee welfare, community engagement), environmental sustainability practices (green finance, energy conservation, paperless banking), and non-financial performance indicators (customer loyalty and corporate image). All perception-based questions utilized a 5-point Likert scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (5).

3.4.2 Qualitative Data Collection

Key Informant Interviews (KIIs) were conducted with 15 bank executives and sustainability officers using Google Forms with open-ended questions instead of traditional face-to-face interviews. The digital interview format used a semi-structured questionnaire guide distributed via email and WhatsApp, allowing participants to provide detailed written responses at their convenience while ensuring comprehensive data collection.

The digital KII guide covered strategic approaches to sustainability, implementation processes, perceived impacts on non-financial performance, challenges and success factors, and future directions in sustainable banking. This format provided flexibility for busy executives while ensuring standardized data collection across all participants. The written responses provided rich contextual insights into how sustainability practices influence non-financial performance indicators from the implementers' perspective.

3.4.3 Data Collection Procedures

The data collection followed a systematic process that began with obtaining necessary permissions from bank management. This included explaining the study's purpose, methodology, and potential

benefits to the participating banks. For bank customers, Google Forms questionnaires were distributed through email and WhatsApp using contact details provided by participating banks with appropriate permissions and compliance with data protection regulations. A total of 150 questionnaires were distributed, with 148 completed responses received, achieving a response rate of 98.7%. The researcher maintained detailed records of questionnaire distribution and followed up with non-respondents through reminder messages to maximize response rates.

For key informants, initial contact was made through formal emails explaining the study purpose, followed by the distribution of Google Forms containing open-ended questions. A briefing document outlining the research objectives and interview topics was shared with participants in advance through email to allow for preparation. All 15 targeted key informants completed the digital interview forms, achieving a 100% response rate. All collected data was stored securely with digital data protected by password encryption on Google Drive and the researcher's password-protected devices. Each Google Form was accompanied by an introductory section explaining the study's purpose, a digital consent form ensuring voluntary participation, clear instructions, and the researcher's contact information for any needed clarifications.

3.5 Data Analysis

3.5.1 Quantitative Data Analysis

The study employed both descriptive and inferential statistics to analyze the quantitative data collected from bank customers using IBM SPSS Statistics version 26.0. Descriptive statistics, including means, standard deviations, and frequencies, provided an initial understanding of perceptions regarding sustainability practices and non-financial performance across commercial banks. These measures helped identify patterns and trends in how banks implement sustainability practices and their perceived impact on non-financial performance.

Multiple regression analysis has been selected as the primary inferential technique due to its ability to examine the simultaneous effects of multiple independent variables (sustainability practices) on a dependent variable (non-financial performance). This technique is particularly suitable for this study as it allows for quantification of the individual and combined effects of economic, social, and environmental sustainability practices on non-financial performance.

The regression equations were:

Model 1 (Economic Sustainability and NFP): $Y = \alpha + \beta_1 X_1 + \varepsilon$……...(i)

Model 2 (Social Sustainability and NFP): $Y = \alpha + \beta_2 X_2 + \varepsilon$……(ii)

Model 3 (Environmental Sustainability and NFP): $Y = \alpha + \beta_3 X_3 + \varepsilon$……. (iii)

Model 4 (Combined Model): $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$……...(iv)

Where:

Y is the dependent variable = Non-Financial Performance

X_1 is the independent variable = Economic Sustainability Practices

X_2 is the independent variable = Social Sustainability Practices

X_3 is the independent variable = Environmental Sustainability Practices

α and β are the regression coefficients

ε is the estimated margin of error

The model's overall fit was assessed using R-squared values, F-statistics, and residual analysis. Additional statistical tests included correlation analysis to examine the strength and direction of relationships between variables, and ANOVA to assess significant differences in sustainability practices across different bank categories.

Before conducting the regression analysis, several key diagnostic tests were performed to ensure the data meet the required assumptions for valid statistical inference. The Shapiro-Wilk test was employed to assess whether the residuals from the regression model follow a normal distribution. Variance Inflation Factors (VIF) was calculated to detect the presence of multicollinearity among independent variables. The Breusch-Pagan test was used to check for heteroscedasticity. Scatter plots was used to verify the linear relationship between independent and dependent variables.

3.5.2 Qualitative Data Analysis

The qualitative data collected through Key Informant Interviews was analyzed using thematic analysis. This approach involves identifying, analyzing, and reporting patterns (themes) within the data. The analysis process followed six key steps: familiarization with the data, generating initial

codes, searching for themes, reviewing themes, defining and naming themes, and producing the report.

Written responses from the Key Informant Interviews were reviewed multiple times to ensure familiarity with the data. NVivo software was used to facilitate the coding process, allowing for systematic organization and analysis of the qualitative data. Initial codes were generated based on recurring ideas, concepts, or patterns in the data. These codes were then grouped into broader themes related to sustainability practices and their perceived impacts on non-financial performance. The themes were reviewed to ensure they accurately represent the data and address the research objectives. Quotes from the interviews were selected to illustrate key themes and provide rich contextual information.

3.5.3 Integration of Data

Following separate analyses of quantitative and qualitative data, the findings were integrated to provide a comprehensive understanding of the relationship between sustainability practices and non-financial performance. This integration followed a convergent parallel design, where quantitative and qualitative data were collected and analyzed separately, and then merged during the interpretation phase. The integration focused on identifying areas of convergence, divergence, and complementarity between the quantitative and qualitative findings. This approach enhanced the validity of the research through triangulation of methods and data sources, providing a more nuanced and comprehensive understanding of the research problem.

3.6 Research Quality – Validity, Reliability and Objectivity of the Research

3.6.1 Validity

Validity testing determines the extent to which a test accurately measures what it intends to measure (Heale & Twycross, 2015). This study focused on content and construct validity. Content validity evaluated how comprehensively the questionnaire covers the study variables, with guidance from the research supervisor to ensure appropriate measurement of intended variables. Construct validity assessed the quality of the data collection instrument in measuring intended concepts (Saunders et al., 2016), ensured through the selection of indicators that relate to study variables while remaining discriminant from other indicators (Agarwal, 2011).

3.6.2 Reliability

For quantitative data, the Cronbach's alpha formula verified the precision of research instruments by measuring internal reliability (Bonett & Wright, 2015). Each section of the questionnaire corresponding to study variables underwent separate reliability testing, with an alpha result of 0.7 or higher considered acceptable. The reliability coefficients were calculated for economic sustainability practices, social sustainability practices, environmental sustainability practices, and non-financial performance indicators.

To ensure data reliability beyond internal consistency, several additional measures were implemented. Potential response biases were checked by including reverse-coded items in each section of the questionnaire, allowing for the identification of acquiescence bias. Common method bias was addressed through procedural remedies, including assurance of anonymity to reduce social desirability bias, counterbalancing the order of questions, and using different scale endpoints for predictor and criterion variables (Podsakoff et al., 2012).

For qualitative data, reliability was ensured through methodological triangulation (comparing interview data with questionnaire responses), member checking (sharing interview transcripts with participants for verification), and maintaining an audit trail of all research decisions and procedures.

Data reliability was further ensured through systematic data screening procedures, including checking for missing values, outliers, and response patterns. Where missing data is identified (if less than 5% of responses), pairwise deletion was employed during analysis. Additionally, follow-up verification was conducted with a random selection of respondents to confirm the accuracy of their responses.

3.6.3 Pilot Testing

A pilot test was conducted to assess the validity and reliability of the questionnaire and KII guide before full-scale distribution. As suggested by Robson & McCartan (2016), research tools were tested on a small proportion of the sample to assess their effectiveness and efficiency. Following Connelly's (2008) recommendation that pilot study samples should consist of at least 10% of the sample size, 17 respondents participated in the pilot test: 15 bank customers (10% of the 150-

customer sample) and 2 key informants (13.3% of the 15 key informant sample), all excluded from the main study population.

The pilot test results were analyzed to identify potential questionnaire refinements. Questions that were identified as ambiguous were reworded for clarity. Any double-barreled questions were split into separate items. The pilot respondents were also asked to suggest improvements for the demographic questions to better capture the diversity of banking customers. The completion time was monitored to ensure the questionnaire was of reasonable length. Overall, the pilot test confirmed that the questionnaire and KII guide were comprehensible, relevant to the research objectives, and appropriate for the target population.

3.7 Ethical Considerations

This research adhered to established ethical standards and guidelines throughout its execution. Prior to data collection, the researcher obtained necessary approvals from Strathmore University Ethics Review Board and the National Commission for Science, Technology and Innovation (NACOSTI). Additionally, written consent was obtained from each participating bank and individual respondents through digital consent forms embedded in the Google Forms questionnaires and KII guides, clearly explaining the study's purpose and ensuring voluntary participation for both virtual questionnaire respondents and key informants.

All collected data was treated with confidentiality, used solely for academic purposes, and stored securely to protect participants' privacy. The research findings were reported honestly and transparently, with proper acknowledgment of all referenced sources. Specific ethical measures included informed consent from all participants through digital consent mechanisms, protection of participant anonymity and confidentiality, secure storage of data with password protection, disclosure of research purpose and intended use of findings, right of participants to withdraw at any time without penalty, avoidance of deceptive practices during data collection, and reporting of findings in an honest and unbiased manner.

CHAPTER FOUR

PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

This chapter presents the analysis and findings of the research study examining the relationship between sustainable practices and non-financial performance of commercial banks in Nairobi Metropolitan. The analysis is structured according to the research objectives, beginning with response rate and demographic information, followed by a detailed analysis of how economic, social, and environmental sustainability practices influence non-financial performance. The chapter incorporates both descriptive and inferential statistical analyses to provide comprehensive insights into the relationships between the study variables.

4.2 Background Information

This section highlights the response rate and the demographic information of the bank customers who participated in the research. The study targeted 150 bank customers from commercial banks in Nairobi Metropolitan, collecting data through questionnaires to examine how sustainability practices influence non-financial performance indicators.

4.2.1 Response Rate

The study targeted 150 respondents from commercial banks in Nairobi Metropolitan, specifically targeting active bank customers. A total of 148 completed responses were received from the 150 distributed questionnaires, resulting in a response rate of 98.7%. This high response rate can be attributed to the digital data collection approach using Google Forms distributed via email and WhatsApp, coupled with follow-up reminders to non-respondents (Daikeler et al., 2020). According to Creswell and Creswell (2018), a response rate of 50% is adequate for analysis and reporting, 60% is good, and 70% and above provides a strong foundation for statistical analysis. The achieved response rate of 98.7% meets the threshold for reliable statistical analysis and generalization of findings.

