THE EFFECT OF INTERNAL AUDITING IN ENHANCING FINANCIAL ACCOUNTABILITY AT THE WATER SERVICE PROVIDERS IN KENYA

BY

MOHAMED ABDIRAHMAN ALI

MASTER OF SCIENCE IN COMMERCE (ACCOUNTING)

KCA UNIVERSITY

2025

THE EFFECT OF INTERNAL AUDITING IN ENHANCING FINANCIAL ACCOUNTABILITY AT THE WATER SERVICE PROVIDERS IN KENYA

BY

MOHAMED ABDIRAHMAN ALI

A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN COMMERCE (ACCOUNTING) OF KCA UNIVERSITY

DECEMBER 2025

DECLARATION

Declaration by the Student:

I hereby declare that I am the sole author of this dissertation and that it has never been presented, in whole or in part, in any prior master's degree application. The work offered is completely my own, unless indicated otherwise by a reference or acknowledgement.

NAME: MOHAMED ABDIRAHMAN ALI……….. Reg No: 23/04504

Signature……… **Date** 2nd December 2025

Recommendation by the Supervisor:

I do hereby confirm that I have examined the master's dissertation of

MOHAMED ABDIRAHMAN ALI

And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed

Signed: …… **Date:** 11th December 2025

DR. MUNENE LAIBONI

ACKNOWLEDGMENT

First and foremost, I would like to express my gratitude to the Highest Allah, Al-Khaliq for giving me the ability to complete this course by his grace, love, and power. I would like to acknowledge Dr. Munene Laiboni, my chief supervisor, for his guidance during this dissertation process. Also, I would like to express my sincere gratitude to the KCA university staff and colleagues who assisted me in putting this dissertation together.

THE EFFECT OF INTERNAL AUDITING IN ENHANCING FINANCIAL ACCOUNTABILITY AT THE WATER SERVICE PROVIDERS IN KENYA

ABSTRACT

Internal auditing plays an important role in ensuring financial accountability within public institutions in Kenya's Water Works Development Agencies (WWDAs). These agencies, established under the Water Act 2016, are assigned to oversee water infrastructure development across the country. The study was guided by the following objectives: to assess the effect of risk assessment in enhancing financial accountability at the Water Service Providers in Kenya, to examine the influence of internal control systems in enhancing financial accountability at the Water Service Providers in Kenya and to assess the effect of auditing compliance in enhancing financial accountability at the Water Service Providers in Kenya. This study examined the agency theory, the auditor's theory of inspired confidence and contingency theory to recognize the effect of internal auditing in enhancing financial accountability at the Water Service Providers in Kenya. In the context of a study on the effect of internal auditing on enhancing financial accountability at water service providers in Kenya, the application of a descriptive research design is both suitable and beneficial. This was because the study sought to provide a clear and systematic understanding of the current internal audit practices and how they influence financial accountability within these organizations. Descriptive research allowed the researcher to gather quantifiable information that accurately reflected the current state of affairs without manipulating the study environment. Hence, there were 55 questionnaires for the CEOs of WSPs in the regions that were included in the study. The sample size was a census approach since the population was relatively small, and the goal was to get a complete and accurate picture of the phenomena being studied. The respondents in the area were assessed using structured questionnaires in order to get primary data. The goals of the study guide development of the questionnaires' questions. There are two sections to the structured questionnaires. Part, one concentrates on the respondents' general data while, part two focuses on the questions relating to dependent and objective variables. The process of analyzing all of the information and determining which information was relevant and useful in terms of improving decision making is what was known as data analysis according to Silvia and Skilling (2012). STATA (16) and Statistical Package for the Social Sciences (SPSS) version 29 were used to do the analysis on the data that was obtained. Correlation, regression, ANOVA, and model summary was generated. Tables and figures are used to present the data. The study established that internal auditing plays a pivotal role in enhancing financial accountability at Water Service Providers in Kenya, primarily through its strong contribution to auditing compliance, which fosters transparency and adherence to financial policies. While risk assessment practices support accountability by identifying potential financial irregularities, their impact is tempered by inconsistent implementation. Similarly, internal control systems provide a framework for accountability but are weakened by gaps in ethical culture and role clarity. The findings highlight that internal auditing is a critical driver of accountability, yet its effectiveness could be further strengthened by improving the consistency of risk assessments, reinforcing control mechanisms, and expanding the scope of audits to better detect and prevent financial mismanagement.

TABLE OF CONTENTS

DECLARATION iii

ACKNOWLEDGMENT iv

ABSTRACT v

TABLE OF CONTENTS vi

DEDICATION ix

LIST OF TABLES x

LIST OF FIGURES xi

LIST OF ABBREVIATIONS AND ACRONYMS xii

DEFINITION OF TERMS xiii

CHAPTER ONE: INTRODUCTION 1

1.1 Background of the Study 1

1.2 Statement of the Problem 12

1.3 Objectives of the Study 15

1.4 Research Questions 15

1.5 Significance of the Study 16

1.6 Scope of the Study 17

CHAPTER TWO: LITERATURE REVIEW 18

2.1 Introduction 18

2.2 Theoretical Review 18

2.3 Empirical Review 22

2.4 Conceptual Framework 34

2.5 Operationalization of Variables 35

CHAPTER THREE: RESEARCH METHODOLOGY 36

3.1 Introduction 36

3.2 Research Design 37

3.3 Target Population.. 37

3.4 Sample Size and Sampling Procedure 38

3.5 Data Collection Instruments and Procedures 38

3.6 Pilot Test.. 39

3.7 Data Processing, Analysis and Presentation 41

3.8 Testing the Assumptions of Multiple Regression Model 42

3.9 Ethical Considerations... 44

CHAPTER FOUR: FINDINGS AND DISCUSSION.. 46

4.1 Introduction 46

4.2 Research Response Rates 46

4.3 Validity and Reliability Test Results 46

4.4 Demographic Analysis Results... 48

4.5 Descriptive Analysis Results 54

4.6 Correlational Analysis Results 60

4.7 Test for Regression Assumptions 61

4.8 Regression Analysis Results.. 64

4.9 Discussion of Findings 68

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS 70

5.1 Introduction 70

5.2 Summary of Findings 70

5.3 Conclusions 71

5.4 Recommendations of the Study 72

5.5 Suggestions for Further Studies 72

REFERENCES 75

APPENDIX I: RESEARCH QUESTIONNAIRE 81

APPENDIX II: LIST OF WATER SERVICE PROVIDERS 86

APPENDIX III: LETTER OF INTRODUCTION 89

APPENDIX IV: RESEARCH PERMIT 90

DEDICATION

I am incredibly grateful to my family and friends for their unwavering support during my studies, especially my dad Mr. Abdirahman Ali Dome, my mum Mrs. Zeinab Yerow Aden, my dear wife Mrs. Shindes Kahiye Mohamed, the children namely; Mahathir Mohamed, Abdullahi Mohamed, Samira Mohamed, Anzal Mohamed, Naimo Mohamed, Zamzam Mohamed and Imran Mohamed. I also want to thank my good friend Sir Fred for showing me the ropes in my thesis. Not forgetting my boss CPA. Andrew Rage Eysimkele, who is the CEO at Northern Water Works Development Agency who has been supportive and helpful when doing the thesis. May Allah bless you all. Barkatullah

LIST OF TABLES

TABLE 1: Operationalization of Variables 36

TABLE 2: Target Population 38

TABLE 3. Variable Description and Measurement.. 44

TABLE 4: Response rate... 46

TABLE 5: Reliability Test Results.. 47

TABLE 6: Risk assessment... 54

TABLE 7: Internal Control Systems... 56

TABLE 8: Auditing Compliance 57

TABLE 9: Financial Accountability 59

TABLE 10: Correlational Analysis Results 60

TABLE 11: Multi-Collinearity Test Results 64

TABLE 12: Model Summary... 65

TABLE 13: Analysis of Variance.. 66

TABLE 14: Regression Coefficients... 67

LIST OF FIGURES

FIGURE 1: Conceptual Framework 34

FIGURE 2: Age of Respondent 48

FIGURE 3: Gender of Respondents 49

FIGURE 4: Highest Level of Education 51

FIGURE 5: Period Worked as Chief Executive Officer 52

FIGURE 6: Time Worked at the Water Services Provider 53

FIGURE 7: Normality Test Results 62

FIGURE 8: Linearity test results 63

LIST OF ABBREVIATIONS AND ACRONYMS

AMI	Advanced Metering Infrastructure
AWWDA	Athi Water Works Development Agency
CMA	Capital Markets Authority
CRWWDA	Central Rift Water Works Development Agency
CWWDA	Coast Water Works Development Agency
ICPAK	Institute of Certified Public Accountants of Kenya
IFRS	International Financial Reporting Standards
IIA	Institute of Internal Auditors
KEMSA	Kenya Medical Supplies Authority
LVNWWDA	Lake Victoria North Water Works Development Agency
LVSWWDA	Lake Victoria South Water Works Development Agency
NRVWWDA	North Rift Valley Water Works Development Agency
NRW	Non-Revenue Water
NWWDA	Northern Water Works Development Agency
NYS	National Youth Service
OAG	Office of the Auditor-General
PPRA	Public Procurement Regulatory Authority
TAWWDA	Tanathi Water Works Development Agency
TWWDA	Tana Water Works Development Agency
WASREB	Water Services Regulatory Board
WSPs	Water Service Providers
WWDAs	Water Works Development Agencies

DEFINITION OF TERMS

Auditing Compliance	To ensure that activities comply with legal and ethical requirements, it entails methodically assessing an organization's adherence to established laws, rules, standards, and internal policies (Chin, Tat & Sulaiman, 2020).
Financial Accountability	It entails being in charge of the appropriate and open administration of financial resources, reporting on their use and making sure they are utilized as planned, but also taking accountability for any abuse or poor management (Hoffman & Bazerman, 2021).
Internal Control Systems	It consists of rules, practices, and measures intended to guarantee that an organization's goals are fulfilled, its resources are safeguarded, and its activities are orderly and law-abiding (Carter & Rogers, 2018).
Risk Assessment	It is the process of determining what risks are present or could arise at work. A risk assessment identifies the occupational dangers that are most likely to injure workers and guests (Sarkis, 2020).

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Internal auditing plays a vital role in enhancing financial accountability within organizations by providing independent assurance that an organization's risk management, governance, and internal control processes are operating effectively. Its primary function is to evaluate and improve the efficiency of financial reporting, compliance with laws and regulations, and operational efficiency, all of which are foundational to financial accountability (Institute of Internal Auditors, 2023).

From a general perspective, internal audits help detect irregularities, fraud, or inefficiencies before they escalate into serious issues. For instance, a 2022 study by Alzeban (2022) found that in Saudi Arabia, internal auditing significantly reduced incidences of financial mismanagement in public sector organizations. The occurrence of robust internal audit departments improved adherence to budgetary controls and increased transparency in financial reporting. These findings align with universal standards, such as those issued by Institute of Internal Auditors (IIA), which emphasize the importance of objective assurance and insight in fostering accountability (IIA, 2023).

Internal auditors also help organizations comply with regulatory frameworks, especially in sectors with strict reporting necessities like banking, healthcare, and public administration. For example, in Kenya, the Public Finance Management Act (2012) established internal audits in government departments to reinforce financial discipline. A report by the Office of the Auditor-General (2021) revealed that counties with reputable internal audit boards established better budget absorption rates and fewer audit queries. This suggests that internal auditing enhances not only compliance but also financial stewardship and service delivery (Auditor-General, 2021).

Furthermore, internal audits are critical in evaluating risk management frameworks. In today's volatile economic environment, organizations must anticipate and mitigate financial risks. A case study from South Africa by Fourie and Ackermann (2023) revealed that firms with proactive internal audit roles retorted better to financial shocks during the Covid-19 pandemic, maintaining liquidity and fulfilling financial obligations. This reveals how internal auditing can contribute to financial accountability by preparing organizations to handle economic disruptions effectively. In the private sector, firms often rely on internal audits to maintain investor confidence. According to the Deloitte Global Internal Audit Survey (2023), 72% of multinational corporations reported that robust internal audit functions notably enhanced the reliability of their financial statements, thereby improving stakeholder trust. This is mostly critical for publicly listed companies where inaccurate financial information can lead to regulatory penalties and reputational damage (Global Internal Audit Survey, 2023).

However, the effectiveness of internal audits in enhancing financial accountability depends on their independence, objectivity, and support from senior management. A recent World Bank report (2023) underscores that internal auditor must be granted open access to records and personnel and must report directly to audit committees or boards of directors to avoid conflicts of interest. Internal auditing is essential to financial accountability. By identifying and mitigating financial anomalies, ensuring regulatory passivity, enhancing risk management, and improving transparency, internal audits build trust among stakeholders and strengthen the financial integrity of institutions (World Bank, 2023).

In recent years, internal audits have become increasingly essential amid growing complexities in financial operations and heightened scrutiny from stakeholders. According to a study by Alzeban and Gwilliam (2023), organizations with robust internal audit functions exhibit higher levels of financial accountability due to the proactive identification of misstatements and enhancement of internal controls. In government agencies, for example, internal audits have been instrumental in curbing misappropriation of public funds. In Kenya, the Office of the Auditor-General reported that internal audit units in several ministries had pointedly improved public financial management by enhancing oversight on expenditure and ensuring funds are used for intended purposes (OAG Kenya, 2023).

Moreover, internal auditing supports the ethical conduct of financial practices by instilling a culture of compliance and accountability. For example, multinational corporations like Nestlé and Unilever have integrated internal audit processes into their global financial reporting systems to monitor compliance with international financial standards and detect anomalies promptly. These practices not only safeguard assets but also promote investor confidence by indicating financial reliability (PwC, 2022). The effect of internal auditing in enhancing financial accountability is indispensable across both public and private sectors. As institutes continue to navigate financial uncertainties and regulatory variations, strengthening internal audit functions remains a strategic imperative. By delivering independent, objective, and systematic evaluations, internal auditors serve as key guardians of financial probity (PwC, 2022).

Technology has further amplified the effectiveness of internal auditing. The use of data analytics and continuous auditing tools allows internal auditors to provide real-time insights and flag suspicious transactions as they occur. A recent survey by Deloitte (2023) shows that over 60% of organizations globally have adopted data-driven audit technologies, leading to faster detection of control failures and improved financial accountability. For example, AI-enabled internal audits in banking institutes have helped uncover systemic issues in loan approvals and credit risk valuations, resulting in more prudent financial management (Ferdinand, 2022). Furthermore, internal audit functions contribute to board-level decision-making by providing independent assessments of financial performance and risk exposure. This advisory role is crucial for setting realistic budgets, allocating resources efficiently, and mitigating potential financial losses. The World Bank (2023) emphasizes that effective internal audit units enhance public trust, mainly in the management of donor and development funds in low-income nations, by ensuring transparent and accountable financial practices.

1.1.1 Global Context of Internal Auditing in Enhancing Financial Accountability

In the United States, internal auditing has long been embedded in corporate governance, mostly after the Sarbanes-Oxley Act of 2002. This legislation significantly elevated the internal audit's profile, making it a critical component of ensuring financial integrity. For example, firms listed on the New York Stock Exchange are required to maintain robust internal audit functions (PCAOB, 2023). Companies such as General Electric and Microsoft have strong internal audit departments that report directly to audit committees, guaranteeing independent oversight of financial processes. Internal audits have also helped uncover significant frauds, such as the Enron scandal, where weak internal controls contributed to corporate collapse (IIA North America, 2022).

In England, the United Kingdom places internal auditing as a cornerstone of public financial management. The Chartered Institute of Internal Auditors (CIIA) promotes best practices that ensure public sector accountability (CIIA, 2023). Post-2008 financial dilemma reforms allowed internal auditors to take on a more consultative role, particularly in the National Health Service (NHS) and local councils, where auditors assess risks and recommend improvements in resource utilization. The UK’s Financial Reporting Council has advocated integrating internal auditing with enterprise risk management frameworks, emphasizing its importance for financial stability (FRC, 2022).

China has witnessed a rapid transformation in internal auditing practices, especially in state-owned enterprises (SOEs). The Chinese government has mandated internal audits in all large SOEs to detect financial irregularities and guarantee compliance with national strategies. According to the China National Audit Office, the internal audit departments have been instrumental in identifying over RMB 100 billion in irregular expenditures between 2020 and 2023 (CNAO, 2023). For instance, the audit of China Railway Construction Corporation in 2022 showed discrepancies in procurement that were later addressed, demonstrating the role of audits in enhancing financial accountability (Li & Zhou, 2023).

Japan's internal audit landscape is shaped by cultural emphasis on process discipline and kaizen (continuous improvement). Japanese corporations such as Toyota and Hitachi employ internal audit units that are deeply integrated with quality control and financial oversight mechanisms. The Japanese Institute of Internal Auditors (JIIA) advocates for a harmonized approach that includes financial, operational, and compliance audits. These practices have been accredited with early detection of irregularities, such as the Olympus Corporation accounting scandal in 2011, which finally led to stronger internal audit protocols (JIIA, 2022).

Russia’s internal audit systems are evolving amidst regulatory and institutional reforms. The Russian government introduced the Federal Law No. 402-FZ on accounting, which encourages internal auditing in both public and private sectors. Internal audit functions have become gradually essential in combating corruption and misuse of public funds, especially in large infrastructure projects. Notably, Gazprom and other major enterprises have enhanced internal audit frameworks to align with international standards amid investor pressure and global scrutiny (Sokolov & Lukin, 2021).