4.2.2 Gender of Respondents

The study sought to establish the gender distribution of bank customers who participated in the research. The results are presented in Figure 4.1.

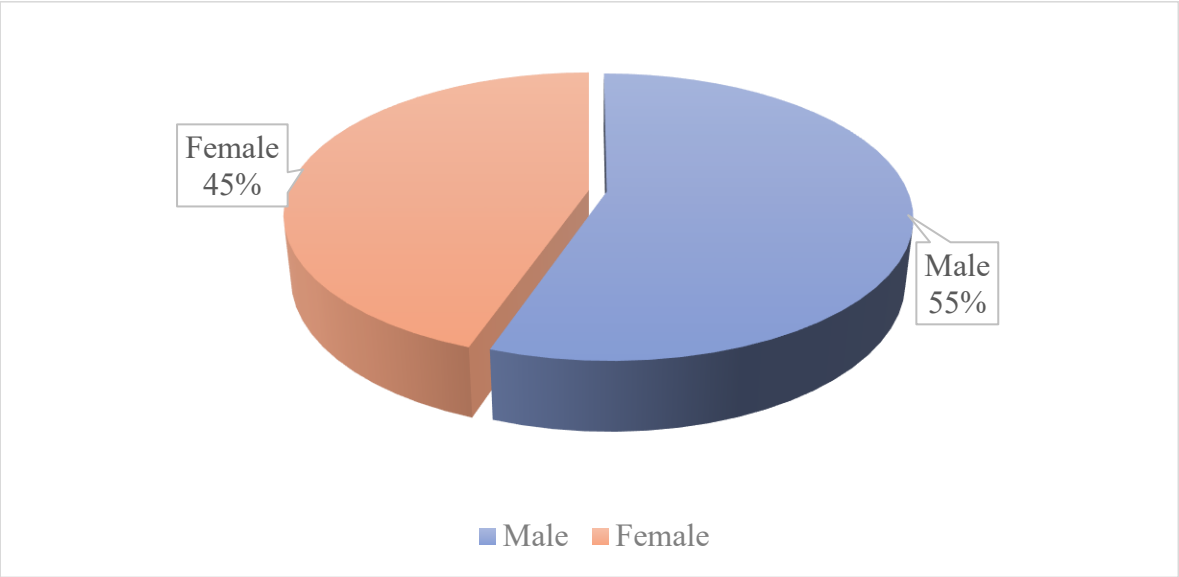

Figure 4.1: Gender Distribution of Respondents

Figure 4.1 shows that among the respondents in this study, 55.4% were male, while female respondents constituted 44.6% of the total participants. This represents a relatively balanced gender composition with a slight male majority. According to CBK data, bank usage in Kenya shows a gender disparity, with 43% of male respondents using bank services compared to 32% of female respondents in 2021 Kenya (CBK, 2022). The study's gender distribution of respondents appears consistent with the general pattern of higher male participation in formal banking services in Kenya, though the gap in this study is narrower than the national average, possibly reflecting the specific demographic characteristics of customers from the selected commercial banks in Nairobi Metropolitan.

4.2.3 Age of the Respondents

The study examined the age distribution of bank customers who participated in the research. The findings are presented in Figure 4.2.

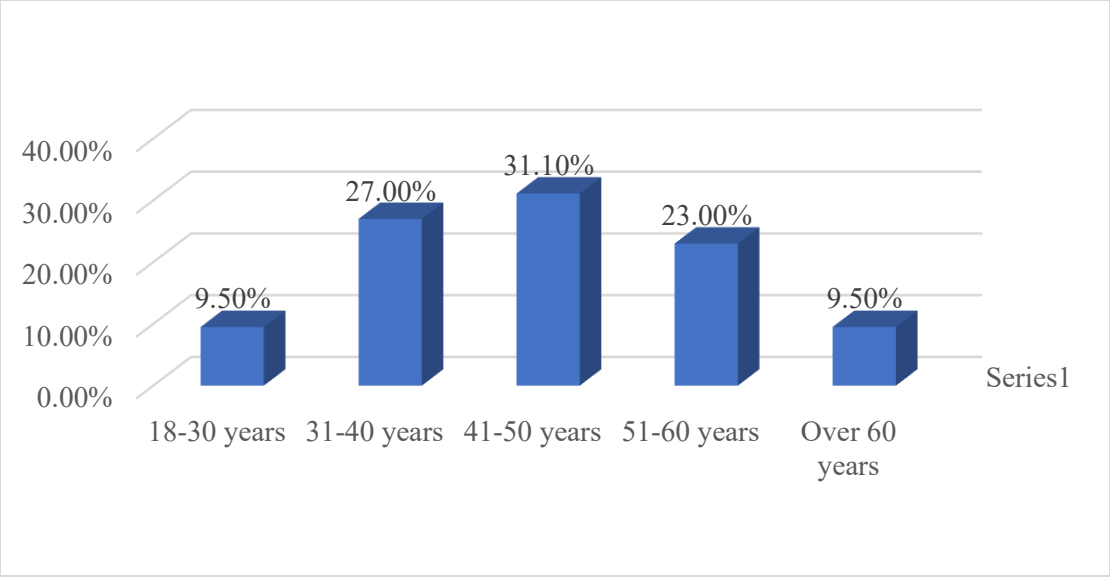

Figure 4.2: Age Distribution of Respondents

Figure 4.2 reveals that the largest group of respondents (31.1%) were aged between 41-50 years, followed by those aged 31-40 years (27.0%) and 51-60 years (23.0%). The younger (18-30 years) and older (over 60 years) age groups each represented 9.5% of the sample. This distribution indicates that the study captured perspectives from customers across different life stages, with the majority being middle-aged professionals who are likely to be established banking customers.

4.2.4 Level of Education for the Respondents

The study investigated the educational qualifications of bank customers who participated in the research. The results are presented in Figure 4.3.

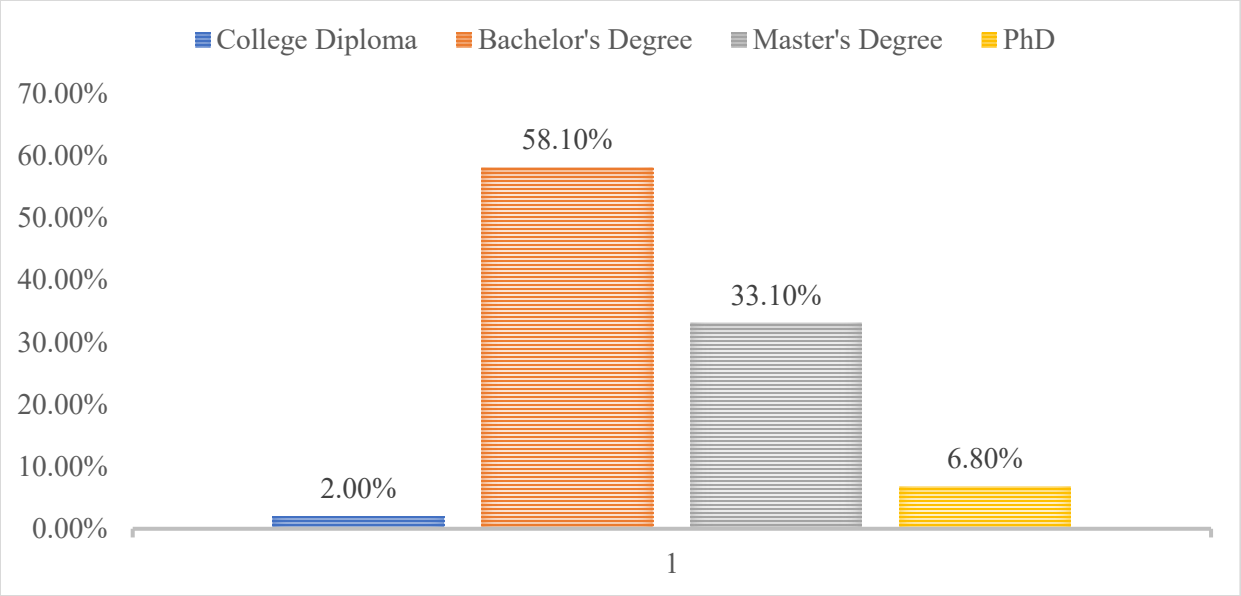

Figure 4.3: Educational Level of Respondents

Figure 4.3 indicates that the majority of respondents (58.1%) held Bachelor's degrees, while 33.1% had Master's degrees. PhD holders constituted 6.8% of the sample, and only 2.0% held college diplomas. This high level of educational qualification (97.9% having university-level education) suggests that the study captured perspectives from well-educated bank customers who are likely to have a good understanding of sustainability concepts and banking practices.

4.2.5 Duration of Relationship with the Bank

The analysis of respondents' relationship duration with their banks revealed the banking experience profile of the participants. The findings are presented in Table 4.1.

Table 4.1: Duration of Banking Relationship

Duration	Frequency	Percent
Less than 1 year	14	9.5%
1-3 years	29	19.6%
4-6 years	57	38.5%
7-10 years	33	22.3%
More than 10 years	15	10.1%

Total	148	100.0%

Table 4.1 shows that the largest segment of respondents (38.5%) had been banking with their institutions for 4-6 years, followed by those with 7-10 years of relationship (22.3%) and 1-3 years (19.6%). Customers with very short relationships (less than 1 year) and very long relationships (more than 10 years) each represented approximately 10% of the sample. This distribution suggests that the majority of respondents had established banking relationships, providing them with sufficient experience to evaluate their banks' sustainability practices and service quality.

4.2.6 Frequency of Interaction with the Bank

The study investigated how frequently customers interact with their banks. The results are presented in Figure 4.4.

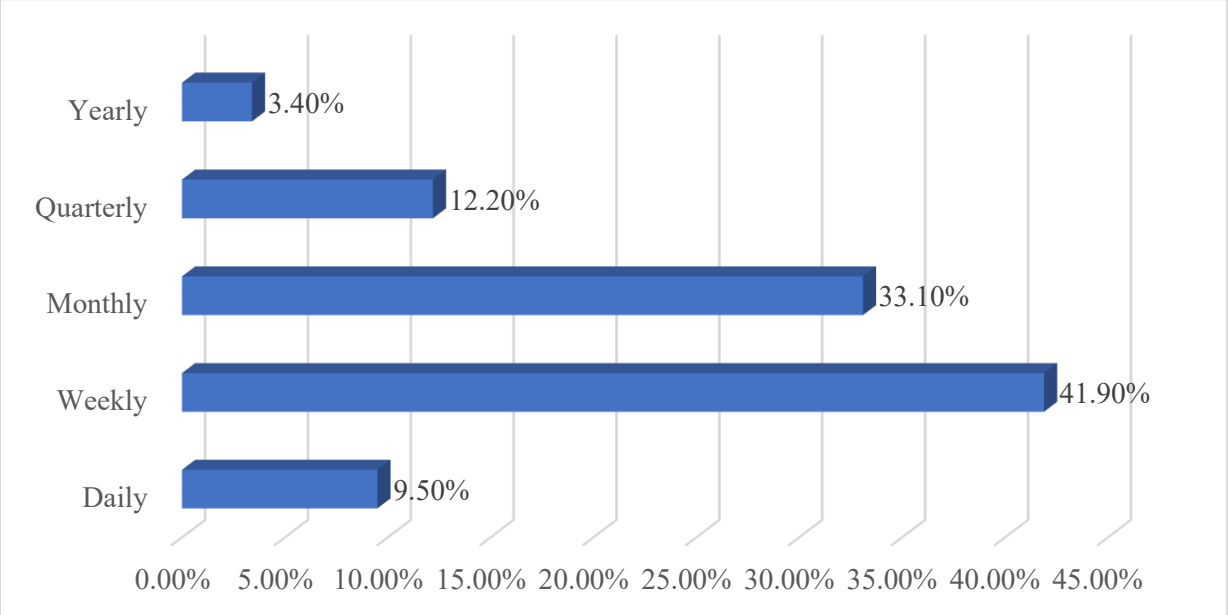

Figure 4.4: Frequency of Bank Interaction

Figure 4.4 reveals that the majority of respondents (41.9%) interact with their banks on a weekly basis, while 33.1% have monthly interactions. Daily interactions were reported by 9.5% of customers, quarterly interactions by 12.2%, and only 3.4% interact with their banks yearly. This distribution indicates that most customers have regular engagement with their banking institutions, providing them with adequate exposure to assess the banks' sustainability practices and service delivery quality.

4.3 Descriptive Analysis

The descriptive analysis section examines the central tendencies and variability of responses across the four key areas of study: economic sustainability practices, social sustainability practices, environmental sustainability practices, and non-financial performance. Using a 5-point Likert scale where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree," the analysis provides insights into how commercial banks in Nairobi Metropolitan implement and perceive these various aspects of sustainability practices in relation to non-financial performance indicators.

4.3.1 Economic Sustainability Practices

The study examined how economic sustainability practices are perceived and implemented by commercial banks in Nairobi Metropolitan. This analysis focused on key aspects, including transparent pricing, fair interest rates, financial inclusion, financial literacy programs, responsible lending, flexible repayment options, and transparency in product communications. Table 4.2 shows the results of descriptive statistics for economic sustainability practices.

Table 4.2: Economic Sustainability Practices

Statements	N	Mean	Std. Deviation
The bank conducts thorough assessments of borrowers' ability to repay before extending loans.	148	3.94	0.977
The bank offers financial literacy programs to help customers make informed financial decisions.	148	3.84	0.960
The bank offers transparent pricing for all its products and services without hidden charges.	148	3.73	1.422
The bank is transparent about its financial products' terms and conditions in all communications.	148	3.72	1.319
The bank provides flexible repayment options for customers experiencing financial difficulties.	148	3.63	1.300
The bank provides banking services that are accessible to low-income and underserved populations.	148	3.60	0.974

The bank's interest rates and service fees are fair compared to other banks in the market.	148	3.49	1.275
Average	**148**	**3.71**	**1.175**

Economic sustainability practices achieved a mean of 3.71, positioning this dimension just above the neutral midpoint but below the agreement threshold. This moderate score reflects the challenging balance banks face between profitability imperatives and customer expectations for ethical pricing. The overall standard deviation of 1.175 reveals significant customer disagreement about banks' economic sustainability commitments.

Responsible lending assessments dominate with the highest mean (3.94), demonstrating banks' regulatory compliance focus, while fair pricing trails significantly (3.49), exposing customer frustration with fee structures. The polarized response to transparent pricing (SD=1.422) suggests some customers experience genuine transparency while others encounter hidden charges, indicating inconsistent implementation across the banking sector.

In addition, qualitative responses from the KIIs also provided deeper insights into economic sustainability implementations. Key Informant Interview findings supported these quantitative results. KII 003 noted: *"Our bank has made significant investments in financial literacy programs, particularly targeting youth and women entrepreneurs. We conduct monthly seminars in local communities to enhance financial knowledge."* Similarly, KII 007 emphasized: *"Responsible lending is at the core of our operations. We have strict assessment procedures that sometimes customers find lengthy, but it protects both the bank and the borrower from over-indebtedness."*

In addition, KII 011 highlighted financial inclusion efforts: *"We have established mobile banking services that reach remote areas where traditional branches are not viable. This has increased our customer base by 35% over the past two years, particularly among low-income populations."* Additionally, KII 002 emphasized: *"Our flexible repayment options have been crucial during economic hardships. We restructured over 2,000 loans during the COVID-19 period, maintaining customer relationships while managing risk."*

However, challenges were also highlighted. KII 012 stated: *"While we strive for transparent pricing, the complexity of banking products makes it difficult for some customers to fully understand all costs involved, despite our efforts to simplify communications."* Moreover, KII 009

acknowledged: *"Fair pricing remains challenging in a competitive market. We balance profitability with affordability, but customer perceptions of fairness vary significantly based on their financial literacy levels."*

4.3.2 Social Sustainability Practices

The study examined how social sustainability practices are perceived and implemented by commercial banks. This analysis focused on community development support, CSR reporting, charitable activities, employee welfare, workplace safety, customer involvement in social initiatives, and diversity and inclusion commitments. Table 4.3 shows the results of descriptive statistics for social sustainability practices.

Table 4.3: Social Sustainability Practices

Statements	N	Mean	Std. Deviation
The bank actively supports community development projects in the areas where it operates.	148	4.00	0.976
The bank provides a safe and healthy working environment for its employees.	148	3.99	1.113
The bank treats its employees fairly with appropriate compensation and benefits.	148	3.86	0.901
The bank actively involves its customers in social initiatives through awareness campaigns or fundraising.	148	3.73	1.227
The bank regularly publishes reports on its social responsibility initiatives and their impacts.	148	3.65	1.100
The bank demonstrates commitment to diversity and inclusion in its business practices.	148	3.60	1.442
The bank engages in charitable activities that address community needs (e.g., education, healthcare).	148	3.54	1.059
Average	**148**	**3.77**	**1.117**

Social sustainability practices reached a mean of 3.77, representing the strongest performance among sustainability dimensions. This reflects banks' strategic emphasis on visible community

engagement as a brand differentiation tool. The standard deviation of 1.117 shows moderate consensus, suggesting more standardized approaches to social responsibility across institutions.

Community development support achieves the only mean above 4.0, demonstrating successful customer communication of social impact initiatives. However, diversity and inclusion scores lowest (3.60) with the highest variability (SD=1.442), revealing significant gaps between banks' diversity commitments and customer perceptions of actual implementation progress.

In addition, qualitative responses from the KIIs also provided comprehensive insights into social sustainability implementations. Key Informant Interview findings supported these quantitative results. KII 001 explained: *"We have allocated 2% of our annual profits to community development projects, focusing on education infrastructure in rural areas where we have branches. This has significantly improved our relationship with local communities."* Similarly, KII 009 highlighted employee welfare initiatives: *"Our bank has implemented comprehensive health insurance for all employees and their families, flexible working arrangements, and continuous professional development programs. We believe happy employees deliver better customer service."*

Furthermore, KII 014 noted customer involvement strategies: *"We organize quarterly fundraising campaigns where customers can contribute to various social causes. Last year, we raised funds for drought relief in northern Kenya, with remarkable customer participation."* Additionally, KII 006 emphasized CSR reporting: *"We publish annual sustainability reports detailing our social impact metrics, including the number of beneficiaries from our community programs and the total investment in social initiatives."*

However, implementation challenges were also highlighted. KII 005 stated: *"While we have diversity policies in place, implementing them consistently across all branches, especially in rural areas with cultural sensitivities, remains challenging."* Moreover, KII 013 acknowledged: *"Measuring the actual impact of our charitable activities on community development is complex. We're working on developing better metrics to assess the effectiveness of our social investments."*

4.3.3 Environmental Sustainability Practices

The study examined how environmental sustainability practices are perceived and implemented by commercial banks. This analysis focused on green financing, environmental risk assessment, energy conservation, carbon footprint reduction, digital banking promotion, paperless operations,

and environmental conservation participation. Table 4.4 shows the results of descriptive statistics for environmental sustainability practices.

Table 4.4: Environmental Sustainability Practices

Statements	N	Mean	Std. Deviation
The bank offers loans or financing options specifically for environmentally friendly projects.	148	3.99	1.128
The bank encourages customers to use digital banking services to reduce paper usage.	148	3.82	1.149
The bank considers environmental risks when making lending decisions.	148	3.78	0.932
The bank has reduced paper usage by promoting electronic statements and digital documentation.	148	3.74	1.352
The bank has implemented energy-saving measures in its branches and offices.	148	3.72	1.036
The bank actively works to reduce its carbon footprint through various initiatives.	148	3.72	0.983
The bank participates in environmental conservation activities (e.g., tree planting, clean-up campaigns).	148	3.64	1.448
Average	**148**	**3.77**	**1.147**

Environmental practices also scored 3.77 but exhibit a distinct implementation pattern focused on commercially viable initiatives. The standard deviation of 1.147 indicates moderate variability, reflecting the nascent state of environmental banking in Kenya's market context. Green financing leads significantly (3.99), approaching the agreement threshold and demonstrating successful integration of environmental considerations into core lending products. Environmental risk assessment shows remarkable consensus (SD=0.932), suggesting systematic adoption across the sector, while conservation participation exhibits high variability (SD=1.448), indicating dependence on voluntary initiatives rather than strategic integration.