In France, the importance of internal auditing is evident in the practices of both multinational firms like Total Energies and in government institutions. The French Cour des Comptes (Court of Audit) collaborates with internal audit bodies in public sector institutions to ensure fiscal discipline. French firms are required to establish internal control and audit committees under the Autorité des marches financiers (AMF) regulations. These structures became particularly important after the Société Générale rogue trading incident, which underscored the necessity for robust internal audit mechanisms (EY France, 2023).

1.1.2 Regional Context of Internal Auditing in Enhancing Financial Accountability

In South Africa, internal auditing has been institutionalized as a key governance mechanism in public utilities, including Water Service Providers (WSPs). The Municipal Finance Management Act (MFMA) mandates internal auditing in municipalities to enhance financial accountability and prevent irregular expenditure. WSPs such as Rand Water and municipal-owned entities depend on internal audit units to monitor compliance, perceive irregularities, and strengthen internal controls. Despite this framework, capacity limits and political interference continue to limit the efficiency of internal audits in ensuring transparency and reducing corruption in the water sector (Auditor-General South Africa, 2022).

In Ghana, the role of internal auditing in the water sector is governed by the Internal Audit Agency Act (2003), which mandates public institutions to establish internal audit units. The Ghana Water Company Limited (GWCL) employs internal auditors to accompany periodic reviews of financial transactions, contracts, and procurement processes. Still, challenges such as limited independence, inadequate staffing, and weak enforcement of audit recommendations hinder their impact. According to Osei-Tutu et al. (2019), strengthening the institutional capacity and independence of internal audit functions is critical to improving financial accountability in Ghana's water sector (GWCL, 2019).

Ethiopia has made strides in adopting internal auditing practices within public utilities, but the effectiveness of these systems remains uneven across regional states. The Addis Ababa Water and Sewerage Authority (AAWSA) has internal audit mechanisms that aim to enhance transparency and safeguard public funds. However, a 2020 report by the World Bank highlighted those internal auditors in Ethiopia face significant limitations, including lack of professional training and low autonomy, which compromise their ability to ensure financial accountability. Strengthening audit committees and enhancing professional development are key recommendations for improvement (World Bank, 2020).

In Nigeria, the internal audit function is an essential component of public financial management in WSPs such as the State Water Agencies (SWAs) and the Federal Ministry of Water Resources. Despite the presence of internal audit departments, issues such as corruption, bureaucratic delays, and lack of enforcement mechanisms dilute their effectiveness. Emeh and Okafor (2021) note that many internal auditors operate under pressure from political actors, making it difficult to uphold accountability standards. Reforms in audit independence and the integration of technology have been suggested to revamp internal audit practices in the Nigerian water sector (Emeh & Okafor, 2021).

Egypt's internal auditing practices in water service provision are guided by the Central Auditing Organization (CAO), which monitors the financial operations of public utilities, including water companies. Internal audit units within institutions for instance the Holding Company for Water and Wastewater (HCWW) play a key role in verifying financial statements, checking procurement, and ensuring regulatory compliance. However, transparency concerns and limited access to audit reports decrease public confidence. According to Khalil (2018), enhancing the clarity of audit findings and involving civil society in oversight could boost financial accountability in the sector (Khalil, 2018).

Rwanda presents a positive example of using internal auditing to enhance financial accountability in the water sector. The Rwanda Water and Sanitation Corporation (WASAC) maintains an active internal audit function aligned with government reforms on public financial management. Backed by institutes such as Office of the Auditor General (OAG), internal audits have led to advances in financial discipline and reduced wasteful spending. A study by Uwizeyimana and Mugenzi (2022) indicates that internal auditing in Rwanda is not only effective but also enjoys high levels of institutional support and public confidence.

In Tanzania, internal auditing is practiced within WSPs under the supervision of the Ministry of Water and the National Audit Office (NAO). Establishments like the Dar es Salaam Water and Sewerage Corporation (DAWASCO) have employed internal control systems, but the impact is limited by resource constraints, lack of qualified personnel, and weak follow-up on audit sanctions. According to Mgaya and Masue (2020), audit committees often lack the authority and capacity to enforce corrective actions, which undermines the goal of financial accountability. Enhancing legal frameworks and providing continuous professional training are crucial steps toward improvement (Mgaya & Masue, 2020).

1.1.3 National Context of Internal Auditing in Enhancing Financial Accountability

In Kenyan organizations, internal auditing is essential to improving financial accountability. Internal auditing, an important part of company governance, ensures that financial transactions are carried out openly and in accordance with established protocols and legal frameworks (Mugambi & Muriithi, 2021). Internal auditors are used by state enterprises, non-governmental organizations, and private firms in Kenya to evaluate financial risks, identify dishonesty, and offer suggestions for improvement. The importance of internal auditing in promoting financial liability is stressed in the Public Finance Management Act (2012) and Institute of Certified Public Accountants of Kenya (ICPAK) standards.

Risk assessment and fraud detection are two main traditions internal auditing improves financial accountability. To find possible hazards that could result in financial negligence or corruption, internal auditors examine financial records and operational actions (Mwangi & Wanyoike, 2020). Strong internal auditing procedures are necessary in Kenya, as evidenced by instances of financial misuse in government agencies like the Kenya Medical Supplies Authority (KEMSA) and the National Youth Service (NYS). Organizations can enhance resource use and prevent financial irregularities by implementing routine audits.

Furthermore, by suggesting financial control measures to improve effectiveness, internal auditors serve as advisors. For example, they assess whether procurement procedures adhere to the Public Procurement and Asset Disposal Act (2015), ensuring that government expenditures are cost-effective (Kariuki, 2019). By guaranteeing accurate financial disclosures, internal audits in Kenyan private sector companies help ensure compliance with International Financial Reporting Standards (IFRS) and enhance investor confidence. Internal audits have been used by companies including Kenya Commercial Bank and Safaricom PLC to uphold corporate accountability and financial integrity (IFRS, 2019).

Internal auditing also improves responsibility by making sure businesses follow ethical financial standards. In state businesses and county governments, where financial mismanagements have been common, ethical governance is critical to preserving investor and public confidence (Ndungu & Kinyanjui, 2022). Internal auditors support honesty in fiscal reporting, spending, and budgeting procedures by providing ongoing monitoring and reporting. By reducing financial risks, detecting fraud, keeping regulatory compliance, and encouraging moral financial behavior, internal auditing pointedly contributes to increased financial accountability in Kenyan businesses. Organizations must ensure that audit sanctions are applied while investing in independent, well-resourced internal audit services to optimize their efficiency. In order to ensure sustained economic growth in Kenya and control financial integrity, internal auditing must be certain (Mwangi & Wanyoike, 2020).

In Kenyan organizations, financial accountability is a crucial component of corporate governance, guaranteeing openness, honesty, and effective use of resources. It includes systems that support responsible fiscal management, regulatory compliance, and ethical financial reporting. Mwangi and Wanjiru (2020) assert that, mainly in the public and commercial sectors, financial liability improves organizational sustainability and investor confidence. Financial accountability measures are enforced in Kenya by organizations like the Public Procurement Regulatory Authority (PPRA) and the Office of the Auditor-General.

The prevalence of financial mismanagement and corruption in Kenyan organizations is one of the major obstacles to financial accountability. Inconsistencies in government institutions, such as improper financial records, non-compliance with procurement regulations, and misallocation of funds, have been often brought to light in the Auditor-General's reports (OAG, 2022). These issues erode public confidence and impede economic growth. Stronger internal controls and adherence to the accountability values set forth in the Public Finance Management Act have been proposed for organizations, especially state-owned businesses (Republic of Kenya, 2012).

Through corporate governance frameworks like the Capital Markets Authority Code of Corporate Governance, the private sector in Kenya has also integrated financial accountability.

Adherence to these conditions ensures financial reporting transparency, preventing corporate fraud and fostering investor trust (Ngugi & Muturi, 2021). To maintain openness and protect the interests of investors, firms registered on the Nairobi Securities Exchange must release audited financial accounts. In a similar vein, Kenyan companies' financial disclosures have become better after implementing International Financial Reporting Standards (IFRS). Kenyan organizations should prioritize strong internal control systems, moral leadership, and strict adherence to financial legislation in order to improve financial responsibility. Fighting financial negligence requires the use of whistleblower protection, open procurement procedures, and routine audits. Fostering a culture of financial obligation will be crucial to ensure sustainable development and investor trust as Kenya's economy continues to grow (Mwangi & Wanjiru, 2020).

1.1.4 Local Context of Water Works Development Agencies

A grid of Water Works Development Agencies (WWDAs) and Water Service Providers (WSPs) makes up Kenya's water service delivery system, and each one is essential to guaranteeing that everyone in the nation has access to clean, safe water. A wide range of entities, as well as public utilities, private firms, non-governmental organizations, and community-based projects, oversee Kenya's water service delivery. The Water Act No. 8 of 2002, which delegated water service management to improve accessibility and efficiency, established the regulatory framework under which these institutes function.

Of Kenya's 89 water service providers (WSPs), public utilities make up the majority. These include rural Water User Associations and urban local government-owned limited liability businesses. For example, the Athi Water Works Development Agency oversees the Nairobi City Water and Sewerage Company, which provides water and sewer services to the capital city and surrounding areas. Likewise, the coastal city of Mombasa is served by the Mombasa Water Supply and Sanitation Company. Within their respective jurisdictions, these public utilities are in charge of providing and maintaining water and sanitation services.

Water Works Development Agencies (WWDAs) were created under the Water Act of 2016 and are responsible for the construction, upkeep, and administration of national public water works in their respective areas. Additionally, they provide county governments and WSPs with technical services and capacity building. Kenya has nine (9) WWDAs, each of which is in charge of a certain number of counties: The agencies in question are the following: Athi Water Works Development Agency (AWWDA), Central Rift Water Works Development Agency (CRWWDA), Coast Water Works Development Agency (CWWDA), Lake Victoria North Water Works Development Agency (LVNWWDA), Lake Victoria South Water Works Development Agency (LVSWWDA), North Rift Valley Water Works Development Agency (NRVWWDA), Northern Water Works Development (NWWDA), Tanathi Water Works Development Agency (TAWWDA) and Tana Water Works Development Agency (TWWDA).Together, these organizations and businesses authenticate that water and sanitation services are efficiently administered and dispersed throughout Kenya, meeting the various needs of both urban and rural communities.

1.2 Statement of the Problem

The high percentage of Non-Revenue Water (NRW), or water produced but not paid because of theft, leakage, or meter faults, is another serious issue. Kenya loses over 47% of its water supply annually, resulting in deficits of more than KSh11 billion annually. For example, Nairobi's NRW is 39%, but Mombasa's losses are even greater at 48% (Kanda & Odiero, 2018). These significant losses restrict the amount of water available to customers in addition to having an impact on the financial stability of water service providers. Water supply system failure worsens the situation in rural areas. Nearly one-third of Kenya's rural water systems are thought to be non-operational at any given time, and the remaining systems often break down three to five years after they are built (Lutta & Ong'or, 2018).

Under the direction of the Water Services Regulatory Board (WASREB), Water Service Providers (WSPs) in Kenya are required to pledge sustainable water supply and sanitation services. However, these organizations have constantly struggled with financial accountability issues, such as financial theft, inadequate internal controls, and non-adherence to financial standards (WASREB, 2023). The ongoing financial flaws in WSPs, including partial financial accounts, mysterious payments, and unapproved procurement procedures, have been highlighted in the Auditor General's reports. These issues cast doubt on how well internal auditing practices encourage financial accountability in the industry (Office of the Auditor General, 2022).

Water utility companies' operations are further hindered by financial limitations. Many utilities suffer from undue operating and maintenance costs as well as inefficient revenue collection. For instance, the financial flux of Amatsi Water Services Company in Vihiga County was worsened by issues including poor connection metering, insufficient finance, and hefty non-revenue water (Amimo et al, 2021). The providers' capacity to maintain and grow their set-up is constrained by these financial matters, which has an influence on service delivery. Furthermore, effective water management is hampered by a lack of modern infrastructure and technological adoption.

The Ministry of Water, Sanitation and Irrigation's Chief Administrative Secretary emphasized the necessity for water service providers to implement Advanced Metering Infrastructure (AMI) in order to lower non-revenue water, which accounts for 45% of the nation's total water usage and costs the industry more than Ksh 10.5 billion annually. Financial constraints and the requirement for technical know-how frequently impede the deployment of such technologies (Wakesho & Mwenyeali, 2022).

Prior research has examined the connection between organizational performance across a range of industries and internal auditing techniques. In a study on Kenyan WSPs, for example, Ndimitu et al. (2018) exposed that internal auditing methods clarified 10.1% of the variances in organizational performance, indicating a strong impact of internal auditing on organizational results. However, performance metrics rather than explicit financial responsibility measures were the primary focus of this study. In a similar vein, Munene et al. (2016) examined how auditing affected the financial performance of a Kirinyaga County water and sanitation firm and found a favorable correlation between financial success and auditor independence.

The study under review, it has been established that audited financial reports for some Water Service Providers within the target population have been issued with adverse opinion and disclaimer of opinion by the Office of the Auditor General during the FY 2021/22, FY 2022/23 and FY 2023/24 respectively (OAG, 2023). The WSPs that were dispensed with adverse opinion based on non-effective internal controls, risk management and overall governance during the stated fiscal years are; Garissa Water & Sewerage Company (GAWASCO), Samburu Water & Sewerage Company (SAWASCO), Tavevo Water & Sewerage Company (TAVEVO) and Lamu Water & Sewerage Company (LAWASCO) whereas the WSPs issued with disclaimer of opinion based on there being no materials issues relating to effectiveness of internal controls, risk management and governance during the stated fiscal years are; Wajir Water & Sewerage Company (WAJWASCO) and Tana River Water & Sanitation Company (TAWASCO) (Office of the Auditor General, 2022-2024).

Furthermore, compliance has been prioritized over financial accountability in the majority of Kenyan studies on internal auditing (Mugambi & Njiru, 2021). This limited focus ignores the ways internal auditing practices support water utilities' operational effectiveness, fraud detection, and financial transparency. Examining how internal auditing affects financial accountability risks was crucial given the vital role WSPs play in delivering necessary services. This study, filled this gap by assessing the effect of internal auditing in enhancing financial accountability at the Water Service Providers in Kenya, providing perceptions for policy formulation and strengthening internal audit frameworks within the sector.

1.3 Objectives of the Study

1.3.1 General Objective:

The main objective of this study was to examine the effect of internal auditing in enhancing financial accountability at the Water Service Providers in Kenya.

1.3.2 Specific Objectives:

The study was guided by the following objectives:

i. To assess the effect of risk assessment in enhancing financial accountability at the Water Service Providers in Kenya.
ii. To examine the influence of internal control systems in enhancing financial accountability at the Water Service Providers in Kenya.
iii. To assess the effect of auditing compliance in enhancing financial accountability at the Water Service Providers in Kenya.

1.4 Research Questions

i. What is the effect of risk assessment in enhancing financial accountability at the Water Service Providers in Kenya?

ii. What is the influence of internal control systems in enhancing financial accountability at the Water Service Providers in Kenya?

iii. What is the effect of auditing compliance in enhancing financial accountability at the Water Service Providers in Kenya?

1.5 Significance of the Study

1.5.1 To Financial Accountability

This study is important because it emphasizes how important internal auditing is to improving water utility companies' financial accountability. To guarantee that public monies given to these organizations are spent effectively and openly, financial accountability is crucial. The study offer insights into how financial controls, risk management, and compliance can be linked to reducing misconduct and financial inefficiencies by evaluating the efficacy of internal audits.

1.5.2 To Policy Makers

Policymakers and regulatory bodies, including the Water Services Regulatory Board (WASREB), Water Service Providers (WSPs), and the Office of the Auditor-General in Kenya, find value in the study's conclusions. It offers factual data on the weaknesses and advantages of internal auditing procedures, which can guide changes to policies and the creation of stricter financial supervision procedures. Better regulatory environments can improve water service companies' governance, guaranteeing transparent and long-term financial management.

1.5.3 To Managers

This study provides useful references for management teams in water service providers on how to use internal audits to rally financial decision-making and operational efficiency. Companies can improve financial performance, increase adherence to legal requirements, and identify financial anomalies with the use of strengthened internal auditing procedures. Water service providers are therefore able to improve public service delivery and allocate resources more effectively.

1.5.4 To Academicians

The literature and findings from this study enhanced the subsequent literature of prospective researchers, giving them a point of comparison for their findings and a chance to improve their empirical literature. Researchers benefit from this study by receiving suggestions for relevant, innovative research subjects. The literature and study result also improve the libraries of potential scholars.

1.6 Scope of the Study

The study was confined into the effect of internal auditing in enhancing financial accountability at the Water Service Providers in Kenya. The independent variables employed in the study were; risk assessment, internal control systems and auditing compliance while the dependent variable was financial accountability. In this study, an explanatory research design was used. The strategy known as explanatory research design was created to scrutinize a phenomenon that has either never been researched before or has not been adequately explained in the past. The target group comprised of Water Service Providers in the jurisdictions of three water development agencies: Athi Water Development Agency, Tanathi Water Development Agency, And Tana Water Development Agency. There are 21 Water Service Providers under the Athi Water Development Agency, while Tanathi Water Development Agency has 15 Water Service Providers and Tana Water Development Agency has 19 Water Service Providers. The data collection tool was structured questionnaires which was given to the personnel of the Water Service Providers in the respective regions between June to July 2025.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In addition to providing an overview of major concepts and ideas advancing in the field of internal auditing and financial accountability, this segment will go deeper into earlier studies and research on the theories and concepts of risk assessment, internal control systems and auditing compliance.