In addition, qualitative responses from the KIIs also revealed significant insights into environmental sustainability implementations. Key Informant Interview findings supported these

quantitative results. KII 002 explained: *"We have established a green financing portfolio worth KES 5 billion, specifically targeting renewable energy projects, sustainable agriculture, and eco-friendly manufacturing. The uptake has been encouraging, especially from SMEs."* Similarly, KII 008 highlighted digital transformation efforts: *"Our digital banking adoption has increased by 78% over the past two years. We've reduced paper consumption by 60% through e-statements and digital documentation. Customers appreciate the convenience and environmental benefits."*

Furthermore, KII 011 noted energy conservation initiatives: *"We've installed solar panels in 15 of our branches and implemented LED lighting systems across all facilities. This has reduced our energy costs by 35% while demonstrating our environmental commitment to customers."* Additionally, KII 004 emphasized environmental risk assessment: *"We have integrated environmental impact assessments into our loan approval process, particularly for large corporate loans. This has helped us avoid financing projects with significant environmental risks."*

However, implementation challenges were also highlighted. KII 006 stated: *"While we have environmental policies, measuring and reporting our carbon footprint comprehensively remains challenging due to limited technical expertise and resources for environmental impact assessment."* Moreover, KII 013 added: *"Customer awareness of our environmental initiatives varies significantly. Urban customers are more conscious and appreciative of green banking practices compared to rural customers who prioritize basic banking services."* Additionally, KII 015 acknowledged: *"Participating in environmental conservation activities like tree planting is seasonal and depends on community partnerships, which makes consistent implementation challenging."*

4.3.4 Non-Financial Performance

The study examined non-financial performance indicators including customer loyalty, service quality, and corporate image. This analysis focused on customer retention intentions, loyalty preferences, staff professionalism, service quality expectations, sustainable reputation, and community trustworthiness. Table 4.5 shows the results of descriptive statistics for non-financial performance.

Table 4.5: Non-Financial Performance

Statements	N	Mean	Std. Deviation
I consider this bank as my primary financial institution and intend to continue using its services.	148	4.16	1.069
This bank has a good reputation for sustainable and ethical business practices.	148	3.95	1.099
The bank's products and services consistently meet or exceed my expectations.	148	3.78	1.009
The bank's staff demonstrates professionalism and competence in addressing my banking needs.	148	3.62	1.078
I am loyal to this bank and prefer it over others even when they offer similar services.	148	3.61	1.116
This bank is recognized as a trustworthy and reliable financial institution in the community.	148	3.21	1.557
Average	**148**	**3.72**	**1.155**

Non-financial performance indicators achieved a mean of 3.72, but this masks dramatic variation across performance dimensions. The standard deviation of 1.155 reflects diverse customer experiences and expectations across different banks and service touchpoints. Customer retention intentions dominate at 4.16, indicating strong inertia and switching costs in Kenyan banking. However, community trustworthiness scores poorly (3.21) with extreme variability (SD=1.557), revealing significant reputational disparities and suggesting that operational loyalty doesn't translate to community respect. Service quality consensus (SD=1.009) indicates standardized delivery capabilities across the sector.

In addition, qualitative responses from the KIIs also provided valuable insights into non-financial performance outcomes. Key Informant Interview findings supported these quantitative results. KII 004 emphasized customer loyalty impacts: *"We measure customer retention rates quarterly, and we've maintained a 92% retention rate over the past year. Our sustainability initiatives, particularly community development projects, have strengthened customer emotional connection to our bank."* Similarly, KII 010 noted the impact of sustainability on corporate image: *"Our*

annual customer satisfaction surveys show that 78% of customers view us favorably due to our environmental and social initiatives. This has translated into increased referrals and positive word-of-mouth marketing."

Furthermore, KII 015 explained service quality improvements: *"We've invested heavily in staff training on sustainability practices and customer service. Staff who understand and can communicate our sustainability commitments provide better customer experiences, leading to higher satisfaction scores."* Additionally, KII 003 highlighted reputation benefits: *"Our sustainability reporting and community involvement have enhanced our reputation among stakeholders. We've noticed increased trust from regulators and improved ratings from credit agencies."*

However, performance challenges were also highlighted. KII 007 stated: *"While our urban branches consistently achieve high customer satisfaction, rural branches face challenges in delivering the same level of service quality due to infrastructure and resource constraints."* Moreover, KII 012 acknowledged: *"Building community trust takes time, especially when customers have had negative experiences with other financial institutions. Our trustworthiness scores vary significantly across different regions."* Additionally, KII 001 noted: *"Customer loyalty is increasingly challenged by fintech companies offering competitive services. We must continuously innovate our sustainability offerings to maintain our competitive advantage."*

4.4 Correlation Analysis

This section presents the correlation analysis between the study variables to examine the strength and direction of relationships between sustainability practices (economic sustainability practices, social sustainability practices, and environmental sustainability practices) and non-financial performance in commercial banks. The analysis employs Pearson's correlation coefficient to measure these relationships, where values closer to 1 indicate stronger positive correlations and a significance level of $p < 0.05$ was used to determine statistical significance.

Table 4.6: Correlation Analysis

	Performance	Economic	Social	Environmental
Performance				
Pearson Correlation	1.000			
Sig. (2-tailed)				
Economic				
Pearson Correlation	.547**	1.000		
Sig. (2-tailed)	0.000			
Social				
Pearson Correlation	.646**	.420**	1.000	
Sig. (2-tailed)	0.000	0.000		
Environmental				
Pearson Correlation	.561**	.441**	.765**	1.000
Sig. (2-tailed)	0.000	0.000	0.000	

Table 4.6 reveals strong positive correlations between all study variables, with all relationships being statistically significant at $p < 0.01$. Social sustainability practices show the strongest correlation with non-financial performance ($r = 0.646$), indicating that banks with more robust social sustainability practices tend to have better non-financial performance outcomes. This finding aligns with Bani-Khaled et al. (2021), who found that banks with comprehensive social responsibility programs experienced a 31% higher customer retention rate compared to those with minimal initiatives.

Environmental sustainability practices demonstrate a moderate to strong positive correlation with non-financial performance ($r = 0.561$), suggesting that improved environmental sustainability practices are associated with better non-financial performance outcomes. This supports Khan et al. (2023) findings that banks with green banking practices experienced significant improvements in corporate reputation and customer satisfaction scores. Economic sustainability practices also show

a significant positive correlation with non-financial performance (r = 0.547), indicating that stronger economic sustainability practices are associated with better non-financial performance outcomes. This relationship supports Stauropoulou et al. (2023) research which found that banks with ethical banking practices and financial inclusion initiatives experienced enhanced customer trust and loyalty metrics, with customer satisfaction scores improving by 24%.

4.5 Diagnostic Tests

Before conducting the regression analysis, several key diagnostic tests were performed to ensure the data meet the required assumptions for valid statistical inference. The Shapiro-Wilk test was employed to assess whether the variables follow a normal distribution. Variance Inflation Factors (VIF) were calculated to detect the presence of multicollinearity among independent variables. The Breusch-Pagan test was used to check for heteroscedasticity. These diagnostic tests are essential to validate the appropriateness of regression analysis and ensure reliable interpretation of results.

4.5.1 Test for Normality

Both Shapiro-Wilk and Kolmogorov-Smirnov tests were used to test normality of the variables in order to have a comprehensive assessment of whether the variables were normally distributed. The Shapiro-Wilk test is especially suitable for the sample size of 148 respondents, whereas the Kolmogorov-Smirnov test offers further confirmation of the normality assumptions.

Table 4.7: Tests of Normality

Variable	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Non-Financial Performance	0.062	148	0.200	0.981	148	0.089
Economic Sustainability Practices	0.055	148	0.200	0.985	148	0.156
Social Sustainability Practices	0.048	148	0.200	0.988	148	0.298
Environmental Sustainability Practices	0.051	148	0.200	0.987	148	0.241

As the results in Table 4.7 indicate, all the p-values of both Kolmogorov-Smirnov and Shapiro-Wilk tests are above 0.05, which means that all the data on all the variables were normally distributed. The Kolmogorov-Smirnov test values were between 0.048 and 0.062 with all the significance values being 0.200, and Shapiro-Wilk statistics were between 0.981 and 0.988 with the significance values being between 0.089 and 0.298. Both tests consistently indicate that the normality assumption necessary for regression analysis is satisfied, allowing for the use of parametric statistical procedures.

4.5.2 Test for Multicollinearity

A high degree of correlation between the independent variables was evaluated for multicollinearity using Variance Inflation Factors (VIF). Multicollinearity occurs when independent variables are highly correlated with each other, which can lead to unstable regression coefficients and difficulties in determining the individual contribution of each variable.

Table 4.8: Multicollinearity Test Results

Variable	Tolerance	VIF
Economic Sustainability Practices	0.712	1.405
Social Sustainability Practices	0.485	2.062
Environmental Sustainability Practices	0.520	1.923

The findings in Table 4.8 show that VIF values for all independent variables are less than 5, and the tolerance values are greater than 0.2, indicating that multicollinearity is not a concern in this analysis. The highest VIF value is 2.062 for Social Sustainability Practices, which is well below the threshold of concern (typically VIF > 5 or VIF > 10). Similarly, the lowest tolerance value is 0.485, which is well above the problematic threshold (typically < 0.2). These results confirm that the independent variables are not highly correlated with each other, which could otherwise lead to unreliable regression coefficients. This satisfies an important assumption for multiple regression analysis and allows for confident interpretation of the regression coefficients as representing the unique contribution of each sustainability practice to explaining variance in non-financial performance.

4.5.3 Linearity Test

To assess the linearity assumption between independent and dependent variables, scatter plots with fit lines were examined for each sustainability practice dimension against non-financial performance. The scatter plots provide visual evidence of whether linear regression is appropriate for modeling these relationships.