2.2 Theoretical Review

A theory, according to Nduati, Iravo, and Ombui (2019), is a collection of related ideas, definitions, and claims that offer a methodical interpretation of events by outlining the connections between variables in order to understand or forecast the occurrences. This study examined the agency theory, the auditor's theory of inspired confidence and contingency theory to recognize the effect of internal auditing in enhancing financial accountability at the Water Service Providers in Kenya.

2.2.1 Agency Theory

According to the agency theory, a firm is composed of a number of interrelated contracts between the managers, who are the persons responsible for using and overseeing the economic resources, and the principals, who are the owners of those resources (Sarens & Abdolmohammadi, 2007). Agency theory is predicated on the idea that agents possess information that principals do not, and that this information asymmetry makes it more challenging for principals to make sure the agents are correctly representing their interests (Jensen and Meckling, 1976).

According to Jensen and Meckling (1976), the split of ownership and control of state corporations indicates a difficulty with the connection between the agents in this example, the management and the principals, who are the citizens of the country who own the state corporations. Because the concept places too much reliance in the agent to make the proper decisions, there could be a number of disputes and conflicts. Accordingly, agency theory seeks to address two issues: the necessity to evaluate the agent's risk appetite, particularly when the principal and the agent hold divergent opinions on risk, and the contradiction between the principal's and the agents' objectives (Jensen & Meckling, 1976).

Internal controls are intended to lessen the problems caused by principal-agent relationships, according to the theory's proponents (Muiruri & Wepukhulu, 2018). Fiscal reporting and internal controls improve the monitoring system and provide the principal with more information about the agent's actions (Nogueira & Jorge, 2017). Agency costs, which may include expenses for monitoring and updating management, are borne by the shareholders, in this case the taxpayers. Losses and other expenses are incurred as a result of the managers' self-serving opportunities at the expense of the corporations.

According to the theory's proponents, internal controls and financial reporting are regarded as the most important agency expenses. But according to the theory's detractors, the control mechanisms it proposes are not only not feasible from an economic standpoint, but they are also inefficient in terms of cost (Alkaraan, 2018).

2.2.2 Auditor's Theory of Inspired Confidence

The Limperg Institute in the Netherlands developed the theory of inspired confidence in 1985. It asserts that the auditor's extensive social role as a confidential agent stems from the need for both an independent and expert examination and an independent and expert judgement backed by the examinations. The public still expects a low rate of audit failures, so accountants and auditors need to be mindful of this. The theory states that an auditor operating as a confidential agent derives their wide goal from the requirement for both an independent and expert examination and an independent and expert conclusion backed by the examinations.

As a result, auditors and organizational-based accountants must function under the presumption that the public still anticipates a low percentage of audit failures. These extra requirements put more pressure on the auditors to organize and perform their audit duties in a way that reduces the possibility of significant misstatements going unnoticed. Additionally, the auditor must act in a way that maintains the trust that people have in him (Limperg, 2002).

Based on the fact that auditors' responsibilities stem from their customers' faith in their ability to successfully complete the audit process and the assurance that comes from the accountant's opinion, the auditor's idea of inspired confidence is crucial (Matoke & Omwenga, 2016). They go on to say that since confidence dictates how long a process will last, it stands to reason that if confidence were to decline, the process or function would cease. Furthermore, if society loses confidence in the efficacy of the audit process and the report it produces, the audit process loses all of its usefulness.

In light of the fact that an audit failure essentially means the end of a career, auditors are evaluated for reasonable quality assurance. Legislation and company governance, in addition to financial reporting, also boost stakeholder and investor poise in the capital markets. According to Matoke and Omwenga (2016), audits give sponsors, investors, shareholders, and firm managers assurance.

2.2.3 The Contingency Theory

The contingency theory of leadership was proposed by an Australian psychologist (Fred, 1964). The notion emphasizes both the leader's personality and the environment in which they operate in relation to the performance of the organization. In this instance, the success of the company is greatly influenced by the personal characteristics of managers and auditors as well as their surroundings. Gelmar et al. (2017) conducted a study on small business leadership styles and found that in order to increase employee engagement and efficiency, small business managers should carefully consider how they behave in these situations.

Contingency has been recognized as a way to comprehend various organizational activities and procedures in both management and accounting. The foundation of contingency is the idea that suitable management practices and efficacy are determined by the organization. The effectiveness of various systems for various organizations may be explained by contextual thoughts (Ismail, Sapiei, & Zainuddin, 2010). The authors stressed the impact of contextual elements, such as the external environment, the use of contemporary technology, existing cultures, sizes and scalability, and available structures, on the organization's structure and, consequently, audit effectiveness. The aforementioned scenarios highlight how the SAGA environment will affect how well management and internal audit teams' function in their efforts to guarantee audit efficacy. In this instance, management's job is to make the auditors' working environment comfortable, which will increase the audit's efficacy.

The contingency theory states that an organization must find certain sets of choices and actions that correspond to specific defined situations and show a suitable fit (Islam & Hu, 2012). The claim that an entity's corporate duties and obligations extend beyond its shareholders to other investors, including staff members, creditors, possible investors, governmental and expert bodies, clients, and suppliers, whose interests also affect the company's performance, is supported by this theory (Badara & Saidin, 2014).

The main tenet of this theory, according to its proponents, is that organizational strategies must consider the unique demands of the organization in each context, and that these strategies must adapt as circumstances do (Cameron, 2010). However, this theory has been criticized for failing to explain why leaders with particular leadership styles work well in some situations but not in others, as well as for failing to satisfactorily explain what should be done when there is a leader/situation mismatch in the workplace (Howell, Windahl & Seidel, 2010).

There are some aspects and implications to the theory of the contingency approach to management. However, for now, a summary and a few salient features will suffice. The universal applicability implied by some of the other theories earlier discussed is called into doubt by contingent theories, even if they are more directly related to Lewin's open system theory. In summary, contingency theories state that depending on the circumstances, good management will take on different shapes. Early research on contingency theory shows that elements like as job design and leadership style, as well as participation in organizational structure and decision-making, are key to understanding what will result in a good overall management outcome.

2.3 Empirical Review

An empirical review is a significant analysis and synthesis of preceding studies and research that involve the collection and analysis of data through observation or experimentation. It focuses on reviewing and summarizing findings from empirical studies to identify patterns, trends, gaps, or liaisons in a specific area of study (Creswell, 2014). The variables are deliberated below;

2.3.1 Risk Assessment in Enhancing Financial Accountability at the Water Service Providers

In Kenya, water service providers (WSPs) work in a heavily regulated sector where maintaining long-term service delivery depends on financial accountability. In order to detect, assess, and mitigate financial risks that may result in corruption, inefficiency, and financial misconduct, risk assessment is essential. By guaranteeing adherence to financial regulations, enhancing clarity, and fortifying governance frameworks, valuable risk assessment frameworks improve financial accountability (Wanjiru & Githongo, 2021).

Revenue leakage from Non-Revenue Water (NRW), which includes water lost through theft, leaks, and inefficient billing, is a major financial concern for WSPs. For example, according to a report on Nairobi City Water and Sewerage Company (NCWSC), NRW was responsible for almost 40% of all water output, which resulted in significant revenue losses. One risk mitigation tactic to improve accountability and efficiency in water billing and revenue collection is the implementation of real-time monitoring systems and advanced metering infrastructure (Wambua & Mugo, 2019).

Financial accountability in WSPs is also seriously hampered by the risks of fraud and corruption. Service delivery and financial sustainability were jeopardised by procurement fraud, irregular contract awards, and financial misreporting, according to a study on Kisumu Water and Sanitation Company (KIWASCO) (Nyang'au & Ochieng, 2020). To reduce these risks and improve financial accountability, it has been suggested that strengthening internal controls, implementing e-procurement systems, and enforcing anti-corruption rules are essential steps (Otieno & Njoroge, 2021).

Furthermore, inadequate financial management techniques, such as inadequate budgeting, lax spending controls, and a dearth of financial reporting, have been recognized as significant hazards in WSPs (Karanja & Wekesa, 2018). Financial mismanagement led to unpaid supplier debts, delayed worker salaries, and deteriorating infrastructure, according to a study on Mombasa Water Supply and Sanitation Company (MOWASSCO). To improve financial concern and guarantee liable financial management, risk-based audits and financial capacity-building programs have been proposed (Makokha & Ndichu, 2019).

Additionally, among Kenyan WSPs, regulatory non-compliance continues to pose a serious financial risk. WSPs are required to produce yearly financial reports, carry out independent audits, and meet performance standards by the Water Services Regulatory Board (WASREB) (Kithinji & Kamau, 2020). Studies have revealed that a lack of financial knowledge and subpar governance practices causes many WSPs to fall short of these requirements. To reduce this risk and encourage obligation, WSP managers' financial literacy must be improved, and strict regulatory compliance procedures must be enforced (Ngugi & Mwangi, 2021).

An indispensable strategy for improving financial accountability among Kenyan WSPs is risk assessment. WSPs can strengthen their financial sustainability and service provision by detecting and resolving fraud, income leaks, scarce financial management, and regulatory non-compliance. Effective risk mitigation techniques including advanced metering, internal controls, and regulatory compliance enforcement can greatly increase financial responsibility, as shown by case studies on NCWSC, KIWASCO, and MOWASSCO (Wanjiru & Githongo, 2021).

Identification, assessment, and mitigation of financial risks that may result in fraud, inefficiencies, or improper handling of funds are critical to the effectiveness of financial management in WSPs. In Kenyan WSPs, for example, insufficient financial risk assessment frameworks led to irregular procurement methods and misallocation of funds, according to research by Githongo and Munga (2021). The lack of appropriate risk assessment procedures, according to Mwangi and Kimani (2022), frequently results in non-revenue water losses, which in certain counties can make up as much as 45% of total water output and have a substantial impact on financial sustainability.

Revenue leakage as a result of subpar billing systems and unauthorized connections is a major financial concern for WSPs. According to a case study on Nairobi City Water and Sewerage Company (NCWSC), corruption and system inefficiencies made NRW losses worse (Kariuki & Mutua, 2021). Furthermore, a Water Sector Trust Fund (WSTF) investigation noted that instances of financial misreporting and budgetary fluxes have been caused by inadequate internal auditing practices inside WSPs. Financial gaps continue to exist in the absence of adequate risk assessment, which restricts water providers' capacity to satisfy operational and infrastructure requirements (Ochieng & Njoroge, 2022).

Procurement fraud and donor fund negligence are two more significant risks that have an impact on WSPs' financial accountability. According to a study on Kisumu Water and Sanitation Company, erratic tendering procedures resulted in exorbitant project costs and subpar service (Muthoni & Waithaka, 2021). Similar to this, Kiprotich and Karanja (2023) showed how the extension of water services in rural regions was significantly hampered by the theft of subsidies from universal organizations like the World Bank. One mitigation strategy to improve transparency in WSPs is to strengthen financial controls through forensic audits and real-time monitoring technologies.

Furthermore, WSP governance flaws lower responsibility levels and exacerbate financial risks. A case study on the Coast Water Works Development Agency (CWWDA) showed how financial malfeasance was exacerbated by a lack of board monitoring, which led to infrastructure projects being delayed. Additionally, Ndegwa and Chege (2022) pointed out that several WSPs do not have standardized fiscal reporting systems, which makes it challenging to monitor spending trends and guarantee compliance with the Public Finance Management Act.

These financial risks can be reduced by putting in place stronger governance systems, such as independent audit boards. Promoting financial accountability among Kenyan WSPs still requires effective risk assessment. Viable water service delivery is nevertheless hampered by major issues like revenue leakage, procurement fraud, and governance deficiencies. Clarity and accountability in the industry can be pointedly improved by implementing digital financial management systems, bracing internal auditing procedures, and ensuring adherence to financial standards (Odhiambo & Wambua, 2021).

2.3.2 Internal Control Systems in Enhancing Financial Accountability

For Kenya's water service providers (WSPs) to maintain financial accountability, internal control measures are fundamental. These systems improve efficiency and transparency and include risk management plans, audit procedures, and financial policies. Effective internal control procedures reduce financial malfeasance and corruption in public utilities, claim Muchiri and Wanyoike (2020). Similar to this, Otieno and Kavoi (2021) point out that efficient financial controls, with recurring audits and compliance assessments and improve accountability.

Financial reporting is a key component of internal control that ensures proper and accurate financial records, hence fostering accountability. According to a 2019 study by Kimani and Mwangi on Nairobi City Water and Sewerage Company, incidences of financial theft decreased when strict reporting standards were followed. Furthermore, Muli and Ndunda (2022) found that financial leakage was less common in WSPs that used real-time financial monitoring systems, including the Integrated Financial Management Information System (IFMIS).

Another essential component of internal control in WSPs is risk assessment, which aids in identifying and reducing financial irregularities. According to Ochieng and Obura's (2020) case study on Kisumu Water and Sanitation Company, proactive risk assessment techniques decreased financial losses by 25% over a three-year period. Similarly, WSPs with structured risk evaluation frameworks, including fraud detection procedures, were found to be more resilient against fiscal inefficiencies by Nduta and Kariuki (2021).

Financial accountability is further strengthened by segregation of roles, which prohibits fraud and illegal transactions. Mutua and Kamau's (2018) case study on Mombasa Water Supply and Sanitation Company showed that a distinct division of financial responsibilities reduced the likelihood of embezzlement. Furthermore, by guaranteeing that no one person has unfettered access to financial resources, Chege and Wambua (2021) demonstrated how decentralized financial approval procedures in WSPs improve accountability.

Despite these benefits, resource limitations and change aversion make it difficult for some WSPs to put strong internal control mechanisms in place. Karanja and Njoroge (2019) assert that the deployment of contemporary financial monitoring systems is constrained by a lack of financing. Besides, according to Maina and Kiptoo (2022), a lack of regulatory enforcement compromises the efficacy of internal control, which results in ongoing instances of financial misconduct. In Kenyan WSPs, internal control measures are essential for improving financial responsibility. Segregation of roles, risk assessment, and efficient financial reporting all reduce fraud and financial incompetence. However, for the sector to have sustained financial responsibility, issues including resource limitations and regulatory prosecution must be addressed (Wanjiru & Githongo, 2021).

Segregation of responsibilities, which guarantees that no one individual has responsibility over an entire financial process, is one of the core elements of Internal Control System (ICS) in WSPs. According to Otieno and Ochieng (2019), this measure reduces the risks associated with financial misreporting and fraud. For instance, Nairobi City Water and Sewerage Company (NCWSC) has seen a notable decrease in instances of financial misappropriation as a result of the division of procurement, auditing, and financial clearances. Additionally, financial responsibility has been improved by computerized financial reporting systems. Enterprise Resource Planning (ERP) systems, which manage financial transactions and minimize human intervention, have been implemented by numerous WSPs. Kisumu Water & Sanitation Company's implementation of automated billing and payment systems has reduced revenue losses and improved financial transparency (Kinyua et al., 2021).

Proper internal controls helped reduce revenue losses by 30% between 2018 and 2021, according to a case study on Eldoret Water and Sanitation Company (ELDOWAS) (Mbugua & Kamau, 2022). ELDOWAS improved its income collection and decreased instances of fiscal misconduct by putting in place strict financial audits, embracing digital payment platforms, and strengthening procurement controls. An independent audit committee was also used by Mombasa Water Supply & Sanitation Company to supervise financial transactions and reporting. Investor trust and funding from institutions like the World Bank grew as a result of this initiative's enhanced adherence to regulatory financial requirements (Muthoni & Kariuki, 2021).

Even though ICS has many advantages, some WSPs find it difficult to completely utilize them. These consist of a shortage of qualified staff, opposition to change, and limited budget (Ng'ang'a & Karanja, 2022). For example, Tana River Water and Sewerages Company and other rural-based WSPs struggle with archaic financial reporting methods, which makes accountability challenging. WSPs can increase efficiency and transparency by using procedures like independent audits, automated financial reporting, and segregation of roles. To protect long-term sustainability and financial integrity, however, issues such limited resources and opposition to change must be addressed (Otieno & Wanyama, 2023).

2.3.3 Auditing Compliance in Enhancing Financial Accountability

In order to improve financial responsibility among Kenya's Water Service Providers (WSPs), auditing compliance is essential. Since the provision of water is a vital public function, effective service delivery depends on maintaining financial transparency and regulatory compliance (Ochieng & Omolo, 2021). The industry has encountered issues like financial inefficiencies, corruption, and neglect, which calls for strong auditing procedures. Compliance auditing lowers the risk of resource misallocation and financial irregularities by ensuring that WSPs follow financial management regulations (Nyaga & Maina, 2020).

WSP adherence to internal controls, financial regulations, and best accounting procedures is guaranteed by auditing compliance. For instance, an external audit conducted in 2022 by the Nairobi City Water and Sewerage Company (NCWSC) found inconsistencies in the company's purchasing and revenue collecting procedures, which resulted in changes that improved financial transparency. In order to reduce financial risks and inefficiencies, regulatory organizations like the Water Services Regulatory Board (WASREB) also implement compliance audits (Mugambi & Waweru, 2021).

By exposing dishonest billing practices and inadequate internal controls, strict compliance audits enhanced financial responsibility, according to a study on Kisumu Water and Sanitation Company (Ochieng & Omolo, 2021). In a similar vein, Mombasa Water Supply and Sanitation Company's 2021 audit resulted in the implementation of automated invoicing systems, which improved service delivery and decreased revenue leaks. According to Nyaga and Maina (2020), these case studies demonstrate how auditing compliance can assist WSPs in improving their financial management and accountability.