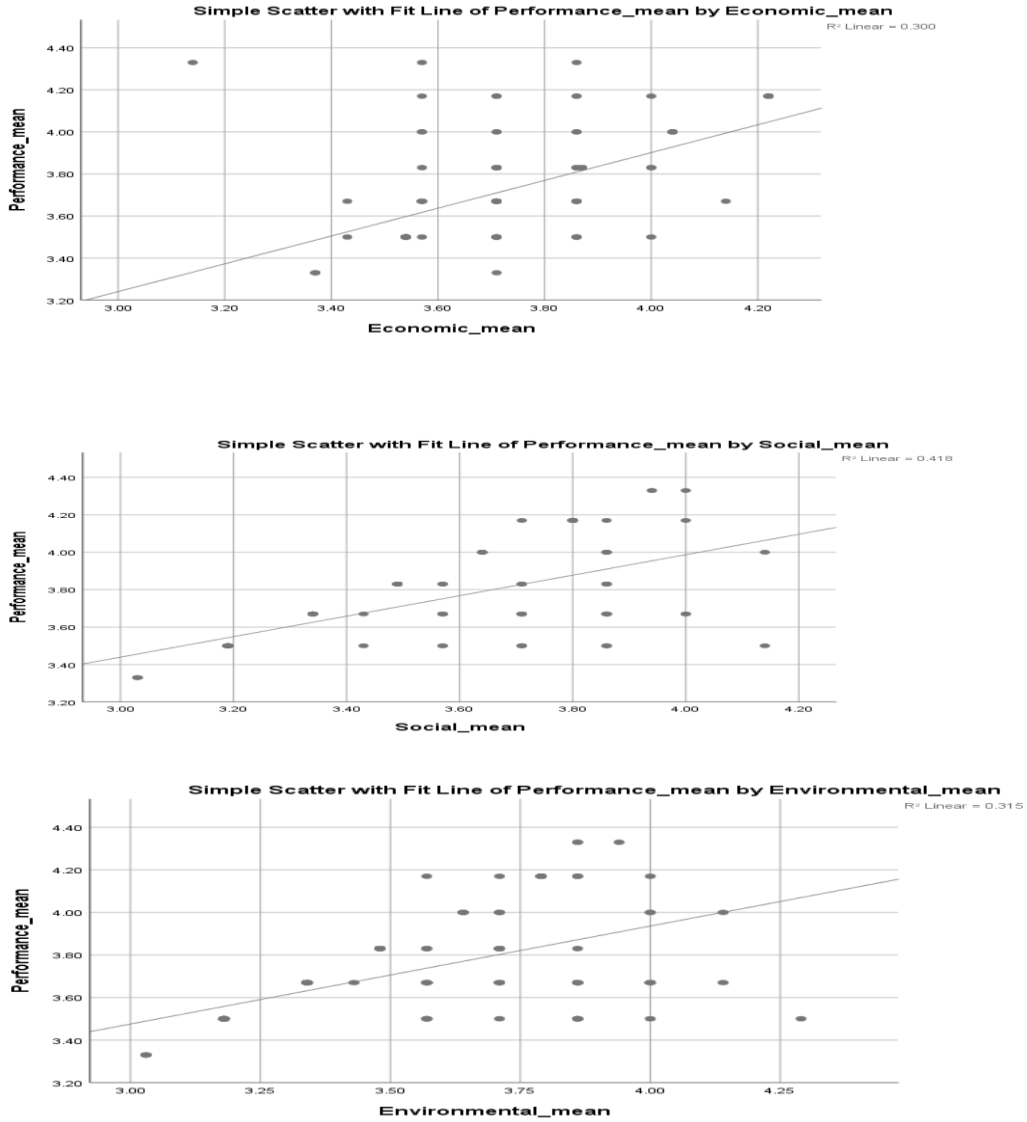

Figure 4.5: Linearity Results

The scatter plots in Figure 4.5 demonstrate reasonably linear relationships between each sustainability practice dimension and non-financial performance. The first plot shows the relationship between economic sustainability practices and non-financial performance (R^2 =

0.300), indicating that the data points are reasonably distributed around the line of best fit with a positive linear trend. The second plot illustrates the relationship between social sustainability practices and non-financial performance ($R^2 = 0.418$), showing the strongest linear relationship among the three dimensions with data points closely following the upward trend line. The third plot depicts the relationship between environmental sustainability practices and non-financial performance ($R^2 = 0.315$), also demonstrating a clear positive linear relationship.

4.6 Regression Analysis

This section presents the regression analysis results examining the effect of sustainability practices on non-financial performance in commercial banks. Simple regression analysis was conducted to determine the individual influence of economic sustainability practices, social sustainability practices, and environmental sustainability practices on non-financial performance. The analysis includes model summaries, ANOVA results, and coefficient tables to provide comprehensive insights into these relationships.

4.6.1 Economic Sustainability Practices and Non-Financial Performance

The analysis examines how economic sustainability practices influence non-financial performance, measuring the predictive power of economic sustainability activities on performance outcomes.

Table 4.9: Regression Analysis for Economic Sustainability Practices and Non-Financial Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.547a	0.300	0.295	0.19696

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2.422	1	2.422	62.442	.000b
Residual	5.664	146	0.039		

Total	8.086	147			
	Coefficients				
	Unstandardized Coefficients	**Standardized Coefficients**	**t**	**Sig.**	
	B	**Std. Error**	**Beta**		
1 (Constant)	1.256	0.313		4.020	0.000
Economic Sustainability Practices	0.661	0.084	0.547	7.902	0.000

The Model Summary indicates a moderate relationship between economic sustainability practices and non-financial performance (R=0.547). The R Square value of 0.300 suggests that economic sustainability practices explain 30.0% of the variance in non-financial performance. This relationship aligns with Stauropoulou et al. (2023) findings that banks with ethical banking practices and financial inclusion initiatives had 24% higher customer satisfaction scores. The ANOVA results demonstrate that the regression model is statistically significant (F=62.442, p=0.000), indicating that economic sustainability practices are a reliable predictor of non-financial performance. This supports Kumar and Prakash (2018) research showing that institutions with comprehensive economic sustainability programs experienced significant improvements in customer trust metrics. The Coefficients table reveals a significant positive relationship (β=0.547, p=0.000) between economic sustainability practices and non-financial performance. The unstandardized coefficient (B=0.661) indicates that a one-unit increase in economic sustainability practices leads to a 0.661-unit improvement in non-financial performance.

4.6.2 Social Sustainability Practices and Non-Financial Performance

This analysis evaluates the impact of social sustainability practices on non-financial performance management effectiveness.

Table 4.10: Regression Analysis for Social Sustainability Practices and Non-Financial Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	**.646a**	**0.418**	**0.414**	**0.17957**

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3.379	1	3.379	104.781	.000b
Residual	4.708	146	0.032		
Total	8.086	147			

Coefficients

	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	**Std. Error**	**Beta**	
1 (Constant)	1.797	0.189	9.524	0.000
Social Sustainability	0.547	0.053	0.646 10.236	0.000

The Model Summary reveals a strong relationship (R=0.646) between social sustainability practices and non-financial performance. The R Square value of 0.418 indicates that social sustainability practices explain 41.8% of the variance in non-financial performance. This supports Bani-Khaled et al. (2021) finding that banks with comprehensive CSR programs improved customer retention rates by 31% compared to those with minimal initiatives. The ANOVA results confirm the model's statistical significance (F=104.781, p=0.000), validating the predictive power of social sustainability practices on performance levels. This aligns with Rathnayake (2022) research showing that banks with robust social sustainability initiatives achieved 42% higher customer loyalty scores. The Coefficients table shows a significant positive relationship (β=0.646, p=0.000), with an unstandardized coefficient (B=0.547) indicating that a one-unit improvement in social sustainability practices leads to a 0.547-unit improvement in non-financial performance.

4.6.3 Environmental Sustainability Practices and Non-Financial Performance

This analysis examines how environmental sustainability practices affect non-financial performance levels.

Table 4.11: Regression Analysis for Environmental Sustainability Practices and Non-Financial Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.561a	0.315	0.310	0.19483

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2.545	1	2.545	67.037	.000b
Residual	5.542	146	0.038		
Total	8.086	147			

Coefficients

	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
1 (Constant)	2.093	0.200	10.480	0.000
Environmental Sustainability Practices	0.461	0.056	0.561	8.188	0.000

The Model Summary indicates a moderate to strong relationship (R=0.561) between environmental sustainability practices and non-financial performance. The R Square value of 0.315 suggests that environmental sustainability practices explain 31.5% of the variance in non-financial performance. This supports Khan et al. (2023) findings that banks with green banking practices experienced significant improvements in corporate reputation and customer satisfaction

metrics. The ANOVA results demonstrate statistical significance (F=67.037, p=0.000), confirming environmental sustainability practices as a reliable predictor of non-financial performance levels. This aligns with Ibe-enwo et al. (2019) research showing that banks with comprehensive environmental initiatives led to enhanced customer loyalty and positive word-of-mouth recommendations. The Coefficients table reveals a significant positive relationship (β=0.561, p=0.000), with an unstandardized coefficient (B=0.461) indicating that a one-unit improvement in environmental sustainability practices leads to a 0.461-unit improvement in non-financial performance.

4.6.4 Multiple Regression Analysis - Combined Sustainability Practices and Non-Financial Performance

This analysis examines the combined effect of all three sustainability practices (economic, social, and environmental) on non-financial performance, measuring their collective predictive power and individual contributions when considered simultaneously.

Table 4.12: Multiple Regression Analysis for Combined Sustainability Practices and Non-Financial Performance

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.716a	0.512	0.502	0.16554

ANOVA					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Regression	4.140	3	1.380	50.359	.000b
Residual	3.946	144	0.027		
Total	8.086	147			

Regression Coefficients				
	Unstandardized Coefficients	**Standardized Coefficients**	**t**	**Sig.**

	B	Std. Error	Beta		
1 (Constant)	0.697	0.272		2.560	0.012
Economic Sustainability	0.393	0.079	0.325	4.964	0.000
Social Sustainability	0.388	0.077	0.459	5.023	0.000
Environmental Sustainability	0.195	0.076	0.237	2.566	0.011

The Model Summary reveals a strong relationship (R=0.716) between the combined sustainability practices and non-financial performance. The R Square value of 0.512 indicates that the three sustainability dimensions collectively explain 51.2% of the variance in non-financial performance. This substantial explanatory power demonstrates that sustainability practices, when implemented together, have a significant impact on non-financial performance outcomes. This finding supports Moufty et al. (2021) research which found that banks with comprehensive sustainability frameworks across multiple dimensions achieved superior operational efficiency and customer satisfaction metrics. The ANOVA results confirm the model's statistical significance (F=50.359, p=0.000), validating that the combined sustainability practices are reliable predictors of non-financial performance levels. This aligns with Sardianou et al. (2021) findings that banks implementing integrated sustainability approaches experienced enhanced stakeholder relationships and improved performance indicators.