Notwithstanding the advantages, monitoring compliance in WSPs is fraught with difficulties, including a lack of funding, political meddling, and a shortage of qualified staff. For example, a 2022 report from the Office of the Auditor General (OAG) found that bureaucratic inefficiencies prevented certain WSPs, such as Eldoret Water and Sanitation Company, from enforcing audit sanctions. Furthermore, several providers' financial wrongdoings have persisted because to lax regulatory enforcement measures (Mugambi & Waweru, 2021). Enhancing financial liability in Kenyan WSPs by auditing compliance is important for guaranteeing efficacy, openness, and adherence to financial procedures. Even while some providers have used audits to improve their financial management, issues including insufficient enforcement and resource limitations still exist. Achieving sustained financial accountability in the industry requires strengthening audit capabilities and bracing regulatory frameworks (Mwangi & Kamau, 2022).

One significant industry that is regulated by laws like the Water Act of 2016 and oversight organizations like the Water Services Regulatory Board (WASREB) is the supply of water services. Nyakundi and Omondi (2022) assert that following auditing standards reduces financial irregularities and guarantees the efficient use of money allotted for water projects. Adoption of International Public Sector Accounting Standards (IPSAS) also helps WSPs with performance-based budgeting and promotes accurate financial reporting. An essential strategy for improving financial responsibility among Kenyan water utility companies is auditing compliance.

While technology advancements like ERP systems and digital audits provide successful solutions, case studies on NCWSC and CWWDA highlight the consequences of non-compliance. Financial transparency in the industry is further cemented by enhancing governance frameworks and encouraging stakeholder involvement. Future studies ought to look into how real-time auditing systems might enhance the financial performance of WSPs (Kariuki & Kimani, 2021).

Cases where inadequate auditing compliance has resulted in financial despotism in Kenya's water sector are highlighted by empirical evidence. According to a case study on Nairobi City Water and Sewerage Company (NCWSC), noncompliance with audit sanctions led to inefficiencies in service delivery and revenue losses (Owuor & Mutunga, 2023). In a similar vein, a performance review of the Coast Water Works Development Agency (CWWDA) revealed that money meant for water projects was stolen as a result of a lack of independent audits. To increase financial responsibility in WSPs, these findings highlight the necessity of strict adherence to audit frameworks (Kamau & Wambua, 2022).

In the water industry, technological developments have greatly improved financial responsibility and auditing compliance. The implementation of Enterprise Resource Planning (ERP) systems has improved financial monitoring in real time and decreased fraudulent activity. These additions demonstrate how technology-enabled auditing systems can improve WSP accountability (Mugambi & Njoroge, 2022). Stakeholder participation and efficient governance frameworks are necessary to improve auditing compliance. Independent audit committee participation in WSPs has improved financial oversight and decision-making procedures, per a study by Mutua and Wainaina (2023). Furthermore, accountability has been strengthened, especially in rural water projects, via frequent financial exposes and public involvement in budgetary allocations. These governance frameworks guarantee that WSPs' financial operations conform to legal and regulatory requirements (Mwangi & Karanja, 2022).

2.3.4 Financial Accountability at the Water Service Providers

In Kenya, Water Service Providers (WSPs) must be financially accountable to guarantee sustainability, transparency, and efficient service delivery. To improve efficiency and reduce corruption, WSPs, which are governed by the Water Services Regulatory Board (WASREB), must follow stringent financial reporting and governance guidelines (Mwenyeali, 2021). However, problems like poor financial reporting, poor internal controls, and mismanagement of cash have persisted and impacted service delivery. Nyakundi et al. (2021), for example, discovered that financial inefficiencies resulted from the prevalence of irregular procurement procedures and unaccounted revenue collections in a number of WSPs.

The Nairobi City Water and Sewerage Company (NCWSC) case is a prime illustration of financial mismanagement. An audit of the company found unreported revenue losses brought on by shoddy billing procedures and unauthorized water connections. The company's financial sustainability was openly impacted by non-revenue water (NRW) losses of approximately 40%, as reported by WASREB (2023). Furthermore, financial inefficiencies have been made worse by governance flaws such the county authorities' lax control. In order to improve financial responsibility and revenue collection, NCWSC has implemented automated billing systems and digital payment platforms (Mugambi & Wainaina, 2022).

Mombasa Water Supply and Sanitation Company (MOWASSCO) is another noteworthy example of a business that experienced financial difficulties as a result of excessive operating expenses and insufficient revenue collecting systems. According to a statement from the Kenya Institute for Public Policy Research and Analysis (KIPPRA), MOWASSCO frequently experienced water shortages and service interruptions as a result of debt accumulation and government subsidy delays. However, financial management and service delivery have improved as a result of reforms such the implementation of performance-based contracts and prepaid water meters (KIPPRA, 2023).

Furthermore, stakeholder involvement and regulatory compliance have a significant impact on financial accountability at WSPs. In order to prevent financial mismanagement, WASREB's annual Impact Report has emphasized the necessity of open financial audits and compliance with the Public Finance Management Act (PFMA). Strong governance frameworks and public involvement in financial planning have enhanced fiscal accountability and decreased fraud instances, as evidenced by case studies on WSPs in Kisumu and Nakuru counties (WASREB, 2023).

Strong regulatory enforcement, better financial reporting systems, and strengthened governance frameworks are all necessary for financial responsibility in Kenyan WSPs. Despite ongoing issues like non-revenue water losses and inadequate oversight, case studies from Nairobi, Mombasa, and Kisumu show that smart reforms can enhance service delivery and financial integrity. Strengthening financial accountability in the water sector will require ongoing regulatory body monitoring and the implementation of digital financial systems (Otieno & Kiplangat, 2021). Improving financial performance requires efficient internal controls, which include strong auditing capabilities and open financial reporting. Strong internal controls have a favorable impact on financial outcomes, according to a study conducted on Tana Water Services Board WSPs. This highlights the necessity of ongoing monitoring and assessment of financial procedures. Moreover, in an effort to control financial practices and increase transparency in the industry, the Water Services Regulatory Board (WASREB) has created rules to help rural service providers become more financially accountable (Njiru & Bunyasi, 2016).

The financial viability of WSPs in Kenya is greatly impacted by infrastructure funding. Strategic infrastructure investments have been shown to improve these providers' financial health. Effective infrastructure development is frequently hampered by issues including restricted access to cash and poor financial management techniques (Muraguri & Wanjohi, 2021). It is recommended that the Ministry of Water, Sanitation, and Irrigation (MWSI) and other interested parties work together to mobilize development grants and local resources in order to address these issues. Furthermore, by lending money to initiatives that seek to improve water accessibility and service delivery, the Water Sector Trust Fund (WSTF) plays a significant role in funding water and sanitation projects, especially in underprivileged communities (Kenya Markets Trust, 2019). Financial responsibility is also impacted by WSP governance procedures. According to Kenya's water sector reforms, the division of the roles of policymaking, regulation, and service delivery is intended to improve openness and lessen the threat of corruption (Mohamed, 2019). Nonetheless, research has revealed persistent issues, such as management procedures that could raise the danger of corruption in WSPs (Chikozho & Kujinga, 2017).

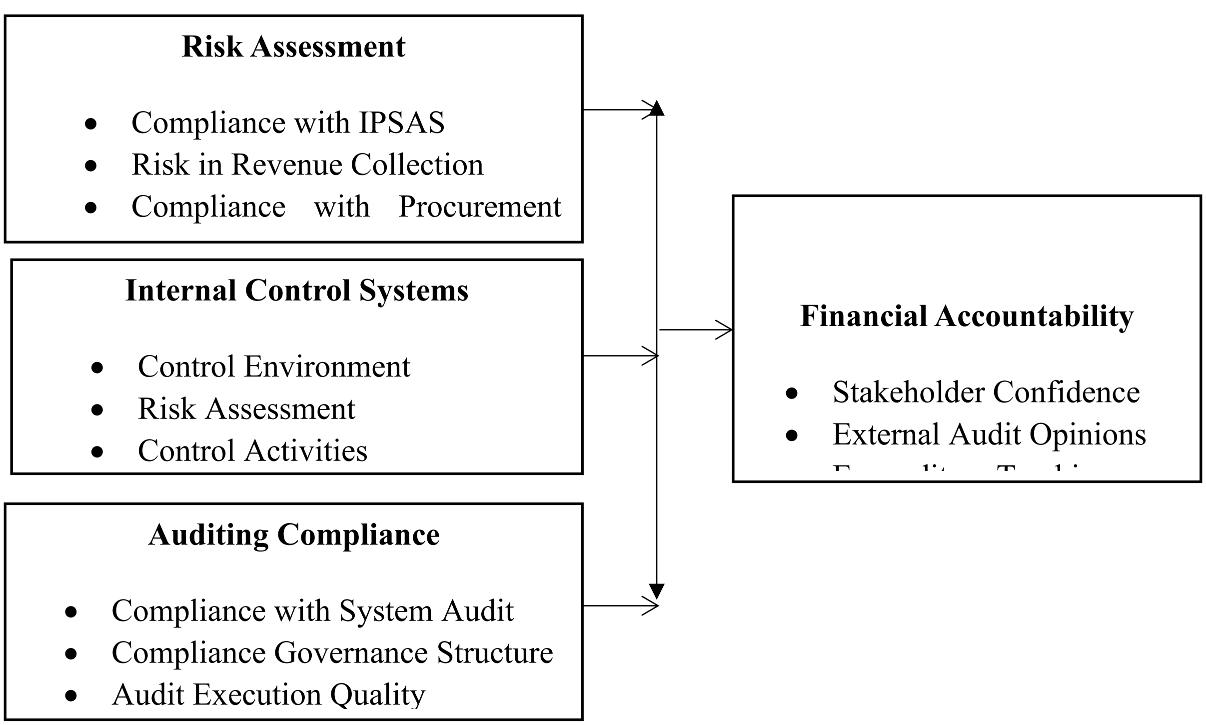
2.4 Conceptual Framework

According to Varpio *et al,* (2020), a conceptual framework is comprised of a set of general ideas and hypotheses that assist a researcher in precisely finding the problem, phrasing their enquiries, and selecting articles that are pertinent to the topic at hand. The topic under study was to investigate the effect of internal auditing in enhancing financial accountability at the Water Service Providers in Kenya. The independent and dependent variables in this study are as follows;

FIGURE 1:

Conceptual Framework

Independent Variables **Dependent Variable**



Source: (Researcher, 2025)

Based on the literature reviewed, a conceptual framework shows how risk assessment, internal control systems and auditing compliance which are the independent variables relates to financial accountability which was the dependent variable are shown in the figure 2.1 above.

2.5 Operationalization of Variables

The foremost area of focus in this research was the effect of internal auditing in enhancing financial accountability at the Water Service Providers in Kenya. Therefore, the variables under investigation were operationalized for their quantitative measurement thus the testing of the proposed hypothesis was possible. Table 2.1 below shows the measurement of variables in summary form.

TABLE 1:

Operationalization of Variables

Variable	Indicators	Measure	Type of Scale
Risk Assessment	▪ Compliance with IPSAS ▪ Risk in Revenue Collection ▪ Compliance	• Number of standards adopted • Revenue deviation in percentage • Audit Violation	Nominal/Ordinal
Internal Control Systems	▪ Control Environment ▪ Risk Assessment ▪ Control Activities	• Existence of audit committees • Risk register use • Procedure documentation	Nominal/Ratio/Ordinal
Auditing Compliance	▪ Compliance with Audit System ▪ Compliance Governance Structure ▪ Audit Execution Quality	• Audit policy • Audit committee existence • Timely completion	Nominal/Ordinal
Financial Accountability	▪ Stakeholder Confidence ▪ External Audit Opinions ▪ Expenditure Tracking	• Engagement frequency • Audit opinion type • Budget variance in percentage	Nominal/Ordinal

Source: (Researcher, 2025)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the various research methodologies that are used in the study. This section was divided into research design which focuses on the general design of the study, a description of the study population, sample size and sampling techniques that was utilized in addition to research instruments. This section also explored the data collection procedures, multiple regression analysis and ethical considerations.

3.2 Research Design

A research study is completed according to a blueprint known as the research design. It is a set of guidelines for gathering and evaluating data that balances procedural economy with relevance to the goal of the study. The following are some reasons why research design is important: it offers a framework or structure for handling a specific research problem in the most cost-effective and visible way possible, and it acts as a logical approach to conducting a research project by defining the sources and categories of information pertinent to the study (Greener, 2016). The research design for the study will be explanatory. In the context of a study on the effect of internal auditing on enhancing financial accountability at water service providers in Kenya, the application of a descriptive research design was both suitable and beneficial. This was because the study sought to provide a clear and systematic understanding of the current internal audit practices and how they influence financial accountability within these organizations. Descriptive research allowed the researcher to gather quantifiable information that accurately reflects the current state of affairs without manipulating the study environment (Kothari, 2014).

3.3 Target Population

The target population comprised of 55 Water Service Providers. These are the 21 Water Service Providers under the Athi Water Development Agency, the 15 Water Service Providers under Tanathi Water Development Agency, and the 19 Water Service Providers under the Tana Water Development Agency. The unit of analysis was a single WSP. These WSPs are listed in Appendix II.

TABLE 2:

Target Population

Description	No. of WSPs
Athi Water Development Agency	21
Tanathi Water Development Agency	15
Tana Water Development Agency	19
Total	**28**

Source: (Researcher, 2025)

3.4 Sample Size and Sampling Procedure

3.4.1 Sample Size

A sample is a subset of the target population that has been specifically chosen to be representative of the entire population. Sample size, according to Kothari & Gaurav (2014), is the number of components that must be present in the research sample. According to Wiersma & Jurs (2012), the ideal sample size should be sufficient to ensure the data's validity and reliability.

3.4.2 Sampling Procedure

A census study in research refers to a method where data is collected from every member of the target population, rather than selecting a sample. It is particularly useful when the population was relatively small, and the goal was to get a complete and accurate picture of the phenomena being studied (Kothari, 2014). Since the subject population was not large, no sampling was undertaken and the study used the entire population as its basis for data collection.

3.5 Data Collection Instruments and Procedures

This study utilized primary data to achieve its objectives.

3.5.1 Data Collection Instruments

The respondents in the area was assessed using structured questionnaires in order to get primary data. The goals of the study guided the development of the questionnaires' questions. There will be two sections to the structured questionnaires. While part two focused on the questions relating to dependent and objective variables, part one concentrated on the respondents' general information. The questions in part two are designed using a 5-point Likert scale with items ranging from (1) strongly disagree to (5) strongly agree. Likert- type scales were utmost convenient as they rated the respondent's perception about the subject under study (Saunders, *et al*. 2009).

3.5.2 Data Collection Procedures

Before visiting the Water Service Providers, respectively, to collect data, a letter from NACOSTI seeking permission to conduct research was distributed. Questionnaires that were self-administered were used to gather primary data. The main mode of participant recruitment was through written invitation letters addressed to Chief Executive Officers of the selected Water Service Providers (WSPs). These letters were sent through official email, and they included an electronic link to the research instrument. The invitations clearly explained the purpose of the study, its objectives, the voluntary nature of participation, and the measures in place to safeguard confidentiality and data protection. The invitation also requested consent for participation and provided contact data for the researcher in case of questions or clarifications. Also, the researcher did a follow-up where telephone calls were made to confirm receipt of the invitation and to clarify any issues regarding the study and the questionnaire.

3.6 Pilot Test

The data collection tool was piloted at water service providers in Lake Victoria South Water Works Development Agency, including as Kisumu Water and Sewerage Company Limited, with 5 respondents, or 10% of the sample size. To eliminate bias, the Water Service Providers selected for the study questionnaire pretesting was not be included in the real studies due to the researcher's suitability. In addition to lowering the possibility of error and identifying potential issues early on, the pilot study tested the research methodology and process. It was also feasible to assess the adequacy of the study's time and financial resources. Another benefit was the ability to identify questions that were unclear or wrong, which helped ensure that overall objectives were fulfilled in compliance with the research factors. The results from the pilot study were used to assess the validity and reliability of the research instruments.

3.6.1 Validity Test

According to Cooper and Schindler (2014), validity refers to how well the study evaluates the intended constructs and accurately captures the true variances between the participants. The degree to which a measurement tool sufficiently covers the essential elements and subjects that are related to the research being done was defined as content validity. The supervisors' professional assessment served as the foundation for determining the content validity.

3.6.2 Reliability Test

According to Mugenda (2013), reliability is the degree to which procedures for collecting and analyzing data yield consistent results. This study's goal was to ascertain whether the methods used yield consistent results in diverse contexts or whether different researchers would reach the same findings using the same raw data. The internal reliability of the questionnaire was evaluated statistically in this study using Cronbach's coefficient alpha. Hair, Black, and Tatham (2016) stating that a test's dependability was based on how steadily a concept was measured by its scale or questions. Internal consistency would be considered absent when the alpha value was zero, and perfect internal consistency was shown when the alpha value was one.

3.7 Data Processing, Analysis and Presentation

The information that is gathered was presented in its raw form as well as in two distinct formats, namely qualitative and quantitative. In descriptive statistics, charts and tables was utilized, however in inferential statistics, multiple regression was utilized and charts were not used at all.

3.7.1 Data Processing

The act of converting data into a format that is both desirable and capable of producing the desired results is what is referred to as data processing. This conversion or processing can be done by hand or automatically using a predetermined arrangement of operations. Either way, it follows a set of steps. Following the initial coding of the data, cleaning, synthesis of the data, and tabulation of the data, the data was entered into the SPSS software to run the analysis.

3.7.2 Data Analysis and Presentation

The process of analyzing all of the information and determining which information is relevant and useful in terms of improving decision making is what is known as data analysis according to Silvia and Skilling (2012). STATA (Ver 16) and Statistical Package for the Social Sciences (SPSS) version 29 were used to do the analysis on the data that was obtained. Correlation, regression, ANOVA, and model summary was generated. Tables and figures were used to present the data.

3.7.3 Correlation Analysis

Correlation analysis is used to quantify the association between two continuous variables (e.g., between an independent and a dependent variable or between two independent variables). The values of the correlation coefficients vary from a value of +1.00 to a value of -1.00 which signifies perfect relationships. When independent variables are highly correlated, it becomes difficult to establish the effect of each independent variable on the dependent variable (Hair *et al*, 2013). This study will use Pearson Product Moment correlation to test the relation between; risk assessment, internal control systems and auditing compliance as the (independent variables) while financial accountability as the (dependent variable). Pearson's moment correlation was tested at 5% level of significance.

3.7.4 Multiple Regression Analysis and its Assumptions Testing

A multiple regression analysis model will be employed to determine the influence of each of the independent variables (factors) on the dependent variable. Analyzing and characterizing the relationship between a certain variable and one or more other variables is the aim of regression. Regression is the process of attempting to explain changes in one variable by referencing changes in one or more other variables, to be more precise. The regression analysis's significance was assessed at a 5% level using the t-test. The researcher carried out analysis of variance to ascertain whether the model was significant. The degree to which the regression model fits the data was also assessed using R^2.

3.8 Testing the Assumptions of Multiple Regression Model

The assumptions of multiple regression model tested are; normality, linearity and autocorrelation. To establish whether the data sets are often distributed, a normality test was utilized. According to the principle of normality, the test's distribution should have a bell-shaped curve with a mean of 0 (zero), a standard deviation of 1, and a symmetric bell-shaped curve (Saunders *et al*., 2015). The Kolmogorov-Smirnov test was utilized to determine normality. Rejecting the null hypothesis entails rejecting the assumption of normality for the distribution if the test results was significant, that is, if p0.05 (Field, 2009). It was discovered that the data was normally distributed. The regression model was shown as follows:

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where;

α: is the intercept.

Y: is financial accountability

X_1: is risk assessment

X_2: is internal control systems

X_3: is auditing compliance

Ɛ: error term.

β_1- β_3: are the coefficients of the independent variable in which measures the responsiveness of **Y** to changes in i.

3.8.1 Testing the Assumptions of Hierarchical Regression Model

The assumptions of multiple regression model tested are; normality, linearity, homoscedasticity and autocorrelation. Normality test is implemented to determine whether the data sets are normally distributed. Normality holds that the distribution of the test is bell-shaped with 0 (zero) mean, with 1 (one) standard deviation and a symmetric bell-shaped curve (Saunders *et al.,* 2015).

Normality test was done using Kolmogorov-Smirnov test. If the results of the test are significant that was $p<0.05$ then rejecting the null hypothesis means rejecting the assumption of normality for the distribution (Field, 2009). The data was found to be normally distributed.

3.8.2 Linearity

This was tested by creating a scatter plot using SPSS statistics where the researcher did plot the dependent variable against the independent variable and then visually inspected the scatter plot to check for linearity. From the scatter diagram, the residuals were distributed evenly around the zero line (the regression line). The conclusion was that the data should be linearly distributed.

3.8.3 Multi collinearity

This was tested by establishing the inter-correlations between the independent variables. Multi-collinearity problem occurs when the independent variables are highly correlated to each other (Hair et al., 2013). Multi-collinearity was tested statistically by use of VIF (Variance Inflation Factor). Multi-collinearity was tested by an examination of tolerance and Variance Inflation Factor (VIF) with the thresholds of more than 0.1 and VIF of 10 (Hair et al., 2013). If, all constructs had a VIF factor of greater than 0.1 and less than 10. Subsequently, multi-collinearity should not be a problem.

TABLE 3.

Variable Description and Measurement

Variable	Items	Source
Risk Assessment	• Compliance with IPSAS • Risk in Revenue Collection • Compliance with Procurement Laws	Five-Likert Scale
Internal Control Systems	• Control Environment • Risk Assessment • Control Activities	Five-Likert Scale
Auditing Compliance	• Compliance with System Audit • Compliance Governance Structure • Audit Execution Quality	Five-Likert Scale
Financial Accountability	• Stakeholder Confidence • External Audit Opinions • Expenditure Tracking	Five-Likert Scale

3.9 Ethical Considerations

The respondents were given complete information describing the nature and purpose of this study, the procedures that was used, as well as the expected benefits that accrue to both the respondents and the Water Service Providers. This information was offered to the respondents. Any information that was obtained from the individuals who participated in the survey was treated with the utmost discretion and was utilized solely for the purpose of this investigation. The researcher also attached a research approval from NACOSTI as well as an introduction letter from KCA University to the questionnaires.

CHAPTER FOUR: FINDINGS AND DISCUSSION

4.1 Introduction

This chapter covers the Study response rate, Reliability and validity results, Demographic analysis results, Descriptive analysis for research variables, correlational analysis, Test for regression assumptions, Model summary, Analysis of variance and Regression co-efficient.

4.2 Research Response Rates

The Researcher Distributed 55 Questionnaires to Water Service Providers In the jurisdictions of The Athi Water Works Development Agency, The Tanathi Water Works Development Agency, And The Tana Water Works Development Agency. The responses obtained are as presented In Table 4.1:

TABLE 4:

Response rate

Item	Frequency	Percentage
Respondents	49	89.1%
Non-respondents	6	10.9%
Total	**55**	**100.0%**

Source: Research data (2025)

The study achieved a high response rate of 89.1%, with 49 respondents out of 55. This high response rate suggests robust data reliability.

4.3 Validity and Reliability Test Results

The data collection tool was piloted in Lake Victoria South Water Works Development Agency, including as Kisumu Water and Sewerage Company Limited, with 5 respondents, or 10% of the sample size. To eliminate bias, the Water Service Providers selected for the study questionnaire pretesting was not be included in the real studies due to the researcher's suitability. The results from the pilot study were used to assess the validity and reliability of the research instruments.

4.3.1 Validity Results

The degree to which a measurement tool sufficiently covers the essential elements and subjects that are related to the research being done is defined as content validity. The supervisors' professional assessment served as the foundation for determining the content validity.

4.3.2 Reliability Test Results

This study used Cronbach’s coefficient alpha to determine the internal consistency of the data measurement instrument. Typically, an alpha value of 0.70 or above is considered acceptable for basic research, suggesting a reliable scale.

TABLE 5:

Reliability Test Results

Variable	Cronbach Alpha	Results
Risk Assessment	.794	Reliable
Internal Control Systems	.915	Reliable
Auditing Compliance	.905	Reliable
Financial Accountability	.854	Reliable

Source: Research data (2025)

The Cronbach’s alpha values for the study’s variables: Risk Assessment (.794), Internal Control Systems (.915), Auditing Compliance (.905), and Financial Accountability (.854) all exceed the commonly accepted threshold of .70, indicating that the measurement scales for these constructs are reliable. These high alpha values suggest strong internal consistency, meaning the items within each scale consistently measure the same underlying construct, enhancing confidence in the study's findings. The particularly high reliability for Internal Control Systems and Auditing Compliance ($\alpha > .90$) reflects robust scale construction, likely contributing to precise measurement of these constructs.

4.4 Demographic Analysis Results

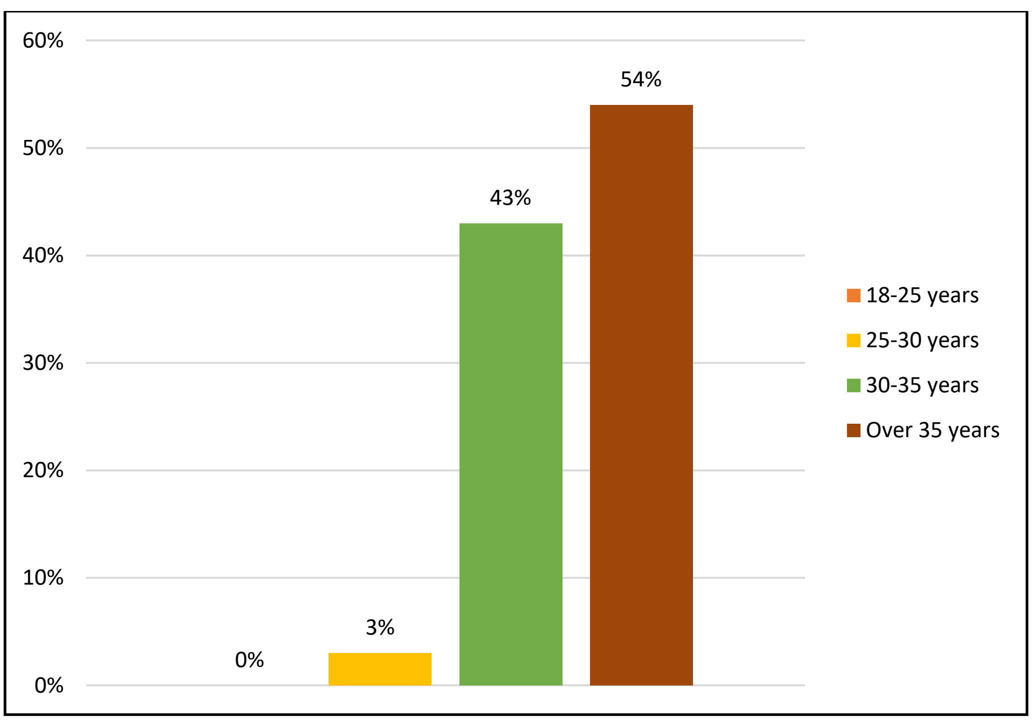
The study analysed information related to study participants touching on; Age of respondent, Gender of respondents, Highest level of education and Period Worked as a CEO, and the total length of tenure as an employee of the respective WSP. The figures below illustrated the findings.

4.4.1 Age of Respondent

The study analysed information related to Age of respondents, the findings are illustrated in the figure below;

FIGURE 2:

Age of Respondent



Source: Research data (2025)

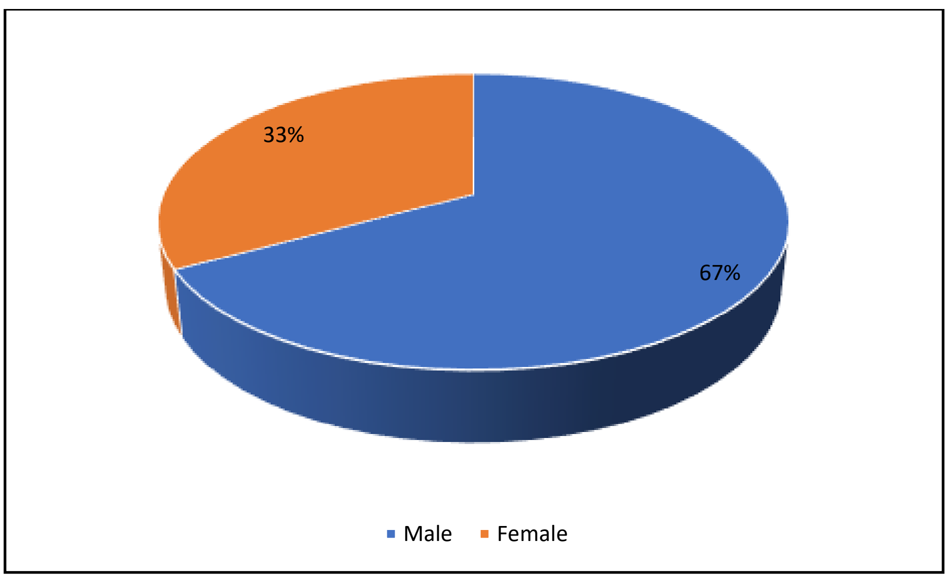
The age distribution of respondents in the study, with 0% aged 18–25 years, 3% aged 25–30 years, 43% aged 30–35 years, and 54% over 35 years, suggests that the sample is predominantly composed of older, likely more experienced professionals, which has implications for the role of internal auditing in enhancing financial accountability at Water Service Providers in Kenya. The absence of younger respondents (18–25) and minimal representation in the 25–30 age group indicate that the perspectives captured are primarily from seasoned employees, who may have greater familiarity with internal auditing processes and their impact on financial accountability, potentially leading to more reliable insights into established practices.

4.4.2 Gender of Respondents

The study analysed information related to Gender of Respondents, the findings are illustrated in the figure below;

FIGURE 3:

Gender of Respondents



Source: Researcher (2025)

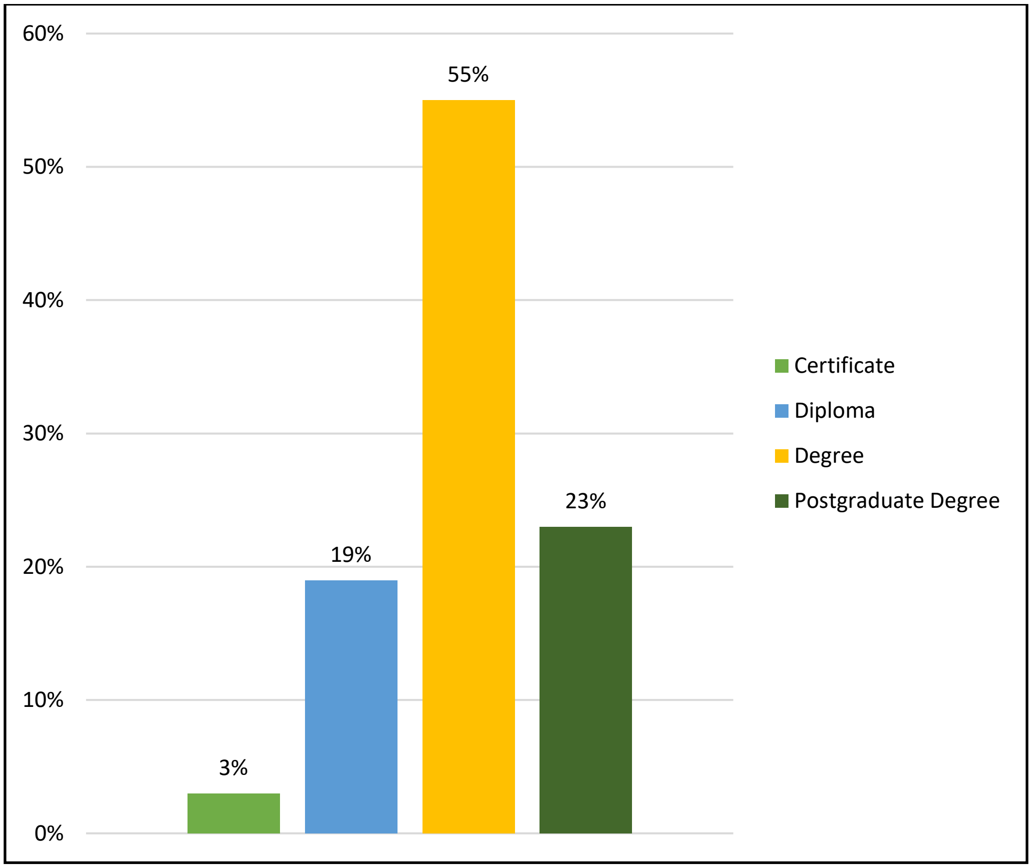
The gender distribution of respondents, with 67% male and 33% female, indicates a male-dominated sample in the study of internal auditing's role in enhancing financial accountability at Water Service Providers in Kenya, which may reflect the broader gender dynamics within the sector's workforce. Males often occupy a majority of senior auditing and financial management roles in Kenyan public sector organizations, potentially influencing the perspectives on internal auditing practices and their effectiveness in ensuring financial accountability (Muthoni & Otieno, 2023). The higher male representation suggests that the findings may predominantly capture male perspectives, which could emphasize traditional auditing approaches, while the lower female participation may underrepresent potentially diverse insights on innovative accountability measures.

4.4.3 Highest Level of Education

The study analysed information related to Highest level of education, the findings are illustrated in the figure below;

FIGURE 4:

Highest Level of Education



Source: Research data (2025)

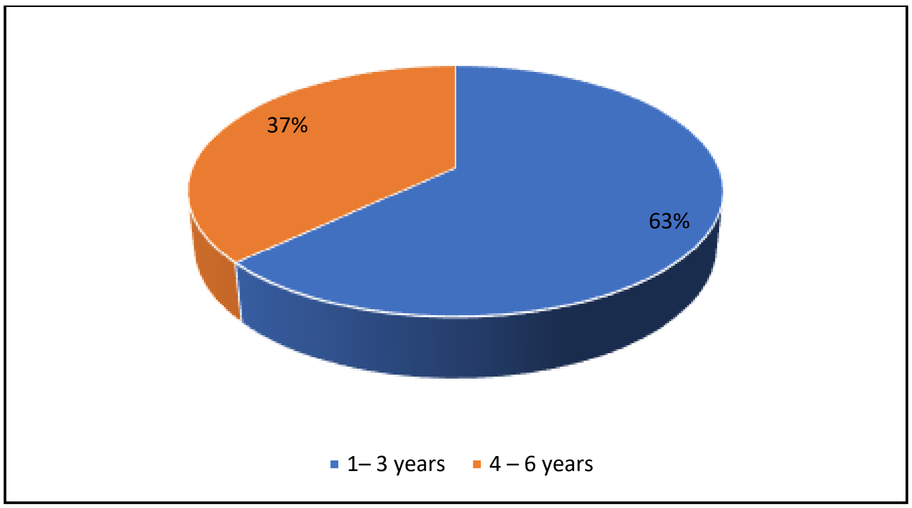
The educational distribution of respondents, with 3% holding a certificate, 19% a diploma, 55% a degree, and 23% a postgraduate degree, indicates a well-educated sample, predominantly with tertiary-level qualifications, which is significant for understanding the role of internal auditing in enhancing financial accountability at Water Service Providers in Kenya. The high proportion of degree (55%) and postgraduate degree (23%) holders suggests that the respondents likely possess advanced knowledge and technical expertise in auditing and financial management, potentially contributing to robust insights into effective internal auditing practices for ensuring financial accountability. Njeri and Mwangi (2022) found that higher educational attainment among auditors in Kenyan public sector organizations correlates with stronger implementation of internal controls and accountability measures.