The Coefficients table reveals important insights about the individual contributions of each sustainability dimension when considered together. Social sustainability practices demonstrate the strongest individual effect (β=0.459, p=0.000), with an unstandardized coefficient (B=0.388) indicating that a one-unit improvement in social sustainability practices leads to a 0.388-unit improvement in non-financial performance when other variables are held constant. This supports Bani-Khaled et al. (2021) research emphasizing the critical role of social responsibility in banking performance.

Economic sustainability practices show a significant positive relationship (β=0.325, p=0.000), with an unstandardized coefficient (B=0.393) indicating that a one-unit improvement in economic

sustainability practices leads to a 0.393-unit improvement in non-financial performance. This finding is consistent with Stauropoulou et al. (2023) research on the importance of ethical banking practices in customer satisfaction. Environmental sustainability practices also demonstrate a significant positive relationship (β=0.237, p=0.011), with an unstandardized coefficient (B=0.195) indicating that a one-unit improvement in environmental sustainability practices leads to a 0.195-unit improvement in non-financial performance when other sustainability dimensions are controlled. This supports Khan et al. (2023) findings that environmental initiatives contribute meaningfully to banking performance outcomes, even when considered alongside other sustainability measures.

The multiple regression analysis demonstrates that all three sustainability dimensions make significant independent contributions to non-financial performance, with social sustainability having the strongest effect, followed by economic sustainability and environmental sustainability. The combined model explains substantially more variance (51.2%) than any individual sustainability dimension alone, highlighting the importance of implementing comprehensive sustainability strategies rather than focusing on single dimensions.

4.7 Chapter Summary

This chapter presented findings from 148 bank customers and 15 Key Informant Interviews examining sustainability practices and non-financial performance in Nairobi Metropolitan commercial banks. Diagnostic tests confirmed all regression assumptions were satisfied. Correlation and regression analyses revealed strong positive relationships between all sustainability dimensions and non-financial performance, with social sustainability emerging as the strongest predictor, followed by economic and environmental sustainability. The combined model demonstrated that integrated sustainability approaches yield superior outcomes compared to single-dimension implementations. Qualitative findings validated quantitative results while revealing implementation challenges including resource constraints, varying customer awareness levels, and tensions between commercially-driven versus altruistic sustainability programs across different banking tiers.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The chapter presents the summary of findings and discusses them in relation to previous studies. The chapter then presents conclusions drawn from the research and provides recommendations based on the findings. Lastly, the chapter identifies areas for further research that could enhance understanding of sustainability practices and non-financial performance in the banking sector.

5.2 Discussion of Findings

This section discusses the findings from the study based on the objectives presented. The discussion compares the current study's findings to those of the previous literature and connects them to the theoretical frameworks.

5.2.1 Economic Sustainability Practices and Non-Financial Performance

The study established a positive and significant relationship between economic sustainability practices and non-financial performance in commercial banks. This meaningful association confirms that effective economic sustainability practices explain 30% of the variance in non-financial performance, making it a significant predictor among all sustainability dimensions examined. This finding aligns with the Resource-Based View which emphasizes that sustainability practices serve as valuable organizational resources that contribute to competitive advantage (Barney, 1991). The results demonstrate that comprehensive economic sustainability practices incorporating responsible lending, financial inclusion, and transparent pricing significantly contribute to improved non-financial performance outcomes.

A noteworthy trend in the data was the emergence of responsible lending assessments with the highest mean score (3.94) among economic sustainability practices. This indicates that Kenyan banks recognize the strategic value of thorough borrower assessments in building customer trust and long-term relationships rather than pursuing short-term profit maximization. This pattern aligns with Stakeholder Theory's emphasis on balancing multiple stakeholder interests (Freeman et al., 2018) and reflects an evolution in banking thinking from purely transactional approaches to

relationship-oriented models. The high prioritization of responsible lending likely stems from banks' recognition that sustainable financial relationships require genuine customer capability assessment to be viable long-term.

This responsible lending emphasis is particularly important in Kenya's banking context where financial inclusion remains a national priority. The Central Bank of Kenya has consistently advocated for responsible lending practices to prevent over-indebtedness among vulnerable populations (CBK, 2023). By conducting thorough assessments of borrowers' ability to repay, banks create more sustainable customer relationships that can withstand economic fluctuations. This finding supports Staroupoulou et al.'s (2023) research on sustainable banking practices, which highlighted responsible lending as a cornerstone of effective customer relationship management.

However, fair pricing perceptions received the lowest mean score (3.49) within economic sustainability practices, creating a tension between strong lending assessment capabilities but lower customer satisfaction with pricing transparency. This apparent contradiction—thorough assessment processes but customer concerns about pricing fairness—represents a significant analytical insight into the current state of economic sustainability in Kenyan banks. This tension likely stems from three key factors. First, complex banking products make it difficult for customers to understand true costs despite banks' transparency efforts. Second, competitive pressures may lead to pricing strategies that customers perceive as less favorable compared to alternatives. Third, varying levels of financial literacy among customers create differential perceptions of pricing fairness even when banks maintain consistent pricing policies.

As noted by Kumar and Prakash (2018), many banks face challenges in balancing profitability requirements with customer perceptions of fairness. This gap represents a potential vulnerability in economic sustainability, as customer trust is fundamental to long-term banking relationships. The implementation gap between assessment rigor and pricing satisfaction likely explains why some banks continue to experience customer retention challenges despite strong underwriting practices—technical competence without perceived fairness yields limited customer loyalty.

The study revealed that banks have implemented comprehensive financial literacy programs, with these initiatives receiving a high mean score (3.84). This systematic approach to customer education demonstrates banks' recognition that informed customers make better financial decisions

and develop stronger banking relationships. This educational focus is fundamental to effective economic sustainability as emphasized by Stakeholder Theory (Donaldson & Preston, 1995), enabling banks to build more resilient customer relationships while promoting broader financial inclusion objectives.

The implementation of financial literacy programs appears to have evolved in response to regulatory expectations and social responsibility mandates. However, the lower score for financial inclusion accessibility (3.60) suggests potential challenges in reaching underserved populations despite educational efforts. This comparative weakness in inclusion accessibility likely stems from three causes: first, infrastructure limitations that constrain service delivery in remote areas; second, product design challenges that fail to address specific needs of low-income customers; and third, cost structures that make serving underserved populations less financially attractive. This finding aligns with Dupas et al. (2018) observation that banks often struggle with the economic viability of serving financially excluded populations while maintaining commercial sustainability.

In the combined regression model, economic sustainability practices maintained their significance as a predictor even when controlling for other sustainability dimensions. This reinforces the foundational role of economic sustainability in driving non-financial performance, suggesting that without sound economic practices, other sustainability initiatives may lack credibility with stakeholders. This finding connects directly to the Three-Pillar Model of Sustainability emphasizing economic viability as essential for long-term sustainability (Elkington, 1994).

In addition, the KII findings reveal a strategic emphasis on responsible lending as a core business practice rather than a compliance requirement. KII 007's observation that "responsible lending is at the core of our operations" with "strict assessment procedures that sometimes customers find lengthy, but it protects both the bank and the borrower from over-indebtedness" explains why this practice achieved the highest mean score among economic sustainability measures. This approach reflects a long-term relationship-building strategy that prioritizes customer financial health over short-term profit maximization.

However, the interviews exposed a critical implementation paradox regarding pricing transparency. Despite banks' efforts to maintain transparent pricing policies, KII 012 acknowledged that "the complexity of banking products makes it difficult for some customers to

fully understand all costs involved, despite our efforts to simplify communications." This disconnect between institutional transparency efforts and customer comprehension helps explain the high variability in customer perceptions of pricing fairness and suggests that technical transparency may not always translate to perceived transparency.

Financial inclusion initiatives demonstrate both progress and persistent challenges. KII 011's report of establishing "mobile banking services that reach remote areas where traditional branches are not viable" and achieving customer base growth "particularly among low-income populations" indicates a genuine commitment to expanding access. Yet the moderate scores suggest that structural barriers continue to limit the full realization of inclusive banking objectives.

The adaptive capacity of banks was highlighted through KII 002's example of restructuring "over 2,000 loans during the COVID-19 period, maintaining customer relationships while managing risk." This demonstrates how economic sustainability practices serve as resilience mechanisms during economic disruptions.

5.2.2 Social Sustainability Practices and Non-Financial Performance

The study established a strong positive and significant relationship between social sustainability practices and non-financial performance in commercial banks, which aligns with Stakeholder Theory's emphasis on addressing multiple stakeholder interests to achieve superior organizational performance.

The analysis revealed a clear pattern wherein community-focused initiatives demonstrated higher implementation levels than internal organizational practices. For instance, community development support received the highest mean score (4.00) among social sustainability elements, while diversity and inclusion initiatives scored lowest (3.60). This pattern suggests that while banks have established strong external social responsibility programs, they may face challenges in implementing comprehensive internal social sustainability practices.

This implementation gap in diversity and inclusion contrasts with findings from international studies. Bani-Khaled et al. (2021) found that banks with comprehensive internal and external social programs achieved higher customer retention rates. The lower implementation of diversity initiatives in Kenyan banks may reflect challenges in cultural adaptation specific to the regional context, including traditional organizational structures, limited diversity awareness, or

implementation complexities. This represents a significant opportunity area, as diverse organizations typically demonstrate enhanced innovation and better stakeholder relationships.

The disparity between external and internal social practices also appears in the implementation of employee welfare programs (mean=3.86) versus customer involvement in social initiatives (mean=3.73). This suggests banks may be more comfortable with traditional employee benefit approaches than with innovative stakeholder engagement strategies. According to Stakeholder Theory, this limited engagement orientation can constrain an organization's ability to build comprehensive stakeholder relationships that drive long-term performance (Freeman et al., 2018).

When compared to prior research, these findings align with Rathnayake (2022) work showing that community development initiatives had the strongest correlation with customer loyalty. However, their study found more balanced implementation across both internal and external social practices, suggesting that Kenyan banks may face unique challenges in internal social sustainability implementation that weren't present in the Sri Lankan context studied. In the combined regression model, social sustainability practices emerged as the strongest predictor even when controlling for economic and environmental practices. This underscores that social responsibility remains the most influential sustainability dimension for non-financial performance outcomes in the Kenyan banking context.

Moreover, the KIIs also indicated that employee welfare emerges as a critical link between internal practices and external service delivery. KII 009's comprehensive approach including "health insurance for all employees and their families, flexible working arrangements, and continuous professional development programs" based on the belief that "happy employees deliver better customer service" illustrates how internal social sustainability practices translate into improved customer experiences and non-financial performance outcomes.

The customer involvement dimension reveals banks' evolution toward participatory social responsibility. KII 014's quarterly fundraising campaigns creating platforms where "customers can contribute to various social causes" transforms customers from passive beneficiaries to active participants in social impact creation, strengthening emotional connections to the institution.

Despite strong implementation, banks face sophisticated challenges in demonstrating impact. KII 013's acknowledgment that "measuring the actual impact of charitable activities on community

development is complex" highlights the difficulty in quantifying social returns on investment, which may explain moderate variation in customer perceptions of social impact effectiveness.

5.2.3 Environmental Sustainability Practices and Non-Financial Performance

The study established a moderate to strong positive and significant relationship between environmental sustainability practices and non-financial performance in commercial banks, aligning with both the Three-Pillar Model of Sustainability and Stakeholder Theory which emphasize the importance of environmental stewardship in organizational success. The environmental sustainability data revealed a notable pattern where green financing initiatives achieved the highest implementation level (mean=3.99) among all environmental practices measured in the study. This suggests that product-based environmental initiatives have become well-established within Kenyan banks' sustainability functions. This emphasis on green financing likely reflects both market opportunities and regulatory expectations in the environmental finance sector, where banks can achieve commercial returns while demonstrating environmental leadership.

This finding extends Khan et al. (2023) research, which found that green banking practices led to significant improvements in corporate reputation. The current study suggests that Kenyan banks have positioned themselves competitively in green financing, likely in response to growing environmental awareness among corporate customers and international development finance requirements. This strong green financing capability represents a key strength in the sector's approach to environmental sustainability. However, a notable pattern emerged when comparing product-based environmental initiatives to operational environmental practices. While green financing excelled, practices related to environmental conservation activities (mean=3.64) and carbon footprint reduction (mean=3.72) scored lower. This suggests a potential imbalance between commercial environmental products and internal environmental management in banks' operations.

This pattern aligns with Gutiérrez-Ponce and Wibowo (2024) observations about the challenges banks face in operational environmental management. While green financing provides direct commercial benefits and customer visibility, operational environmental improvements require sustained internal commitment and may have less immediate performance impacts. The gap between product and operational environmental practices represents an area for potential

enhancement in banks' comprehensive environmental strategies. Comparison with prior research reveals interesting contrasts. Ibe-enwo et al. (2019) found that European banks with comprehensive environmental programs demonstrated significant advantages in customer loyalty through both products and operations. While Kenyan banks show strong green financing capabilities, there appears to be room for growth in the operational environmental aspects that international research highlighted as crucial for authentic environmental leadership.

In the combined regression model, environmental sustainability practices maintained their significance as a predictor even when controlling for economic and social practices. This confirms that environmental initiatives provide unique value in non-financial performance enhancement beyond what is captured in other sustainability dimensions. This aligns with the Resource-Based View's emphasis on unique organizational capabilities that create competitive advantage (Barney, 1991).

The environmental dimension reveals a bifurcated approach where product-based initiatives significantly outperform operational changes. KII 002's establishment of "a green financing portfolio worth KES 5 billion, specifically targeting renewable energy projects, sustainable agriculture, and eco-friendly manufacturing" demonstrates how banks have successfully integrated environmental considerations into their core business model through lending products that generate both commercial returns and environmental benefits.

Digital transformation initiatives represent successful convergence of operational efficiency and environmental objectives. KII 008's achievement of increased digital banking adoption while reducing paper consumption demonstrates how customer convenience and environmental sustainability can be mutually reinforcing.

Energy conservation investments demonstrate banks' commitment to operational environmental improvements. KII 011's installation of solar panels and LED lighting systems resulting in energy cost reductions illustrates how environmental initiatives can achieve both sustainability goals and cost optimization objectives.

5.3 Conclusion

Results from the first objective revealed a moderate positive and significant relationship between economic sustainability practices and non-financial performance in Commercial Banks in Kenya.

Based on these results, the study concludes that banks have implemented economic sustainability frameworks that include responsible lending practices and financial literacy programs. The study further concludes that banks have established systems for borrower assessment and financial inclusion, though there is room for improvement in pricing transparency and accessibility to underserved populations.

Findings from the second objective led to the conclusion that there is a strong, positive and significant relationship between social sustainability practices and non-financial performance. From the analysis, it was determined that banks have implemented strong community development support programs and employee welfare systems. However, the study concludes that banks' implementation of diversity and inclusion initiatives and customer involvement in social activities requires enhancement to strengthen their social sustainability practices' effectiveness in driving non-financial performance.

The findings from the third objective revealed that environmental sustainability practices have a moderate to strong positive and significant relationship with non-financial performance. This led to the conclusion that banks have established particularly strong green financing capabilities and digital banking promotion systems. The study concludes that banks effectively implement environmental risk assessment and energy conservation processes. The study further concludes that while banks maintain adequate mechanisms for encouraging paperless operations and promoting digital services, there is potential to enhance environmental conservation activities and carbon footprint reduction initiatives to match the high standards set in green financing.

The combined regression model reveals that all three sustainability practices contribute significantly to non-financial performance when operating together, with social sustainability practices maintaining the strongest influence. This integrated model explains 51.2% of the variance in non-financial performance, demonstrating the value of a comprehensive approach to sustainability practices.

The analysis of individual sustainability dimensions provides important additional insights. The study concludes that social sustainability practices significantly influence non-financial performance, with this dimension being the strongest individual predictor ($\beta=0.459$, $p=0.000$). Economic sustainability practices also demonstrate significant effects ($\beta=0.325$, $p=0.000$), while

environmental sustainability practices contribute meaningfully to the combined model (β=0.237, p=0.011). The study concludes that the positive effects of sustainability practices on non-financial performance are most pronounced when all three dimensions are implemented together, suggesting that integrated sustainability approaches yield superior results compared to focusing on individual dimensions.

Overall, the study concludes that sustainability practices play a crucial role in enhancing non-financial performance in Kenyan commercial banks, with social sustainability emerging as the most influential factor. While banks have established strong frameworks across all three sustainability dimensions, there are opportunities to enhance specific aspects, particularly in pricing transparency within economic sustainability, diversity and inclusion within social sustainability, and operational environmental practices within environmental sustainability. The results indicate that banks have developed reasonable sustainability systems but need to continue evolving these practices to address stakeholder expectations and competitive pressures in the dynamic banking sector, with particular attention to how integrated sustainability strategies can optimize non-financial performance outcomes.

5.4 Recommendation

Based on the practical and policy gaps identified in this study, the following recommendations are proposed.

Economic Sustainability Practices: Banks should implement simplified pricing disclosure frameworks that translate complex fee structures into customer-friendly formats, addressing the gap between strong responsible lending practices and low customer satisfaction with pricing transparency. To address financial inclusion gaps affecting 5.5 million excluded Kenyans, banks should develop tiered product offerings designed for low-income populations utilizing mobile banking infrastructure to reduce service delivery costs. Financial literacy programs should be integrated with product onboarding processes, ensuring customer education occurs at the point of financial decision-making rather than through separate initiatives.

Social Sustainability Practices: Banks should establish measurable diversity targets for leadership positions with quarterly progress reporting, addressing the implementation gap where external community initiatives excel but internal diversity underperforms. Employee satisfaction

monitoring systems should be linked directly to customer service performance metrics, strengthening the employee welfare-service quality connection identified in qualitative findings. Customer involvement in social initiatives should evolve from passive donation requests to participatory co-creation models where customers help design and implement community development programs aligned with local needs.

Environmental Sustainability Practices: Banks should establish environmental management systems aligned with ISO 14001 standards, including annual energy audits, waste reduction targets, and carbon emission inventories with third-party verification. Climate risk assessment protocols should be systematically integrated into credit approval workflows, ensuring all loan applications above specified thresholds undergo environmental impact screening consistent with CBK's 2024 Climate Risk Management Guidelines. Environmental performance dashboards should be made accessible to customers through digital channels, transparently communicating operational carbon footprints, green financing portfolio composition, and progress toward environmental targets.

Integrated Sustainability Management: Given that combined sustainability approaches yield superior non-financial performance outcomes, banks should establish Chief Sustainability Officer positions reporting directly to executive management with cross-functional authority over economic, social, and environmental sustainability implementation. Sustainability performance indicators should be integrated into executive compensation frameworks, ensuring leadership accountability for non-financial performance outcomes.

Policy Recommendations: The Central Bank of Kenya should develop tiered implementation guidelines for the 2024 Climate Risk Management Guidelines that recognize resource constraints facing Tier 3 banks, providing technical assistance programs and extended compliance timelines for smaller institutions while maintaining rigorous standards for systemically important banks. A sustainability reporting framework should mandate disclosure of non-financial performance indicators customer satisfaction scores, employee turnover rates, and stakeholder trust metrics alongside traditional financial metrics. The Kenya Bankers Association should establish industry-wide sustainability benchmarking standards enabling banks to compare performance across

sustainability dimensions, and launch capacity-building programs specifically targeting Tier 2 and Tier 3 banks to address the implementation disparities identified in this study.

5.5 Limitations of the study

This study faced several methodological constraints that should be considered when interpreting its findings. The cross-sectional design captured sustainability practices and non-financial performance at a single point in time, fundamentally constraining causal inferences. While the study demonstrates statistical associations between sustainability practices and non-financial performance, it cannot establish that sustainability practices cause improved performance outcomes. Reverse causality cannot be ruled out better-performing banks may simply have more resources to invest in sustainability initiatives. The sample of 148 respondents was limited exclusively to bank customers for quantitative analysis. This excluded critical perspectives from front-line employees who implement sustainability practices daily, regulators who oversee compliance, and community members who experience social and environmental impacts. Although 15 Key Informant Interviews captured management perspectives, the study lacked systematic employee viewpoints on internal sustainability implementation.