4.4.4 Period Worked as Chief Executive Officer

The study analysed information related to Period Worked as the Chief Executive of the respective WSPs, the findings are illustrated in the figure below;

FIGURE 5:

Period Worked as Chief Executive Officer



Source: Research data (2025)

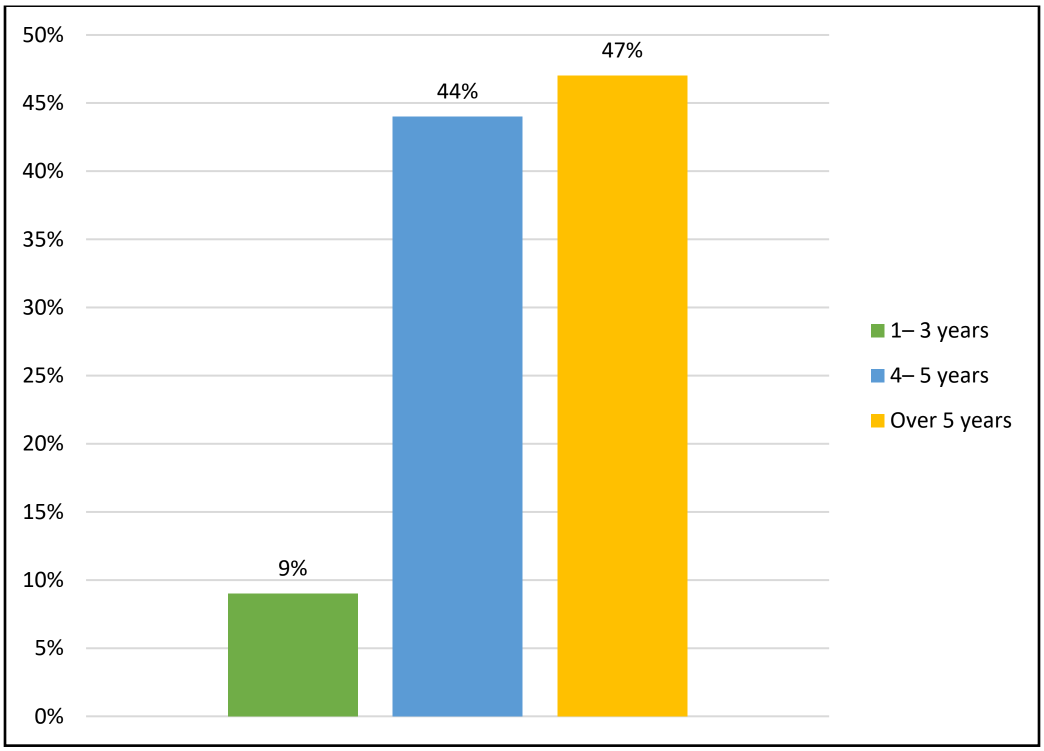
The distribution of CEO tenure, with 63% serving 1–3 years and 37% serving 4–6 years, indicates a majority of relatively newer CEO's in the study, which has implications for their perspectives on internal auditing's role in enhancing financial accountability at Water Service Providers in Kenya. The predominance of shorter-tenured CEOs (1–3 years) suggests fresher insights, potentially reflecting familiarity with modern auditing techniques and innovative accountability measures, but possibly less experience with long-term governance challenges, as noted in a study by Ochieng and Kariuki (2022) that found newer CEOs in Kenyan public entities often prioritizing compliance over strategic oversight (Conversely, the 37% with 4–6 years of experience likely provide deeper understanding of established internal auditing practices and their impact on financial accountability, having observed multiple audit cycles.

4.4.6 Time Worked at the Water Services Provider

The study analysed information related to Time Worked at the Water Services Provider, the findings are illustrated in the figure below;

FIGURE 6:

Time Worked at the Water Services Provider



Source: Research data (2025)

The distribution of respondents' tenure at the WSP, with 9% having worked 1–3 years, 44% for 4–5 years, and 47% for over 5 years, indicates a predominantly experienced workforce, which is significant for understanding internal auditing's role in enhancing financial accountability at Water Service Providers in Kenya. The high proportion of respondents with over 4 years of experience (91% combined) suggests deep familiarity with WSP-level auditing processes and financial accountability mechanisms. However, the small percentage of newer CEOs (1–3 years, 9%) limit insights into emerging auditing innovations or challenges faced by less experienced staff, potentially skewing findings toward established practices.

4.5 Descriptive Analysis Results

This section presents responses rating given by study participants on statements relating to Risk assessment, Internal control systems, Auditing compliance and financial accountability.

4.5.1 Risk Assessment

Study participants were asked to indicate the extent to which they agree to statements relating to risk assessment based on a likert scale of 1-5, the responses are as presented in table 4.3:

TABLE 6:

Risk assessment

Statements	Mean	Std. Dev
The internal audit function effectively categorizes financial risks within the organization.	4.49	.981
Risk assessment practices are regularly conducted to detect potential financial irregularities.	3.95	1.012
Internal auditors have sufficient expertise to assess financial risks in water service provision.	4.19	.871
The internal audit team adequately reviews compliance with financial policies and regulations at the organization.	4.31	.902
There is a structured risk assessment framework controlling financial accountability at the organization.	3.95	.893
The water service provider has clear whistleblowing means that support fraud risk management.	4.33	.773
Overall mean	**4.20**	

Source: Research data (2025)

The findings reveal a generally positive perception of the internal audit function and risk management practices within the water service provider organization, with an overall mean score of 4.20. Individual statement means range from 3.95 to 4.49, suggesting moderate to strong agreement. The highest mean (4.49, SD = 0.981) reflects confidence in the internal audit's ability to categorize financial risks effectively, while the lowest means (3.95 for both risk assessment practices and structured risk assessment framework, SD = 1.012 and 0.893, respectively) indicate slightly less confidence in the regularity and structure of risk assessment processes. The relatively high means for auditor expertise (4.19, SD = 0.871), compliance review (4.31, SD = 0.902), and whistleblowing mechanisms (4.33, SD = 0.773) suggest robust systems, though the slightly lower scores for risk assessment practices and framework highlight potential areas for improvement in ensuring consistent and structured financial accountability.

4.5.2 Internal Control Systems

Study participants were asked to indicate the extent to which they agree to statements relating to Internal Control Systems based on a likert scale of 1-5, the responses are as presented in table 4.7:

TABLE 7:

Internal Control Systems

Statement	Mean	Std. Dev
The organization has a well-defined internal control framework that supports financial accountability.	3.75	.902
The management determines a strong commitment to ethical financial practices at the organization.	3.47	1.023
There is a clear separation of duties to prevent financial mismanagement at the organization.	3.30	.865
Employees understand their roles and responsibilities in financial accountability at the organization.	3.16	.984
The organization promotes a culture of integrity and transparency in financial transactions.	3.08	1.113
The organization often identifies and assesses financial risks that could affect accountability.	3.74	.908
Overall mean	**3.375**	

Source: Research data (2025)

The findings revealed a moderate perception of the organization's financial accountability measures, with an overall mean score of 3.375, indicating a neutral to slightly positive stance. Individual statement means range from 3.08 to 3.75, reflecting varying levels of agreement. The highest mean (3.75, SD = 0.902) is for the presence of a well-defined internal control framework, suggesting some confidence in structural measures, while a close second (3.74, SD = 0.908) indicates regular identification and assessment of financial risks. However, lower means for management's commitment to ethical practices (3.47, SD = 1.023), separation of duties (3.30, SD = 0.865), employee understanding of roles (3.16, SD = 0.984), and promotion of integrity and transparency (3.08, SD = 1.113) highlight potential weaknesses, particularly in fostering a strong ethical culture and ensuring role clarity, which could undermine financial accountability efforts.

4.5.3 Auditing Compliance

Study participants were asked to indicate the extent to which they agree to statements relating to auditing compliance based on a likert scale of 1-5, the responses are as presented in table 8:

TABLE 8:

Auditing Compliance

Statement	Mean	Std.dev
Internal audits guarantee that Water Service Providers comply with financial principles and legal needs.	3.21	.784
Non-compliance with financial regulations is actually identified and addressed through internal auditing.	3.58	1.271
Internal auditors often review and report on the loyalty to government financial policies.	3.44	.905
Internal auditing assists in identifying financial risks and implementing mitigation measures.	3.90	.875
Water service providers have strong internal controls due to effective internal audits.	3.27	.923
Internal audits detect and prevent financial misdeeds such as fraud and mismanagement.	3.03	1.090
Overall mean	3.405	

Source: Research data (2025)

The findings reveal a moderate perception of the effectiveness of internal audits in ensuring financial accountability and compliance within Water Service Providers, with an overall mean score of 3.405, suggesting a neutral to slightly positive view. Individual statement means range from 3.03 to 3.90, reflecting varied confidence levels. The highest mean (3.90, SD = 0.875) highlights internal auditing's role in identifying financial risks and implementing mitigation measures, indicating relative strength in risk management. However, lower means, particularly for detecting and preventing financial misdeeds like fraud and mismanagement (3.03, SD = 1.090) and ensuring compliance with financial principles and legal requirements (3.21, SD = 0.784), suggest skepticism about the audits' ability to fully address misconduct and regulatory adherence. Means for non-compliance identification (3.58, SD = 1.271), policy loyalty reporting (3.44, SD = 0.905), and strong internal controls (3.27, SD = 0.923) further indicate moderate confidence, pointing to potential gaps in the robustness and impact of internal audit processes.

4.5.4 Financial Accountability

Study participants were asked to indicate the extent to which they agree to statements relating to financial accountability based on a likert scale of 1-5, the responses are as presented in table 4.6:

TABLE 9:

Financial Accountability

Statement	Mean	Std. Dev
Internal auditing has improved adherence to financial policies and regulations.	3.61	.812
The internal audit function guarantees that financial statements are accurate and reliable.	3.71	.765
Internal auditors help in ensuring compliance with the Public Finance Management Act.	3.53	.712
Regular internal audits have eased financial anomalies in the organization	3.91	.873
Internal audit verdicts are used to enhance candidness in financial reporting at the organization	3.72	.799
Internal audit findings influence financial policies and procedures in the organization.	3.56	.987
Overall mean	**3.696**	

Source: Research data (2025)

The findings reveal a moderately positive perception of the internal audit function's impact on financial accountability and compliance within the organization, with an overall mean score of 3.696, indicating a slightly above-neutral stance. Individual statement means range from 3.53 to 3.91, showing consistent but not strong agreement across aspects. The highest mean (3.91, SD = 0.873) suggests that regular internal audits are seen as effective in easing financial anomalies, highlighting a key strength. Other notable means include the internal audit function's role in ensuring accurate and reliable financial statements (3.71, SD = 0.765) and enhancing candidness in financial reporting (3.72, SD = 0.799), both indicating moderate confidence in transparency efforts. Slightly lower means for adherence to financial policies (3.61, SD = 0.812), compliance with the Public Finance Management Act (3.53, SD = 0.712), and influence on financial policies and procedures (3.56, SD = 0.987) suggest that while internal audits contribute to these areas, there may be room for improvement in their perceived effectiveness and impact on policy development.

4.6 Correlational Analysis Results

Correlation analysis was used to examine the strength and direction of the linear relationship between study variables. Findings are presented in table 4.7;

TABLE 10:

Correlational Analysis Results

Construct		Financial Accountability	Risk Assessment	Internal Control Systems	Auditing Compliance
Financial Accountability	Pearson Correlation	1			
	Sig. (2-tailed)				
Risk Assessment	Pearson Correlation	.623**	1		
	Sig. (2-tailed)	.001			
Internal Control Systems	Pearson Correlation	.449**	.324**	1	
	Sig. (2-tailed)	.010	.031		
Auditing Compliance	Pearson Correlation	.703**	.718**	.602**	1
	Sig. (2-tailed)	.020	.467	.794	

Source: Research (2025)

The results reveal a significant positive relationship between internal auditing (Auditing Compliance) and financial accountability at Water Service Providers in Kenya, with a strong Pearson correlation coefficient of 0.703 (p = 0.020), indicating that effective internal auditing significantly enhances financial accountability. Auditing Compliance shows a robust correlation with Risk assessment (0.718, p = 0.467) and Internal control systems (0.602, p = 0.794), suggesting that internal auditing contributes to identifying financial risks and strengthening control mechanisms, which further support accountability. The strong correlation between financial accountability and Risk assessment (0.623, p = 0.001) and a moderate correlation with Internal Control Systems (0.449, p = 0.010) highlight that internal auditing indirectly bolsters accountability by improving risk management and control frameworks. The overall pattern underscores internal auditing's critical role in fostering transparency, compliance, and accountability in financial operations at Kenyan Water Service Providers.

4.7 Test for Regression Assumptions

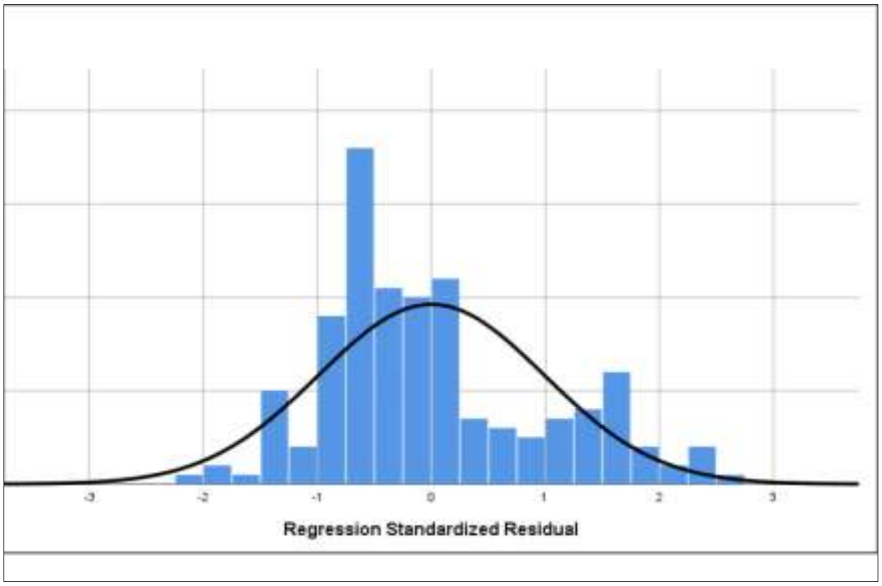
The assumptions of multiple regression model tested are; normality, linearity, homoscedasticity and autocorrelation.

4.7.1 Normality Test Results

The normality assumption was assessed using a plot of histogram of regression residuals which should show a normal distribution for the assumption to be met.

FIGURE 7:

Normality Test Results



Source: Research Data (2025)

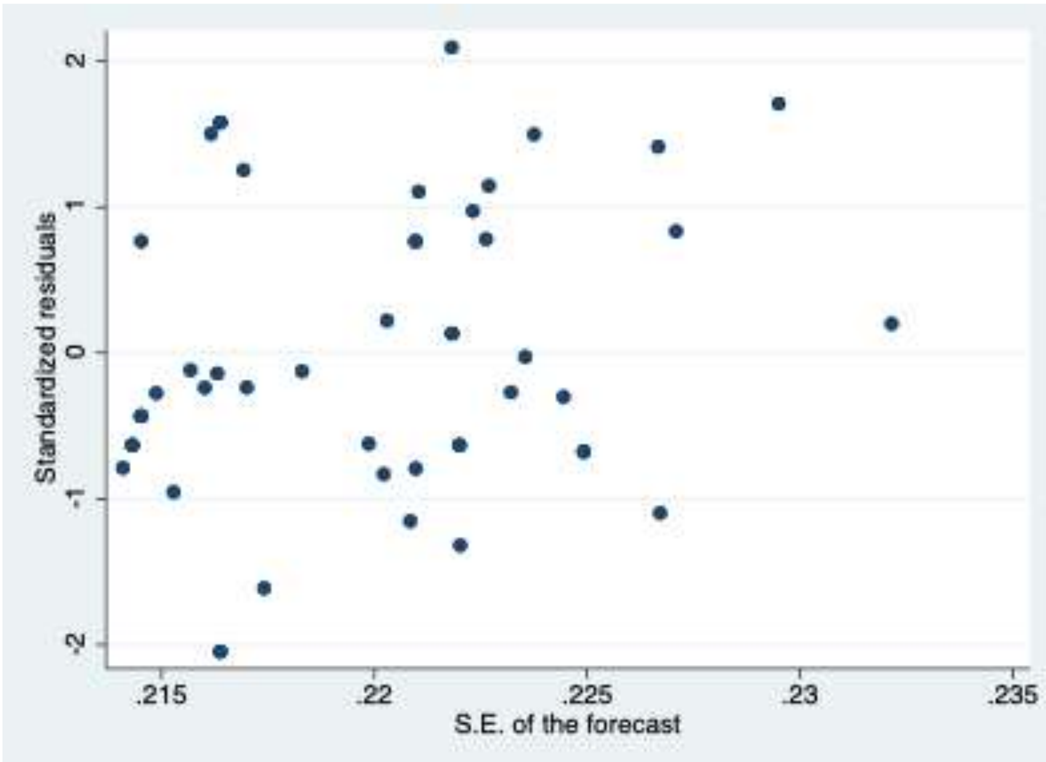
The results show that the distribution of the residuals best describes the normal distribution. It means that the assumption is not significantly violated.