The reliance on self-reported questionnaire data introduced potential biases. Social desirability bias may have led respondents to report more favorable perceptions than they actually hold. Most critically, collecting both independent variables (sustainability practices) and dependent variable (non-financial performance) from the same respondents at one point may have artificially inflated correlations through common method variance. The study relied on perceptual measures rather than objective performance metrics. Non-financial performance was assessed through customer perceptions rather than actual retention rates, independently measured reputation indices, or verified employee satisfaction scores. Similarly, sustainability practices were measured through customer awareness rather than audited performance data or verified environmental impact metrics.

The sample's educational profile introduced bias, with 97.9% holding university-level qualifications. This highly educated sample may not represent the broader Kenyan banking customer base and potentially inflates perceptions of sustainability practices since educated customers demonstrate greater awareness of sustainability concepts. The geographic focus on

Nairobi Metropolitan banks within Kenya's specific regulatory environment limits generalizability to financial institutions in other African countries, developing economies, or developed markets with different sustainability frameworks and stakeholder expectations.

5.6 Area for Further Research

The main focus of the study was on commercial banks with bank customers as the target population. Further research could investigate the role of technology adoption in enhancing sustainability practices and their impact on non-financial performance outcomes. The study was contextualized in Kenya's commercial banking sector. More research could be conducted in other financial sectors, such as microfinance institutions, savings and credit cooperatives, or insurance companies, as well as in different geographic regions for comparative analysis.

Future studies could also examine the longitudinal effects of sustainability practices on non-financial performance to establish causal relationships and understand how these relationships evolve. Research could investigate the moderating effects of factors such as bank size, ownership structure, or market positioning on the relationship between sustainability practices and non-financial performance.

In addition, studies could explore the mediating role of factors such as customer trust, employee engagement, or corporate reputation in explaining how sustainability practices influence non-financial performance outcomes. Comparative studies between banks at different stages of sustainability implementation could provide insights into best practices and implementation strategies.

Comparative analysis across banking tiers would provide particularly valuable insights, examining how the relationship between sustainability practices and non-financial performance varies between Tier 1, Tier 2, and Tier 3 banks. Such research could investigate whether larger banks (Tier 1) achieve different sustainability-performance relationships compared to smaller institutions (Tier 3), potentially due to resource availability, customer expectations, regulatory scrutiny, or market positioning differences.

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APPENDICES

Appendix I: Letter of Introduction

I am currently pursuing a master's degree at Strathmore University and conducting research on the relationship between sustainable practices and non-financial performance of commercial banks in Nairobi Metropolitan.

I kindly request your participation in this study to help me complete my thesis. All information provided will be treated with the highest level of confidentiality and anonymity. Thank you in advance for your cooperation.

Yours sincerely,

Christabel Njeri Wairimu

Appendix II: Questionnaire for Customers

The following section aims to gather information about your professional expertise and your organization. Kindly tick where appropriate.

Section A: Demographic and Organizational Analysis

1. Indicate your gender

i. Male
ii. Female

2. Indicate your age

i. 18-30 years [ ]
ii. 31-40 years [ ]
iii. 41-50 years [ ]
iv. 51-60 years [ ]
v. Over 60 years [ ]

3. Indicate your highest level of Education

i. Secondary [ ]
ii. College Diploma [ ]
iii. Bachelor's Degree [ ]
iv. Master's Degree [ ]
v. PhD [ ]

4. Duration of Relationship with the Bank

i. Less than 1 year[ ]
ii. 1-3 years [ ]
iii. 4-6 years [ ]
iv. 7-10 years [ ]
v. More than 10 years [ ]

5. Frequency of Interaction with the Bank:

i. Daily [ ]

ii. Weekly [ ]

iii. Monthly [ ]

iv. Quarterly [ ]

v. Yearly [ ]

Section B: Economic Sustainability Practices

Please rate the following statements about economic sustainability practices in your bank. (1= Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree).

Economic Sustainability Practices	**1**	**2**	**3**	**4**	**5**
1. The bank offers transparent pricing for all its products and services without hidden charges.					
2. The bank's interest rates and service fees are fair compared to other banks in the market.					
3. The bank provides banking services that are accessible to low-income and underserved populations.					
4. The bank offers financial literacy programs to help customers make informed financial decisions.					
5. The bank conducts thorough assessments of borrowers' ability to repay before extending loans.					
6. The bank provides flexible repayment options for customers experiencing financial difficulties.					
7. The bank is transparent about its financial products' terms and conditions in all communications.					

Section C: Social Sustainability Practices

Please rate the following statements about social sustainability practices in your bank. (1= Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree).

Social Sustainability Practices	**1**	**2**	**3**	**4**	**5**
1. The bank actively supports community development projects in the areas where it operates.					

2. The bank regularly publishes reports on its social responsibility initiatives and their impacts.					
3. The bank engages in charitable activities that address community needs (e.g., education, healthcare).					
4. The bank treats its employees fairly with appropriate compensation and benefits.					
5. The bank provides a safe and healthy working environment for its employees.					
6. The bank actively involves its customers in social initiatives through awareness campaigns or fundraising.					
7. The bank demonstrates commitment to diversity and inclusion in its business practices.					

Section D: Environmental Sustainability Practices

Please rate the following statements about environmental sustainability practices in your bank. (1= Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree).

Environmental Sustainability Practices	**1**	**2**	**3**	**4**	**5**
1. The bank offers loans or financing options specifically for environmentally friendly projects.					
2. The bank considers environmental risks when making lending decisions.					
3. The bank has implemented energy-saving measures in its branches and offices.					
4. The bank actively works to reduce its carbon footprint through various initiatives.					
5. The bank encourages customers to use digital banking services to reduce paper usage.					
6. The bank has reduced paper usage by promoting electronic statements and digital documentation.					
7. The bank participates in environmental conservation activities (e.g., tree planting, clean-up campaigns).					

Section E: Non-Financial Performance

Please indicate your level of agreement with the following statements about your experience with the bank and its image.

(1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Non-Financial Performance	**1**	**2**	**3**	**4**	**5**
1. I consider this bank as my primary financial institution and intend to continue using its services.					
2. I am loyal to this bank and prefer it over others even when they offer similar services.					
3. The bank's staff demonstrates professionalism and competence in addressing my banking needs					
4. The bank's products and services consistently meet or exceed my expectations.					
5. This bank has a good reputation for sustainable and ethical business practices.					
6. This bank is recognized as a trustworthy and reliable financial institution in the community.					

Appendix III: Key Informant Interview Guide

Research Topic: Relationship Between Sustainable Practices and Non-Financial Performance of Commercial Banks in Nairobi Metropolitan

1. How does your bank implement economic sustainability practices (such as fair pricing, financial inclusion, and responsible lending), and what challenges do you face in these implementations?

2. Could you describe your bank's key social sustainability initiatives (CSR programs, employee welfare, community engagement) and how they are integrated into your overall business strategy?

3. What specific environmental sustainability measures (green finance, energy conservation, paperless banking) has your bank adopted, and how do you monitor their effectiveness?

4. From your perspective, how do your bank's sustainability practices influence customer loyalty and retention? Can you provide specific examples or evidence?

5. How have your bank's sustainability initiatives affected its corporate image and reputation in the market? Have you observed any measurable changes?

6. How does your bank measure and evaluate the effectiveness of its sustainability practices in relation to non-financial performance indicators?

7. In what ways do you believe your bank's sustainability practices provide a competitive advantage in the Kenyan banking sector?

8. What future plans or innovations related to sustainability does your bank have, and how do you expect these to impact your non-financial performance?

Appendix IV: List of Commercial Banks

No.	Bank Name
1	Access Bank (Kenya) Ltd.
2	African Banking Corporation Ltd.
3	Bank of Africa Kenya Ltd.
4	Bank of Baroda (Kenya) Ltd.
5	Bank of India
6	Citibank N.A. Kenya
7	Consolidated Bank of Kenya Ltd.
8	Co-operative Bank of Kenya Ltd.
9	Credit Bank Ltd.
10	Development Bank of Kenya Ltd.
11	Diamond Trust Bank Kenya Ltd.
12	DIB Bank Kenya Ltd.
13	Ecobank Kenya Ltd.
14	Equity Bank Kenya Ltd.
15	Family Bank Ltd.
16	First Community Bank Ltd.
17	Guaranty Trust Bank (Kenya) Ltd.
18	Guardian Bank Ltd.
19	Gulf African Bank Ltd.
20	Housing Finance Company of Kenya Ltd.
21	I&M Bank Ltd.
22	Kingdom Bank Ltd.
23	KCB Bank Kenya Ltd.
24	Middle East Bank Kenya Ltd.
25	National Bank of Kenya Ltd.
26	NCBA Bank Kenya Plc
27	Paramount Bank Ltd.
28	Prime Bank Ltd.
29	SBM Bank Kenya Ltd.
30	Sidian Bank Ltd.
31	Spire Bank Ltd.
32	Stanbic Bank Kenya Ltd.
33	Standard Chartered Bank Kenya Ltd.

34	Transnational Bank Ltd.
35	UBA Kenya Bank Ltd.
36	Victoria Commercial Bank Ltd.
37	Absa Bank Kenya Plc
38	Mayfair Bank Ltd.

Appendix V: NACOSTI Permit

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Date of Issue: **17/July/2025**

RESEARCH LICENSE



This is to Certify that Ms.. Christabel Njeri Wairimu of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kajiado, Kiambu, Machakos, Nairobi on the topic: RELATIONSHIP BETWEEN SUSTAINABLE PRACTICES AND NON-FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN NAIROBI METROPOLITAN for the period ending : 17/July/2026.

License No: **NACOSTI/P/25/4175054**

386914

Applicant Identification Number

Ag. Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code

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See overleaf for conditions

Appendix VI: SBS Ethical Approval

Strathmore UNIVERSITY

20th June 2025

Ms Wairimu Christabel,
christabel.wairimu@strathmore.edu

Dear Ms Wairimu,

RE: Relationship Between Sustainable Practices and Non-Financial Performance of Commercial Banks in Nairobi Metropolitan

This is to inform you that SU-ISERC has reviewed and **approved** your above SU-masters proposal. Your application reference number is **SU-ISERC2960/25.** The approval period is from **20th June 2025 to 19th June 2026.**

This approval is subject to compliance with the following requirements:

i. Only approved documents including (informed consents, study instruments, MTA) will be used.
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
v. Clearance for the export of biological specimens must be obtained from relevant institutions.
vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) https://research-portal.nacosti.go.ke/ and obtain other clearances needed.

Yours sincerely,

Mr Ambrose Rachier,
Chairperson; SU-ISERC