4.7.2 Linearity Test Results

The constant variance assumption was assessed using the plot of standardized residuals versus the standard error of the estimate in which the scatter points should indicate particular pattern across the regression line (the zero line on y axis).

FIGURE 8:

Linearity test results



Source: Research data (2025)

The linearity assumption was met as the scatter points were evenly distributed below and above the regression line (y =0). The assumption is also met since the line y=0 divides the scatter points into two equal halves.

4.7.3 Multi-Collinearity Test Results

Multi-collinearity was tested by an examination of tolerance and Variance Inflation Factor (VIF) with the thresholds of more than 0.1 and VIF of 10 (Hair et al., 2013). All constructs were assumed a VIF factor of greater than 0.1 and less than 10.

TABLE 11:

Multi-Collinearity Test Results

Construct	Tolerance	VIF
Financial Accountability	.742	1.348
Risk Assessment	.925	1.081
Internal Control Systems	.724	1.382
Auditing Compliance	.868	1.152

Source: Research data (2025)

The multicollinearity results exhibit acceptable levels of independence in the regression model, with no significant multicollinearity issues. Tolerance values range from 0.724 (Internal Control Systems) to 0.925 (Risk Assessment), all well above the critical threshold of 0.1, suggesting that each construct explains unique variance in the model. Similarly, the Variance Inflation Factor (VIF) values, ranging from 1.081 (Risk Assessment) to 1.382 (Internal Control Systems), are far below the threshold of 10, confirming minimal correlation among the independent variables. These results indicate that Risk Assessment, Internal Control Systems, and Auditing Compliance can be reliably used as distinct predictors of financial accountability at Kenyan Water Service Providers without redundancy, ensuring the stability and interpretability of the regression model's coefficients.

4.8 Regression Analysis Results

This section presents the results for Model summary, Analysis of Variance and Regression co-efficient results. The results are presented below;

4.8.1 Model Summary

The study used a model summary provides essential information about the model with an aim to understand its characteristics and capabilities. The findings are presented in table 4.10;

TABLE 12:

Model Summary

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	.814[a]	.663	.641	.473

Source: Research data (2025)

The R-square in the model summary results shows the proportion of variance in the dependent variable explained by the set of independent variables in the model. The results indicate that the predictors account for 66.3% of the variation in financial accountability. After adjusting for the number of predictors in the model, the adjusted R-square stands at 64.1%, which still demonstrates a strong explanatory power. The correlation coefficient (R = .814) further confirms a strong positive relationship between the independent variables and the dependent variable, Financial Accountability.

4.8.2 Analysis of Variance

Analysis of Variance, was used to determine whether the differences among the targeted groups are statistically significant or if they could have occurred by random chance. The findings are presented in table 4.10

TABLE 13:

Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.965	3	1.322	29.510	.000
	Residual	2.015	45	0.045		
	Total	5.980	48			

Source: Research data (2025)

The analysis of variance (ANOVA) results for the regression model, with a regression sum of squares of 3.965 (df = 3), a residual sum of squares of 2.015 (df = 45), and a total sum of squares of 5.980 (df = 48), indicate that the model explains a statistically significant portion of the variance in the dependent variable, financial accountability, at Water Service Providers in Kenya. This is evidenced by the F-statistic of 29.510 and a p-value of .000 ($p < .05$). The regression mean square (1.322) compared to the residual mean square (0.045) demonstrates that the independent variables collectively account for a substantial and statistically significant proportion of the variance in financial accountability at the sampled water service providers.

4.8.3 Regression Coefficients

In regression analysis, the regression coefficient results show the significance of each predictor variable (Risk assessment, Internal control systems, Auditing compliance in predicting financial accountability by comparing the corresponding p-value of each regression coefficient with threshold value. In this study, the regression coefficient results are presented in Table 4.11.

TABLE 14:

Regression Coefficients

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	.904	.383	2.360	.023
	Risk assessment	.166	.088	1.887	.067
	Internal control systems	.494	.148	3.338	.002
	Auditing compliance	.334	.069	4.840	.000

Source: Research data (2025)

The regression results highlight the significant role of internal auditing dimensions in enhancing financial accountability at Water Service Providers in Kenya. The constant term is statistically significant (B = 0.904, t = 2.360, p = 0.023), indicating that even in the absence of the predictors, there is a baseline level of financial accountability. Risk Assessment shows a positive but statistically non-significant effect (B = 0.166, t = 1.887, p = 0.067), suggesting that while risk identification and management contribute to accountability, their impact is not strong enough to be conclusive at the 5% level. Internal Control Systems have a significant positive influence (B = 0.494, t = 3.338, p = 0.002), underscoring the importance of strong control mechanisms in promoting transparency and accountability. Auditing Compliance demonstrates the strongest effect on financial accountability (B = 0.334, t = 4.840, p = 0.000), confirming that adherence to auditing practices and compliance frameworks is a critical driver of accountability in the sector. Collectively, these findings show that internal auditing, particularly through compliance and robust internal controls, plays a pivotal role in enhancing financial accountability at Water Service Providers, while risk assessment remains a supportive but less statistically robust factor.

4.9 Discussion of Findings

The descriptive statistics indicate a moderate perception of risk assessment practices, with means of 3.95 (SD = 1.012) for regular risk assessments and 3.74 (SD = 0.908) for frequent identification of financial risks, suggesting that while risk assessment is conducted, its consistency and effectiveness could be improved. The correlation analysis supports this, showing a strong positive relationship with financial accountability ($r = 0.623$, $p = 0.001$) and auditing compliance ($r = 0.718$, $p = 0.467$), indicating that robust risk assessment enhances accountability by identifying potential financial irregularities. The regression results show a positive but statistically non-significant effect on financial accountability ($B = 0.166$, $t = 1.887$, $p = 0.067$), highlighting that while risk assessment contributes to accountability, its impact is relatively weak compared to other drivers.

The descriptive results reveal a moderate perception of internal control systems, with means ranging from 3.08 (SD = 1.113) for promoting a culture of integrity to 3.75 (SD = 0.902) for a well-defined control framework, indicating varied confidence in control mechanisms. The correlation analysis shows a moderate positive relationship with financial accountability ($r = 0.449$, $p = 0.010$) and auditing compliance ($r = 0.602$, $p = 0.794$), suggesting that internal controls support accountability by reinforcing compliance and transparency, though the high p-value for auditing compliance indicates a weaker statistical link. The regression analysis confirms a significant effect on financial accountability ($B = 0.494$, $t = 3.338$, $p = 0.002$), underscoring that strong internal controls, such as separation of duties and clear frameworks, enhance accountability. However, the lower mean scores for employee role clarity (3.16, SD = 0.984) and integrity culture (3.08, SD = 1.113) suggest weaknesses in fostering a comprehensive control environment, which may hinder the overall effectiveness of internal control systems in ensuring financial accountability at Water Service Providers.

The descriptive statistics reflect a moderately positive view of auditing compliance, with means ranging from 3.03 (SD = 1.090) for detecting financial misdeeds to 3.91 (SD = 0.873) for easing financial anomalies, indicating that internal audits are perceived as effective in some areas but less so in preventing fraud. The correlation analysis demonstrates strong positive relationships with financial accountability ($r = 0.703$, $p = 0.020$) and risk assessment ($r = 0.718$, $p = 0.467$), highlighting auditing compliance as a critical driver of accountability through its role in ensuring adherence to financial policies and risk mitigation. The regression results reinforce this, showing a highly significant effect on financial accountability ($B = 0.334$, $t = 4.840$, $p = 0.000$), with the strongest statistical influence among the constructs, confirming its pivotal role. Despite this, the lower mean for detecting and preventing financial misdeeds (3.03) and the high standard deviation for non-compliance identification (SD = 1.271, mean = 3.58) suggest inconsistencies in audit effectiveness, possibly due to limited scope or follow-up, indicating a need for enhanced audit processes to fully realize their potential in improving financial accountability at Kenyan Water Service Providers.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the Summary of study findings, Conclusion of the study, Recommendations of the study and Suggestions for further studies.

5.2 Summary of Findings

5.2.1 Risk Assessment

The findings suggest that risk assessment practices within Kenyan Water Service Providers are viewed as moderately effective in supporting financial accountability. Respondents acknowledge that regular risk assessments are conducted to identify potential financial irregularities, and these efforts contribute to accountability by highlighting areas of concern. However, there is room for improvement in the consistency and thoroughness of these practices, as the perception of their effectiveness is not as strong as other factors like auditing compliance. The ability to identify and manage financial risks is seen as valuable but may be limited by irregular implementation or insufficient follow-through, indicating a need for more robust and systematic risk assessment processes to strengthen accountability.

5.2.2 Internal Control Systems

The results indicate a mixed perception of internal control systems, with moderate confidence in the existence of a well-defined framework but weaker assurance in fostering a culture of integrity and transparency. Clear separation of duties and employee understanding of roles are areas of concern, suggesting that while some structural controls are in place, they may not be fully effective in preventing financial mismanagement. These systems support accountability by providing mechanisms to enforce compliance and transparency, but gaps in ethical culture and role clarity could undermine their impact. Strengthening the implementation of controls and promoting a stronger ethical environment are critical to enhancing financial accountability.

5.2.3 Auditing Compliance

Internal auditing is recognized as a key driver of financial accountability, with audits seen as effective in reducing financial anomalies and improving adherence to policies. Respondents view internal audits as contributing to accurate financial reporting and compliance with regulations, such as the Public Finance Management Act, though their ability to prevent fraud and mismanagement is perceived as less robust. The strong influence of auditing on accountability underscores its role in identifying risks and ensuring transparency, but inconsistencies in detecting financial misdeeds suggest that audit processes may need to be more comprehensive. Enhancing the scope and follow-up of audits could further bolster their effectiveness in promoting financial accountability at Water Service Providers.

5.3 Conclusions

The study established that internal auditing plays a pivotal role in enhancing financial accountability at Water Service Providers in Kenya, primarily through its strong contribution to auditing compliance, which fosters transparency and adherence to financial policies. While risk assessment practices support accountability by identifying potential financial irregularities, their impact is tempered by inconsistent implementation. Similarly, internal control systems provide a framework for accountability but are weakened by gaps in ethical culture and role clarity. The findings highlight that internal auditing is a critical driver of accountability, yet its effectiveness could be further strengthened by improving the consistency of risk assessments, reinforcing control mechanisms, and expanding the scope of audits to better detect and prevent financial mismanagement.

5.4 Recommendations of the Study

The study noted inconsistent implementation of regular risk assessment practices, while efforts are made to identify potential financial irregularities, the perception suggests that these assessments lack frequency or thoroughness, limiting their effectiveness. The study recommends for the adoption of a standardized and scheduled risk assessment framework with clear protocols to ensure consistent and comprehensive evaluations.

Furthermore, the study revealed a weakness in internal control systems in terms of integrity and transparency in financial transactions. Employees and stakeholders perceive deficiencies in fostering an ethical environment, which undermines accountability. To address this, managers should implement regular ethics training, enforce transparent financial reporting, and encourage leadership to model and prioritize ethical behavior.

Lastly, the study observed ineffectiveness of internal audits in detecting and preventing financial misdeeds, such as fraud and mismanagement. This suggests that audits lack the depth or tools needed to uncover irregularities consistently. Enhancing audit processes with forensic techniques, surprise audits, and advanced data analytics will go a long way in strengthening their ability to address financial misconduct effectively.

5.5 Suggestions for Further Studies

While this study provides important insights into the effect of internal auditing on financial accountability among Water Service Providers (WSPs) in Kenya, several avenues remain open for further investigation. First, future studies could expand the geographical and institutional scope beyond WSPs to include county governments, state corporations, and private utilities. Such comparative research would provide a broader understanding of whether the role of internal auditing in enhancing accountability is consistent across different organizational contexts, or whether sector-specific dynamics play a more prominent role. Similarly, comparative analyses between urban and rural WSPs may reveal the extent to which organizational size, funding structures, and governance models influence internal auditing effectiveness.

Second, subsequent research could adopt longitudinal designs to establish causal inferences by examining how internal auditing practices influence accountability over time. Tracking changes across several years would also allow scholars to evaluate the impact of regulatory reforms introduced by institutions such as the Water Services Regulatory Board (WASREB) and the Auditor-General's office. This approach would overcome the limitations of cross-sectional studies by highlighting dynamic trends and temporal shifts in accountability outcomes.

Third, future inquiry may benefit from methodological diversification. Employing mixed methods designs that integrate survey evidence with in-depth interviews or case studies of audit committees, internal auditors, and managers would yield richer and more nuanced findings. In addition, the use of advanced econometric techniques would permit testing of indirect effects, for example whether internal control systems mediate the relationship between risk assessment and financial accountability.

Fourth, researchers should also consider incorporating additional explanatory variables and theoretical perspectives. Variables such as organizational culture, leadership ethics, and information and communication technology (ICT) adoption may significantly shape the effectiveness of internal auditing processes. Similarly, the inclusion of alternative theoretical lenses may provide deeper insights into the accountability process.

Fifth, future research could address stakeholder and governance dimensions. For instance, examining the role of board oversight, management commitment, and employee attitudes toward compliance may illuminate how organizational governance structures intersect with internal auditing to enhance accountability. Furthermore, exploring the interaction between citizen participation (through public reporting, community monitoring, and social accountability mechanisms) and internal auditing would provide a more holistic view of accountability in public service delivery.

Finally, cross-country and regional comparative studies within East Africa and beyond could help establish whether the findings observed in Kenya are generalizable to other governance and regulatory contexts. Such research would contribute to the development of regional best practices in strengthening financial accountability within essential service delivery sectors.

REFERENCES

Alkaraan, F. (2018). The role of management control systems in managing agency costs: Evidence from manufacturing companies. *Journal of Accounting and Business Research, 48*(3), 275-294.

Auditor General. (2022). *Report on the financial statements of water sector agencies*. Nairobi: Office of the Auditor General.

Chege, P., & Wambua, C. (2021). Decentralized financial approval systems and accountability in water service providers in Kenya. *Journal of Public Sector Finance*, 12(3), 45-62.

Githongo, J. (2023). *Technology and Financial Accountability in Public Institutions: The Role of IFMIS in Kenya*. African Journal of Public Finance, 18(3), 45-62.

Githongo, J., & Munga, B. (2021). Financial Risk Management in Water Service Providers in Kenya. *Journal of Public Finance and Policy*, 8(2), 112-128.

Institute of Internal Auditors (IIA). (2020). *Standards for the Professional Practice of Internal Auditing*. Florida: IIA Publications.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305-360.

Kamau, R., & Wambua, D. (2022). *Performance auditing and financial management in Kenya's water sector: A case of Coast Water Works Development Agency (CWWDA)*. Journal of Public Sector Economics, 9(1), 88-102.

Kanda, E. K., Odiero, J., Lutta, V. O., & Ong'or, B. T. I. (2018). Challenges Facing Small and Medium Water Service Providers in Kenya: A Case of Amatsi Water Services Company, Vihiga County. *Journal of the Civil Engineering Forum*, 4(1), 19.

Karanja, E., & Njoroge, P. (2019). Challenges in implementing financial monitoring technologies in Kenyan water utilities. *African Journal of Financial Management*, 9(1), 78-92.

Karanja, J., & Wekesa, F. (2018). *Financial management challenges in water service providers: A case of Mombasa Water Supply and Sanitation Company*. African Journal of Finance and Management, 14(2), 78-95.

Kariuki, D., & Mutua, J. (2021). Non-Revenue Water and Its Financial Implications on Water Utilities: A Case of Nairobi. *Water Sector Review Journal*, 5(1), 45-63.

Kariuki, J. (2019). *The role of internal auditing in financial accountability of public institutions in Kenya*. Nairobi: ICPAK.

Kariuki, M., & Schwartz, J. (2020). *Non-revenue water management in developing countries: Challenges and solutions*. World Bank Publications.

Kariuki, P., & Kimani, J. (2021). *The impact of IPSAS adoption on financial reporting in public sector institutions in Kenya*. African Journal of Accounting and Finance, 7(2), 45-61.

Kenya Institute for Public Policy Research and Analysis (KIPPRA). (2021). *Financial Challenges in Kenya's Water Sector: A Case Study of Mombasa Water Supply*. KIPPRA Publications.

Kimani, J., & Mwangi, L. (2019). Effect of financial reporting on fund misappropriation in Nairobi City Water and Sewerage Company. *International Journal of Accounting Research*, 7(2), 33-50.

Kiprotich, L., & Karanja, P. (2023). The Impact of Donor Funding Mismanagement on Water Infrastructure Projects in Kenya. *East African Financial Studies*, 10(4), 97-115.

Kiprotich, P., & Sang, J. (2021). *Internal auditing and financial performance of public universities in Kenya*. African Journal of Accounting and Finance, 8(2), 45-61.

Kithinji, M., & Kamau, P. (2020). *Regulatory compliance and financial sustainability of water service providers in Kenya*. Journal of Governance and Public Policy, 8(1), 45-63.

Limperg, T. (2002). The concept of auditor independence and its importance in audit practice. Netherlands: Limperg Institute.

Maina, R., & Kiptoo, S. (2022). Regulatory enforcement and financial control in Kenya's water sector. *East African Financial Review*, 15(4), 27-41.

Makokha, R., & Ndichu, M. (2019). *Budgeting and expenditure controls in water utilities: Lessons from Kenya*. East African Business Review, 10(4), 102-118.

Matoke, V., & Omwenga, J. (2016). Auditors' responsibilities and the public's expectations: A case of listed companies in Kenya. *Journal of Economics and Business, 3*(5), 121-129.

Muchiri, W., & Wanyoike, J. (2020). Internal control measures and financial accountability in public utilities. *Kenya Journal of Financial Governance*, 10(2), 55-70.

Mugambi, J., & Wainaina, P. (2022). *Governance and Financial Performance of Water Service Providers in Kenya*. African Journal of Public Administration, 9(2), 45-62.

Mugambi, J., & Waweru, M. (2021). The role of compliance auditing in enhancing financial accountability in Kenyan water service providers. *Journal of Public Sector Finance*, 8(2), 45-62.

Mugambi, M., & Njiru, S. (2021). *Compliance-based auditing and financial transparency in Kenyan state corporations*. International Journal of Financial Studies, 9(3), 87-102.

Mugambi, P., & Muriithi, W. (2021). *Corporate governance and financial accountability: The*

Mugambi, S., & Njoroge, L. (2022). *Digital financial systems and fraud prevention in Kenyan utilities*. International Journal of Financial Studies, 10(3), 112-127.

Muiruri, S., & Wepukhulu, J. (2018). Internal controls, financial reporting, and agency costs in state corporations. *African Journal of Accounting and Finance, 5*(2), 34-49.

Muli, K., & Ndunda, B. (2022). Effectiveness of IFMIS in financial monitoring at Kenyan water service providers. *Journal of Financial Innovations*, 8(1), 41-56.

Munene, L. W., Njangiru, M. J., & Ngungu, S. W. (2016). Effect of Auditing on Financial Performance of Water and Sanitation Company in Kirinyaga County, Kenya. *Journal of Finance and Accounting*, 4(5), 271-284.

Muthoni, R., & Waithaka, S. (2021). Procurement Fraud in Public Water Utilities: A Study of Kisumu Water and Sanitation Company. *Journal of Public Sector Accountability*, 9(2), 132-150.

Mutua, D., & Kamau, F. (2018). Role of segregation of duties in preventing financial fraud in public utilities. *Public Administration Review*, 6(3), 89-104.

Mutua, E., & Wainaina, P. (2023). *Governance structures and financial accountability in Kenyan water service providers*. East African Journal of Governance, 5(1), 65-79.

Mwangi, D., & Mutua, E. (2022). *Risk assessment frameworks in water utilities: Enhancing financial accountability and service delivery in Kenya*. International Journal of Public Sector Management, 15(3), 88-107.

Mwangi, G., & Irungu, J. (2021). *Effectiveness of internal auditing in mitigating financial malpractices in Kenya's public sector: A case study of Nairobi County*. African Journal of Governance and Accountability.

Mwangi, J., & Wanyoike, M. (2020). *Fraud detection and financial accountability in state corporations in Kenya*. International Journal of Finance and Accounting, 8(1), 112-130.

Mwangi, K., & Kamau, R. (2022). Challenges and prospects of financial auditing in public utilities: A case of water service providers in Kenya. *African Journal of Accounting and Auditing*, 10(1), 34-50.

Mwangi, K., & Kimani, W. (2022). Revenue Leakage in Water Utilities: Strategies for Risk Mitigation. *African Journal of Water Governance*, 6(3), 78-94.

Mwangi, P., & Wanjiru, K. (2020). *Corporate Governance and Financial Accountability in Kenya*. Nairobi: Kenya Institute of Public Policy Research and Analysis.

Mwangi, T., & Karanja, R. (2022). *Public participation and financial oversight in rural water schemes in Kenya*. Journal of Development Studies, 8(4), 34-49.

Ndegwa, E., & Chege, P. (2022). Governance Weaknesses and Financial Reporting Challenges in Water Service Providers. *Kenya Financial Accountability Journal*, 7(1), 54-70.

Ndimitu, P. N., Mwangi, C., Kisaka, S., & Mwangi, M. (2018). Relationship Between Internal Audit Practices and Performance of Water Service Providers in Kenya. *Archives of Business Research*, 5(9).

Ndung'u, M., & Otieno, H. (2021). *The role of digital audit trails in enhancing financial accountability in Kenyan water utilities*. African Journal of Business and Management, 6(2), 78-92.

Ndungu, S., & Kinyanjui, P. (2022). *The effectiveness of internal audit functions in promoting ethical financial practices in Kenya*. Journal of Financial Governance, 10(4), 89-105.

Nduta, H., & Kariuki, M. (2021). Fraud detection mechanisms and financial efficiency in water service firms. *Journal of Risk Management*, 11(3), 62-78.

Ngugi, A., & Muturi, W. (2021). *The Impact of Corporate Governance on Financial Reporting in Kenyan Firms*. Journal of Business Ethics, 34(2), 99-118.

Ngugi, P., & Mwangi, S. (2021). *Governance structures and financial performance of water service providers in Kenya*. African Journal of Water Resources, 12(2), 56-73.

Njiru, D. K., & Bunyasi, G. (2016). Effect of Internal Controls on Financial Performance of Water Companies in Kenya (A Case of Water Companies in Tana Water Services Board). *American Journal of Finance*, 1(1), 11-28.

Nogueira, S. P., & Jorge, S. M. (2017). The use of internal controls in addressing agency problems in public entities. *Public Management Review, 19*(3), 313-333.

Nyaga, P., & Maina, C. (2020). Auditing compliance and financial transparency in Kenya's water sector: A case study approach. *East African Business Review*, 12(3), 78-94.

Nyakundi, E., et al. (2021). *Procurement Irregularities and Financial Accountability in Kenya's Water Sector*. Journal of Economic Policy, 7(1), 112-128.

Nyakundi, F., & Omondi, B. (2022). *Auditing standards and financial integrity in Kenya's water sector: A regulatory perspective*. Journal of Auditing and Compliance, 4(1), 101-117.

Nyamita, M. (2020). *Challenges affecting internal audit effectiveness in public institutions in Kenya*. Journal of Public Sector Finance, 7(1), 112-129.

Nyamita, M. O., Ogutu, M., & Ochieng, D. E. (2020). The influence of internal audit on financial accountability in public sector institutions in Kenya. *Journal of Financial Accountability and Management*, 36(3), 289-307.

Nyang'au, G., & Ochieng, D. (2020). *Corruption risks and financial mismanagement in Kisumu Water and Sanitation Company: A case study analysis*. Kenya Journal of Policy Analysis, 5(2), 34-49.

Ochieng, L., & Omolo, J. (2021). The impact of compliance auditing on financial management in public utilities: Evidence from water service providers in Kenya. *Kenyan Journal of Finance and Governance*, 15(4), 112-130.

Ochieng, P., & Njoroge, M. (2022). Enhancing Internal Audit Functions in Kenyan Water Service Providers. *Water Sector Trust Fund Report*, 4(5), 103-119.

Ochieng, P., & Obura, J. (2020). Risk assessment strategies and financial accountability in Kisumu Water and Sanitation Company. *Water Sector Journal*, 5(4), 15-32.

Odhiambo, T., & Wambua, C. (2021). The Role of Governance in Financial Accountability at Coast Water Works Development Agency. *Journal of Policy and Development Studies*, 11(3), 81-98.

Oduor, J., & Kinyua, J. (2020). *Role of internal audit practices on financial accountability in public sector organizations in Kenya*. Journal of Financial Management.

Office of the Auditor General. (2022). *Annual Report on the Accounts of the National and County Governments*. Nairobi: Office of the Auditor General.

Ombogo, R., & Musyoka, J. (2023). *Performance-Based Reforms in Water Utilities: Case of Mombasa Water Supply and Sanitation Company*. East African Journal of Policy Studies, 6(3), 98-114.

Otieno, B., & Njoroge, C. (2021). *Procurement fraud in water utilities: Case study of Kisumu Water and Sanitation Company*. Journal of African Public Administration, 9(1), 23-39.

Otieno, H., & Kiplangat, C. (2021). *Stakeholder Engagement and Financial Transparency in Water Utilities: Evidence from Kisumu and Nakuru Counties*. Journal of Governance and Public Finance, 5(4), 56-72.

Owuor, G., & Mutunga, L. (2023). *The effectiveness of audit recommendations in revenue management at Nairobi City Water and Sewerage Company (NCWSC)*. Journal of Urban Finance, 7(3), 54-69.

Republic of Kenya. (2012). *Public Finance Management Act*. Nairobi: Government Printer. *Role of internal audits in Kenyan organizations*. African Journal of Business Ethics, 6(2), 45-58.

Wambua, L., & Mutua, P. (2019). *The role of internal audit in enhancing financial accountability in county governments*. Journal of Economics and Public Administration, 6(4), 98-115.

Wanjiru, L., & Githongo, J. (2021). *Financial accountability and risk assessment in public sector utilities: A Kenyan perspective*. Journal of African Finance, 7(2), 112-130.

Water Services Regulatory Board (WASREB). (2023). *Impact Report on Water Service Providers' Financial Performance in Kenya*. WASREB Reports.

APPENDIX I: RESEARCH QUESTIONNAIRE

Instructions: Kindly answer the questions below by ticking the appropriate answer or writing your answer in the space provided.

Section A: Background Information

1. Age of respondent:

    18-25 years [ ]

    25-30 years [ ]

    30-35 years [ ]

    Over 35 years [ ]

2. Gender of respondent:

    Male [ ]

    Female [ ]

3. Please indicate your highest level of education:

    Certificate [ ]

    Diploma [ ]

    Degree [ ]

    Postgraduate Degree [ ]

4. How long have you been a CEO at the Water Service Provider?

    1– 3 years [ ]

    4 – 6 years [ ]

5. How long have you served in the Water Service Provider as a member of staff?

   1– 3 years [ ]

   4– 5 years [ ]

   Over 5 years [ ]

Section B: Risk Assessment

This section seeks your views on the effect of risk assessment in enhancing financial accountability at the Water Service Providers in Kenya.

Kindly indicate your level of agreement or disagreement with the statements using the following 5-point Likert scale where; 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1= Strongly Disagree.

	Risk Assessment	**5**	**4**	**3**	**2**	**1**
a.	The internal audit function effectively categorizes financial risks within the organization.					
b.	Risk assessment practices are regularly conducted to detect potential financial irregularities.					
c.	Internal auditors have sufficient expertise to assess financial risks in water service provision.					
d.	The internal audit team adequately reviews compliance with financial policies and regulations at the organization.					
e.	There is a structured risk assessment framework controlling financial accountability at the organization.					

f.	The water service provider has clear whistleblowing means that support fraud risk management.					

Internal Control Systems

This section seeks your opinions on the effect of internal control system in enhancing financial accountability at the Water Service Providers in Kenya.

Kindly indicate your level of agreement or disagreement with the statements using the following 5-point Likert scale where; 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1= Strongly Disagree.

	Internal Control Systems	**5**	**4**	**3**	**2**	**1**
a.	The organization has a well-defined internal control framework that supports financial accountability.					
b.	The management determines a strong commitment to ethical financial practices at the organization.					
c.	There is a clear separation of duties to prevent financial mismanagement at the organization.					
d.	Employees understand their roles and responsibilities in financial accountability at the organization.					
e.	The organization promotes a culture of integrity and transparency in financial transactions.					
f.	The organization often identifies and assesses financial risks that could affect accountability.					

Auditing Compliance

This section seeks your assessments on the effect of auditing compliance in enhancing financial accountability at the Water Service Providers in Kenya.

Kindly indicate your level of agreement or disagreement with the statements using the following 5-point Likert scale where; 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1= Strongly Disagree.

	Auditing Compliance	**5**	**4**	**3**	**2**	**1**
a.	Internal audits guarantee that Water Service Providers comply with financial principles and legal needs.					
b.	Non-compliance with financial regulations is actually identified and addressed through internal auditing.					
c.	Internal auditors often review and report on the loyalty to government financial policies.					
d.	Internal auditing assists in identifying financial risks and implementing mitigation measures.					
e.	Water service providers have strong internal controls due to effective internal audits.					
f.	Internal audits detect and prevent financial misdeeds such as fraud and mismanagement.					

Financial Accountability

This section seeks your views on the effect of enhancing financial accountability at Water Service Providers in Kenya.

Kindly indicate your level of agreement or disagreement with the statements using the following 5-point Likert scale where; 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1= Strongly Disagree.

	Financial Accountability	**5**	**4**	**3**	**2**	**1**
a.	Internal auditing has improved adherence to financial policies and regulations.					
b.	The internal audit function guarantees that financial statements are accurate and reliable.					
c.	Internal auditors help in ensuring compliance with the Public Finance Management Act.					
d.	Regular internal audits have eased financial anomalies in the organization.					
e.	Internal audit verdicts are used to enhance candidness in financial reporting at the organization					
f.	Internal audit findings influence financial policies and procedures in the organization.					

Thank you for your Cooperation

APPENDIX II: LIST OF WATER SERVICE PROVIDERS

ATHIWATER WORKS DEVELOPMENT AGENCY
Nairobi City Water and Sewerage Company (NCWSC)
Thika Water and Sewerage Company (THIWASCO)
Murang'a Water and Sanitation Company (MUWASCO)
Murang'a South Water and Sanitation Company (MUSWASCO)
Gatundu Water and Sanitation Company (GATWASCO)
Kikuyu Water Company Limited
Ruiru Juja Water and Sanitation Company (RUJWASCO)
Kiambu Water and Sewerage Company
Murang'a West Water and Sanitation Company / Kahuti
Gatamathi Water and Sanitation Company
Limuru Water and Sewerage Company
Karuri Water and Sanitation Company
Githunguri Water and Sanitation Company
Gatanga Community Water Scheme
Tatu City Water and Sanitation Company
Two Rivers Water and Sanitation Company
Tilisi Water and Sewerage Company
Runda Water Ltd
Kiamumbi
Athi Water - Karimenu Bulk Water Supply
Athi Water - Northern Collector Tunnel

TANATHI WATER WORKS DEVELOPMENT AGENCY
Kitui Water and Sanitation Company
Oloolaiser Water and Sewerage Company
Mavoko Water and Sewerage Company Limited
Machakos Water and Sanitation Company
Kibwezi Makindu Water and Sanitation Company
NolTuresh Loitokitok Water and Sanitation Company
Kiambere Mwingi Water and Sanitation Company
Namanga/ Ol Donyo Water Users Trust
Wote Water and Sewerage Company
Mwala Water and Sanitation Company
Yatta Water Services Company
Matungulu Kangundo Water and Sewerage Company
Olkejuado Water and Sewerage Company
Mbooni Water and Sanitation Company
Kathiani Water and Sanitation Company
TANA WATER WORKS DEVELOPMENT AGENCY
Nyeri Water and Sanitation Company
Meru County Rural Water and Sanitation Company (Imetha)- MeRuWASCO
Ngandori Nginda Water Consumers Association
Mathira Water and Saniation Company Limited
Ngagaka Water and Saniation Company

Embu Water and Saniation Company
Nithi Water and Saniation Company
Meru Water and Sewerage Services Company
Kirinyaga Water and Saniation Company
Othaya Mukurweni Water Services Company
Tetu Aberdare Water and Saniation Company
Kyeni Water and Sewerage Company
Tuuru Water Association
Naromoru Water and Saniation Company
Rukanga Water and Saniation Company
Embe Water and Saniation Company
Kathita Kiirua Water Association
Muthambi 4K Water Association
Murugi Mugumango Water Society

APPENDIX III: LETTER OF INTRODUCTION

Thika Road, Ruaraka
P.O. Box 56808-00200 Nairobi Kenya
Pilot Line: +254 20 8070408/9

Tel: +254 20 3537842
Fax: +254 20 8561077
Mobile: +254 734 888022, 710 888022
Email: kca@kca.ac.ke
Website: www.kca.ac.ke

BOARD OF POSTGRADUATE STUDIES

KCAU/BPS/2025 *Date: Tuesday, June 03, 2025*

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: MOHAMED ABDIRAHMAN ALI - REG NO. 23/04504

It is my distinct pleasure to introduce Mohamed Abdirahman Ali, a student at our institution pursuing a Master of Science in Commerce- Accounting degree within the School of Business.

Mohamed is conducting research on the topic "*The effect of internal auditing in enhancing financial accountability at the water service providers in Kenya*" which is part of the requirements of the program he is pursuing. The research as well as the data procured thereof shall be used for academic purposes only.

Any assistance accorded to him is highly appreciated.

In case of further inquiry, do not hesitate to contact the undersigned.

Yours faithfully,

DR. JACKSON NDOLO
DIRECTOR, BOARD OF POST GRADUATE STUDIES

APPENDIX IV: RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **692193**

Date of Issue: **08/June/2025**

RESEARCH LICENSE

This is to Certify that Mr.. CPA Mohamed Abdirahman Ali of KCA University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Garissa, Isiolo, Kilifi, Kwale, Lamu, Mandera, Marsabit, Mombasa, Samburu,
Taita-Taveta, Tanariver, Wajir on the topic: The Role of Internal Auditing in Enhancing Financial Accountability at The Water Service Providers in Kenya for the period ending : 08/June/2026.

License No: **NACOSTI/P/25/4175169**

692193

Applicant Identification Number

Deputy Director
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions