

**ANALYSIS OF THE EFFECT OF WATER SECTOR REFORMS ON
GOVERNANCE OF WATER BY ATHI WATER SERVICES BOARD, KENYA**

JAMES AMBUSO OMONDI



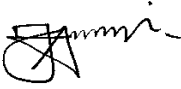
**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE AWARD OF MASTER OF ARTS DEGREE IN GOVERNANCE AND
ETHICS OF
MOUNT KENYA UNIVERSITY**

MAY 2023

DECLARATION AND APPROVAL

DECLARATION BY STUDENT

This research thesis is my original work and has not been presented for the award of any masters in any university or institution for academic credit.

Signature: 

Date: 10-05-2023

JAMES AMBUSO OMONDI

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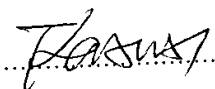
This research thesis has been submitted for examination with my approval as university supervisor.

Signature: 

Date: 10-05-2023

DR. DENNIS NYONGESA WAMALWA

UNIVERSITY SUPERVISOR

Signature: 

Date: 11-05-2023

DR. KARURI THIONGO

UNIVERSITY SUPERVISOR



DEDICATION

This Research is dedicated to My Spouse Dr Janerose Sande, children Bryan Jensen Otieno ,
Bennet Aldridge Ambuso , Brandon Elijah Rangita and Joseph Nixton Ambuso .



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ABSTRACT

The governance of the AWSB remains a challenge. There are concerns about corruption, limited stakeholder participation and weak accountability mechanisms. This has led to inefficiencies, mismanagement of water resources and inadequate access to clean and safe water for the population served by the AWSB. This study examined the effects of water sector reforms on governance at Athi Water Services Board, analyzing coverage, reporting, stakeholder participation, challenges, and the influence of government legislation and donors, using a mixed-methods approach and data from 80 employees at various management levels. Validity and reliability of the research instruments were assessed, and both qualitative and quantitative analyses were conducted. The correlation results revealed significant positive associations between coverage, reporting, and stakeholder participation with governance ($r=.726$, $p=.000$; $r=.734$, $p=000$; $r=.611$, $p=000$), while challenges exhibited a negative and significant association ($r=-.458$, $p=000$). Regression analysis further indicated that coverage ($\beta=.337$, $p=0.000$), reporting ($\beta=.241$, $p=0.004$), and stakeholder participation ($\beta=.182$, $p=0.039$) were positively and significantly related to governance, whereas challenges ($\beta=-.135$, $p=0.046$) had a negative and significant impact. Moreover, government legislation and donors were identified as effective moderators. Based on the findings, several recommendations are proposed. These include establishing adequate connectivity to informal sectors with sufficient water supply, developing additional water sources, and improving the frequency of water supply in urban areas. It is crucial to prepare and maintain a strategic plan, ensure the independence of the finance department from management, and enable stakeholders to freely inspect financial records. Active involvement of stakeholders is recommended to better understand the root causes of challenges in the water sector. Adequate funding should be directed towards the water sector to facilitate project engagement, and efforts should be made to enhance services for the benefit of Kenyans. Finally, investments should be prioritized in infrastructure necessary for the production of clean water.

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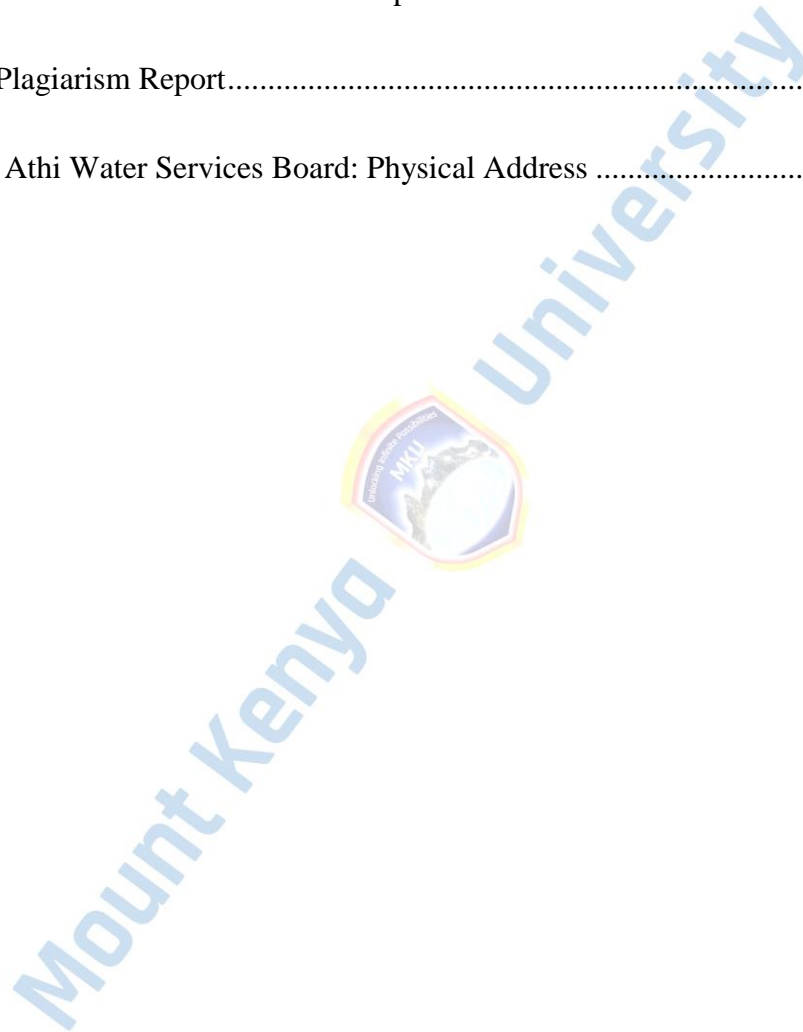
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LIST OF ABBREVIATIONS AND ACRONYMS

AWSB	Athi Water Services Board
CBO	Community Based Organization
GOK	Government of Kenya
NGO	Non Governmental Organisation
WHO	World Health Organization
WSP	Water Service Provider
WRMA	Water Resources Management Authority
WRUA	Water Resource Users Association



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Effective management of water services is crucial for ensuring sustainable and reliable access to clean water. Poddar, Qureshi, and Shi (2014) argues that effective management involves various components, such as infrastructure development, maintenance, water quality monitoring, and customer engagement. Implementing robust infrastructure systems, including water treatment plants, distribution networks, and storage facilities, is essential for ensuring the availability and reliability of water services. Bandaragoda (2016) pointed out that a lack of comprehensive stakeholder consultation in the public water distribution sector can lead to disputes, sparking bureaucratic complications in the reform process. In contrast, Fulazzaky (2014) highlighted a successful example from Indonesia, where the government and public consensus led to successful water reform implementation, ensuring clean water availability and enhancing economic sustainability.

In a study focusing on Nigeria, Emenike et al. (2017) found that water sector reforms had improved sustainability and increased the number of citizens in the Southwest with access to clean and reliable water. Furthermore, Acheampong et al. (2016) stressed that successful water reforms in Ghana are heavily dependent on accountability, integrity, and resource availability of various sectors tasked with water supply. Lein and Tagseth (2009) studied Tanzania's water reform implementation and found it to be a state-centered, community-based process with bureaucratic involvement, effectively managing conflicts over the central Pangani river basin.

Schwartz et al. (2017) discussed a 2001 agreement among all stakeholders in the water sector on the need for new water policy. The resulting strategy redistributed roles among key players, with the national government taking on policy direction, regulatory, and other enabling

functions (Matondo, 2002). The study also noted changes in the Kenyan water distribution system due to the reforms. In addition, Ifejika Speranza et al. (2018) emphasized that the water reform sectors' progress was hindered by stakeholder exclusion, political interference, and inadequate infrastructure. The Water Act of 2002 introduced independent authorities to address these issues.

In Kenya, water-related issues fall under the jurisdiction of the Ministry of Water and Sanitation. This ministry is responsible for overseeing the management, regulation, and provision of water resources and services across the country. Several authors have shed light on the governance and policies related to water in Kenya. Okechi (2015) has explored the relationship between reporting and effective governance within water institutions. Spaling, Brouwer, and Njoka (2014) have examined the challenges of water governance and management in Kenya, focusing on issues such as institutional arrangements, stakeholder participation, and accountability. Additionally, Dill and Crow (2014) have discussed the need for integrated water resources management and the importance of effective governance structures in addressing water-related challenges in Kenya. These studies contribute to our understanding of the governance landscape surrounding water management and policies in Kenya.

McCord et al. (2017) underscored that water is essential for life, with shortages leading to significant health implications and impacting people's lives. Okechi (2015) also highlighted how water scarcity has contributed to the growth of slums in urban areas, where individuals cannot afford to buy clean water from profit-oriented vendors. While Kenya is rich in water bodies, water accessibility remains an issue in certain regions. Asante (2010) noted that despite numerous reforms in the water sector, many of these changes have not been actualized due to financial instability, poor management, and misuse of funds in the country's water boards.

Furthermore, Adams et al. (2019) pointed out that inadequate infrastructure has hindered the development of reliable data to support the integrated management of water usage across multiple sectors, as well as faculty training and institutional improvement.

The Athi Water Services Board (AWSB) plays a crucial role in the water sector in Kenya, specifically in the Athi River Basin. This board is responsible for the planning, development, and management of water resources and services within its jurisdiction. The board focuses on ensuring reliable water supply, proper sanitation, and sustainable water management practices. Spaling, Brouwer, and Njoka (2014) have provided insights into the challenges and governance issues faced by the water sector in Kenya, including the Athi Water Services Board. Their research examines the institutional arrangements, stakeholder participation, and accountability mechanisms within the water sector. By shedding light on these aspects, the study highlights the complexities and opportunities for improvement in the governance of water resources and services, including the role of the Athi Water Services Board.

The Athi Water Services Board acknowledges the necessity of delivering suitable services to its customers and safeguarding against public exploitation by water providers. It is also charged with updating the government on issues, administration, and progress made in securing nationwide water safety (Bellaubi & Visscher, 2014). In recognition of the importance of customer satisfaction, the board instituted a customer service department in 2007. This department handles inquiries related to the institution and the water supply, as well as oversees the implementation of previously approved water reforms (Okechi, 2015).

Thus, the water sector reforms in Kenya have brought about significant changes in water governance in the country. In the case of Athi Water Services Board, the reforms implemented have had significant impacts on governance. One of the key reforms in the water sector in Kenya is the expansion of water services coverage. This has been achieved through increased

investments in infrastructure and the adoption of new technologies (Mekonnen, Hoekstra & Becht, 2012). As a result, the Athi Water Services Board can be able to provide access to clean and safe water to a larger segment of the population, thereby enhancing the quality of life of the people.

Another critical aspect of the water sector reforms in Kenya is the improvement of reporting mechanisms. The Athi Water Services Board adopted a transparent reporting system, which provides regular updates on water service delivery to the public. It is noted by K'Akumu (2016) that reporting can be enhance accountability and enable the public to monitor the performance of the Board in delivering water services. Through this system, the Board is able to address challenges in the sector, such as leakages, billing, and quality issues, more effectively.

Stakeholder participation is a critical component of the water sector reforms in Kenya. The Athi Water Services Board engages stakeholders, including water users, civil society and the private sector in decision-making processes. Stakeholder participation can create a sense of ownership and responsibility among stakeholders, resulting in better management of water resources ((Njihia & Senaji, 2018). Additionally, stakeholder participation can facilitate the identification of gaps and opportunities for improvement, leading to the development of more inclusive and effective water policies.

However, the water sector reforms in Kenya have not been without challenges. One significant challenge faced by the Athi Water Services Board is the issue of inadequate financing. Despite increased investments in the water sector, funding has remained insufficient, resulting in a backlog of projects and inadequate maintenance of existing infrastructure (Jeuland & Whittington, 2014). Additionally, concerns about the sustainability of water services, particularly in rural areas, where the cost of providing water services is often high, and the ability of the population to pay for these services is limited.

In conclusion, the water sector reforms in Kenya have had significant impacts on water governance in the country. The Athi Water Services Board has been able to expand water services coverage, improve reporting mechanisms and engage stakeholders more effectively in decision-making processes. However, challenges such as inadequate financing and sustainability of water services remain significant hurdles that should be addressed. Nonetheless, the water sector reforms in Kenya has set a strong foundation for improved water governance and enhanced access to water services for the population. Based on this background, conducting of the study was considered worthy for policy formulations.

1.2 Statement of the Problem

In an ideal situation, the water sector reforms in the AWSB would lead to improved governance practices, increased transparency and accountability, efficient service delivery, and enhanced participation of all stakeholders in the water management process. The reforms would result in a well-functioning institution that effectively manages water resources, delivers water services equitably, and promotes sustainable water management. This would lead to improved access to clean and safe water for the population served by the AWSB.

In reality, despite the water sector reforms, the governance of the AWSB remains a challenge. There are concerns about corruption, limited stakeholder participation and weak accountability mechanisms. This has led to inefficiencies, mismanagement of water resources and inadequate access to clean and safe water for the population served by the AWSB. Schwartz, Tutusaus, and Savelli (2017) argue that the effectiveness of the reforms has been compromised by factors such as crumbling infrastructure, poor management, inadequate funding, and substantial debts accrued by public institutions. In addition, McCord et al. (2017) noted issues related to the accessibility and availability of clean water in urban areas, with these problems largely attributable to poor management, ill-conceived policies, corruption, and bureaucratic

inefficiencies in water board management. These circumstances highlight the necessity for research to assess the influence of water sector reforms on governance within the AWSB. Such studies could guide policy decisions aimed at enhancing water service delivery and fostering sustainable water management.

The knowledge gap is that despite the significant reforms in the water sector in Kenya and specifically in the Athi Water Services Board (AWSB), there is a significant knowledge gap regarding the actual impact of these reforms on governance. There is limited research on the actual effectiveness of the reforms in improving the governance of the AWSB and enhancing water service delivery. The impact of coverage, reporting, stakeholder participation and challenges on governance in Athi Water Services Board remains uninvestigated. By investigating the question, "What is the impact of water sector reforms on governance in the Athi Water Services Board?", this research aimed to bridge these identified gaps.

1.3 Purpose of the Study

The study analysed the effect of water sector reforms on the governance of water by the Athi Water Services Board.

1.4 Research Objectives

- i. To examine the effect of coverage on governance of water after the water sector reforms in Athi Water Services Board.
- ii. To establish the effect of reporting on governance of water after the water sector reforms in Athi Water Services Board.
- iii. To explore the effect of stakeholder participation on governance of water after water sector reforms in Athi Water Services Board.

- iv. To examine the challenges on governance of water after water sector reforms in Athi Water Services Board.
- v. To explore the moderating effect of government legislation on the relationship between the water sector reforms and governance of water in athi water services board.

1.5 Research Questions

- i. To what extent has been the impact of coverage on governance of water after the water sector reforms in Athi Water Services Board.
- ii. What is effect of reporting on governance of water after the water sector reforms in Athi Water Services Board?
- iii. What is the effect of stakeholder participation on governance of water after water sector reforms in Athi Water Services Board?
- iv. What are the challenges on governance of water after water sector reforms in Athi Water Services Board?
- v. To what extent is the the moderating effect of government legislation on the relationship between the water sector reforms and governance of water in athi water services board.

1.6 Significance of the Study

The study findings are expected to be of significance to different stakeholders involved in the water sector, such as government agencies responsible for water service regulation, water resource management, water service providers, civil society organizations and community groups like water resource users associations. These stakeholders will benefit from the study by gaining a better understanding of the factors that affect governance in the water sector, and how these can be addressed to improve service delivery and sustainability.

In terms of its contribution to the field of academia, the study can provide insights into the effectiveness of water sector reforms and the role of governance in promoting sustainable water

management. The findings can be used to inform policy development and implementation, and can also contribute to the academic literature on water governance and sustainability.

1.7 Justification of the study

Water is a critical resource, and access to clean and safe water is a basic human right. The water sector in Kenya has undergone various reforms aimed at improving service delivery, increasing access to water, and promoting sustainable water management. The Athi Water Services Board (AWSB) is one of the institutions that has undergone significant reforms, including restructuring, capacity building, and introduction of new technologies. Despite these reforms, majority of the population is still not accessing clean water. Thus, this study sought to examine the effect of water sector reforms on governance in AWSB, Kenya. The study is justified because good governance is critical for the effective management of water resources. Poor governance can lead to inefficiencies, corruption, and mismanagement, resulting in inadequate access to clean and safe water. Therefore, understanding the effect of water sector reforms on governance is crucial for improving water service delivery and promoting sustainable water management. Furthermore, the AWSB is a significant water services provider in Kenya, serving a population of over 10 million people. Therefore, the findings of this study will be essential in informing policy decisions aimed at improving water service delivery in Kenya and other developing countries facing similar challenges.

1.8 Scope of the Study

The study was carried out at the AWSB Headquarters in Nairobi County over a period from September 2019 to December 2020, with the objective of providing a comprehensive understanding of post-reform governance in the water sector. The study specifically aimed to address the existing challenges within the AWSB, thereby contributing to improving the overall governance of water services in the region.

1.9 Limitations and delimitations of the study

To accommodate the busy schedules of the management respondents, the research assistant administered the questionnaires at their convenient times upon inquiry. The questionnaire was made available for a week to ensure sufficient time for completion. To address concerns of unwillingness and fear of victimization, a letter of consent was sent to the respondents assuring them of anonymity and the academic purpose of the research. To mitigate biased information, the respondents were assured that they could request a copy of the final results. The study was conducted between September 2019 and December 2020.

1.10 Assumptions of the Study

This study focused on the water sector in Kenya, which involves various players at different levels, each facing distinct challenges and seeking unique solutions. The assumption was made that the reforms implemented by the Athi Water Services Board at the regional level could serve as effective solutions for the challenges encountered by all stakeholders in the water sector.

1.11 Operational Definition of Key Terms

Abstraction: Abstraction is the action of extracting water from a water source.

Challenges: Challenges are obstacles that hinder institutions from achieving their targets. In the context of water sector reforms, these challenges include inadequate funding, inappropriate staffing, resistance to adopting modern technology, and high levels of corruption.

Committees (BWRCs): BWRCs are committees established to manage water-related issues within specific catchment areas.

Conservation: Conservation involves preserving the environment to improve the availability of water resources.

Coverage: Coverage refers to the extent of water service provision, including the number of people served, water sources utilized, and the quantity of water produced within a given period.

Donor Partners: Donor partners are stakeholders or sector players in the water sector who contribute expertise and support.

Governance: Governance encompasses accountability and integrity among employees in higher positions. In the water sector, governance involves managing and regulating water services, including water supply, sanitation, resource management, and water quality protection.

Government legislation: Government legislation refers to laws and regulations created by a government to govern and regulate society. It covers various areas such as economic policy, public safety, social welfare, education, and the environment.

Reporting: Reporting entails being responsible and demonstrating high levels of integrity and transparency in providing information.

Stakeholder Participation: Stakeholder participation involves involving other members in decision-making processes through activities like mapping, involvement, and partnership.

Water Catchment: Water catchment refers to a designated river system used for water allocation purposes.

Water Sector Reforms: Water sector reforms encompass changes discussed, documented in policy documents, enacted in legislation, and implemented by various sector players. These reforms focus on infrastructure development, reporting, compliance, accountability, and quality improvement.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The empirical literature review was done in which the analysis was done per the objective. In addition, this section entailed the critical review of relevant theories to inform the study. The conceptual framework was analyzed to depict the relationship of the variables under the investigation grammatically. From the literature review, the research gaps were obtained.

2.1 Empirical Review

Water management is vital and it shows how water can be effectively utilized to meet the needs of the people. The human activities in the World have caused shortages of water sources in which many rivers and other sources of water are drying up in China (Li, Tian, Xue & Wu, 2017). The resulting degradation, damage of ecosystems, and soil damage severely impact the economic development and stability of a country. Poor governance has caused a lot of problems in most of the bodies mandated with the protection of the ecosystem in the World. A group of experts working under the UN Millennium reported that the absence of sound and reliable foundations at all levels and poor governance in most of the departments responsible with the distribution of the water are the leading causes of the problems (Connor, 2015).

In most of the developing nations, the provision of clean and reliable water to the people is much unreliable and the majority of the population consume water directly from the source without any treatment because of poor governance (Brondizio & Le Tourneau, 2016). The absence of applicable innovative mastery and equipment necessary to manage non-income water in most water utilities foundations decreases the accessibility of adequate excellent quality water to clients in most (Thornton, 2012). As indicated by Butler and Memon (2016),

non-income water in many urban areas of developing economies is expecting hazardous extents.

Limited water availability and supply is also an enormous challenge in the region. In East Africa, for example, Uganda was in great extent affected by the internal conflict which lasted between 1971 and 1985 (Naiga, Penker & Hognl, 2015). The East African nation emerged from this war with deep scars as the economy was damaged entirely, many professional workers fled the country, infrastructure was in disrepair and most services were not functional at all. From that period in 1986, the country rebuilt in all sectors leading the country to reform the water sector (Mengistu, 2015). The government ensured that the water Sector services were provided and managed with increased efficiency and cost-effectiveness to reduce the budgetary burden while maintaining the National Government's commitment to sustainability and equitable development (Ampaire, Jassogne, Providence, Acosta, Twyman, Winowiecki & Van Asten, 2017).

Kenya covers a total area of 582,646km² out of which water covers a paltry 11,230km² representing 1.9% of the total land area and 16% is made up of land with high productivity and useful for agriculture (Morgan, Bowling, Bartram & Kayser, 2017). The remaining 84% is dry and can only be utilized through livestock production and not for farming. The reduction of Kenyan poverty mainly depends on agribusiness. Moreover, most parts of the country are not suitable for agriculture and water supply is ineffective. The development of the country will depend on the extent to which the government will enforce the implementation of the reforms in the departments mandated with the execution of those changes. As indicated by the World Bank 2002, influential organizations are required at the national, location and community level to guarantee that all partners can add up to to the necessary leadership process (Okechi, 2015).

2.1.1 Coverage and Governance of Water Reforms

Water sector reforms and governance are essential for ensuring that the delivery of water services is effective, efficient and sustainable. In Kenya, the Athi Water Services Board (AWSB) is responsible for providing water and sanitation services to Nairobi and surrounding areas. The AWSB has been instrumental in providing water and sanitation, especially in Nairobi, where water is a scarce resource (Ng'ang'a, & Mbataru, 2022). Water sector reforms and governance are essential for ensuring that water services are delivered effectively, efficiently, and sustainably. The Athi Water Services Board (AWSB) has played a significant role in implementing water sector reforms and ensuring that water services are delivered to Nairobi and surrounding areas (Ndungu, 2014). The AWSB's governance structure ensures that there is transparency and accountability in the management of water services, which is crucial for the provision of quality water and sanitation services to the people of Kenya. According to Mekonnen, Hoekstra and Becht (2012), almost half of the population in Kenya are not accessing to clean water and the sanitation services are inadequate. The climatic change in the country through pollution, cutting down of the trees and chemical emission from the industries have further polluted the available water in the country, for example, Athi river (Munyao, 2018).

Managing of the resource effectively is essential to human society for sustainability. A series of institutional changes have been initiated to improve water management, strengthen water institutions, associations and water service providers so to help in distributing the water resource and solving issues at the grassroots levels (Muriithi, 2016). Likewise, the ministry of water, the Council, transfer of water rights, were only replicated to solve the problems (GOK, 2007). Water supply and sanitation are likewise among the critical issues stressed in Vision 2030. The Vision visualizes accessibility and access to water to all people continuously by 2030 (Mwenzwa & Misati, 2014). To ensure the goal is achieved, the parliament Water Act

2002 was enacted by parliament to oversee water is managed more efficiently through the separation of the obligations (Mumma, 2017).

According to Warghade and Wagle (2011), the equity dimension is essential as part of the governance, which refers to the distribution of costs and benefits among various stakeholders. Moreover, apart from financing costs, there is additionally the social and environmental costs, which are the aftereffect of creating framework required for age and dispersion of water (Mengistu, 2015). The primary preferred position to partners from the area is water and sanitation administrations, including compelling access-compelling access to water presently cherished in Kenya Constitution 2010 is reliant on the accessibility of water to a specific group which is influenced by physical, financial, political and social elements Muriithi (2016).

Cherop (2012) discovered that the poor administration had impacted the use of water division changes of institutional structures because of confusion within the institutions on the roles and responsibilities. Okechi (2015) reported that the Kenyan institution's systems and procedures were not strong enough to ensure effectiveness and efficiency in the water sector, especially in the implementation of water sector reforms. Poor terms of service and inadequate management capacity negatively impact on the level of service delivery. Institutions have not built up an integrated information management system which could have influenced the water sector reforms positively in terms of service delivery (Kithuku, 2014). There are various forms of corruption in the water sector which affect the success of the implementation of water sector reforms, these including withholding, denying and misinforming the customers.

2.1.2 Reporting and Governance of Water Reforms

AWSB is a Kenyan state corporation responsible for the provision of water and sanitation services in the Athi River basin. As a public entity, it is subject to various reporting and governance requirements, which aim to ensure accountability and transparency in its

operations. AWSB is required to prepare and submit annual reports to the Ministry of Water and Sanitation. These reports provide an overview of the organization's activities and financial performance during the year (Njunu, 2013). The AWSB in addition, is governed by a board of directors, which is responsible for providing oversight and strategic direction to the organization.

The study conducted by Ikobe (2014) examined the governance structure of the Water Services Board (AWSB) in relation to the appointment and composition of its board members. The board, responsible for overseeing water and sanitation services, is appointed by the Minister of Water and Sanitation. It consists of individuals with expertise in various fields such as finance, engineering, and management. This diverse composition ensures that the board possesses a wide range of knowledge and skills necessary for effective decision-making and management of water resources.

Furthermore, the AWSB operates within a regulatory framework that includes environmental regulations and health and safety standards, as highlighted by Njunu (2013). Compliance with these regulations is crucial for safeguarding the well-being of employees and the public. By adhering to environmental regulations, the AWSB can ensure sustainable and responsible water management practices, reducing any negative impact on the environment. Similarly, complying with health and safety standards guarantees the safety of employees and promotes a healthy working environment.

One of the critical drivers to water sector reforms was the issue of regular reporting in the water sector. K'Akumu (2016) reported that revenue and expenditure arising out of Water supply was unclear; its administration was poorly managed to lead to inadequate infrastructure systems and low morale to Personnel. There are many cases of the illegal connections in most of the urban areas which are not accounted for and the cartels end up distributing to the

residents without submitting the returns to the relevant authority. Data on water quality, water users and infrastructure becomes unclear and impossible to tell the value and status of water infrastructure given that government accounting initially was based on accrual accounting (Mekonnen, Hoekstra & Becht, 2012). In addition to regulatory requirements, the AWSB is also required to prepare audited financial statements, as mandated by the Auditor General's office. These financial statements provide a comprehensive overview of the organization's financial performance, including details of its revenues, expenses, and assets. By submitting audited financial statements, the AWSB demonstrates transparency and accountability in its financial operations, ensuring that resources are effectively managed and allocated to support the provision of water and sanitation services.

Poor governance of water catchments and supply has portrayed how the government have failed in its mandate and showed the absence of capability required for proper administration (Dubnick, 2015). A portion of these failures incorporates lack of inclusivity, openness, consistency and responsiveness. As indicated by Okechi (2015), the administration of the water institutions is very critical; however, the management has shown incompetence in which the challenges of distributing clean water has remained a big challenge. Barreiro (2013) analyzed the obstacles faced in implementing water resources policies in the Philippines, revealing that ineffective management and widespread corruption hindered reform implementation, and suggested the need for capacity-building, institutional development, and data accumulation to support coordinated administration and achieve water sector reforms in the country.

Chilwe and Nkhata's (2014) study in Malawi focused on investigating the impact of effective water governance, particularly examining the principles of accountability, transparency, and participation in water management. The research findings highlighted that the management issues significantly influence the extent to which fair and equitable water allocation is achieved among competing users. The study emphasized that adherence to these principles is crucial for

ensuring a just and sustainable distribution of water resources. The results of the study revealed an important paradox in Malawi's water situation. Despite having an abundance of freshwater, the country still experiences water shortages due to disparities in the distribution process. This highlights the significance of proper water governance practices in addressing the issue of water scarcity. By emphasizing accountability, transparency, and participation in water management, policymakers and stakeholders can work together to ensure a more equitable and efficient distribution of water resources, thus mitigating the challenges associated with water shortages in Malawi.

Another study conducted by Okechi (2015) shed light on the impact of water interventions on rural communities' access to water sources. The research indicated that although there have been efforts to increase the number of water sources in rural areas, these interventions have not necessarily improved access to water for rural individuals. This suggests that simply expanding the availability of water sources is insufficient in ensuring equitable access, and additional factors such as infrastructure development, affordability, and community involvement need to be addressed to effectively enhance water accessibility in rural regions. The study underscore the importance of effective water governance and comprehensive interventions in addressing water scarcity and ensuring equitable access to water resources. By incorporating principles such as accountability, transparency, and participation into water management practices and considering the multifaceted nature of water accessibility challenges, policymakers can make significant strides in achieving sustainable water distribution and meeting the water needs of communities.

Brikke and Rojas (2011) examined the critical components for maintainable cost improvement, with regards to water supply in the Netherlands. The examination discovered that the primary factor why cost reduction is a trouble objective to accomplish is that inadequate management systems within the institutions influence it. The study demonstrated that many water and

sanitation activities start without in the end regarding the estimation of the interrelationships and that is the explanation the expense of numerous discovered that the factor had impacted the use of water division changes of the water projects keeps on increasing. The study also suggested that changing innovations and improving the administration to produce quality results will reduce the cost and have maximum benefits.

2.1.3 Stakeholder Participation and Governance of Water Reforms

The study conducted by Njihia and Senaji (2018) examined the relationship between stakeholder participation and governance at the Athi Water Services Board (AWSB). Stakeholder participation plays a crucial role in the effective governance of water services, as it ensures that the decisions made by the board are representative of the diverse interests and needs of the stakeholders involved. The study found that stakeholder participation had a significant positive impact on governance at the AWSB. This implies that when stakeholders are actively engaged in the decision-making processes and their perspectives are considered, it leads to better governance outcomes. The findings highlight the importance of promoting and facilitating meaningful stakeholder participation in water governance to enhance transparency, accountability, and the overall effectiveness of water service delivery.

Moraa, Otieno and Salim (2012) reported that the integrated water resources management approach to managing water brought out crucial stakeholders in the water sector. Until its unveiling in Dublin-Scotland, no stakeholder recognition framework existed in the Water Sector and this led to a severe governance gap which allowed decisions to be made without consultations (Blackstock & Richards, 2017). Water sector was being managed by across institutions who consulted among themselves within cross-cutting legal frameworks. There existed Ministry of Water which maintained Water schemes across the Country, Municipalities and Town Councils being in charge of Water in their jurisdictions, Ministry of Environment

and Natural Resources which was in charge of Forests and the Ministry of Agriculture (Katomero, 2017).

All these Institutions had to enable legislation and jurisdictions and it is clear that stakeholders were majorly the public institutions (Bo Jensen, 2010). Then, there was a need to bring in consumers, communities and development partners, among others in the management. Water sector reforms headed a new era where detailed stakeholders mapping was done and all players brought in decision making regarding all water matters. Nyanchaga (2011) discovered that changes in the municipal water sectors were required, since keeping up business, as usual, would prompt further weakening of water supply. Stakeholder involvement is so paramount for the administration to provide a stronger lead to the water sector reforms implementation and processes if they are to acquire real influence and success in the reforms. The financial institutions should, therefore, be made to adopt a comprehensive strategy to guarantee that continued changes made will be successful.

Tushaar (2014) investigated the reforms and best policies to be undertaken in India to increase the availability of water to everyone. The discoveries of the study uncovered that the proposed plans and regulation in the water sector had received mixed reaction from the society who comprised of the beneficiaries of the reforms and other stakeholders. The study also reported that the only way the improvements will be successful is adjusting those reforms and establishing the best mechanism that will make sure the changes set are being implemented. The study recommended that involving all the stakeholders in the provision and distribution of water without any form of discrimination will help the reforms to get implemented.

Uwejamomere (2013) investigated how the involvement of the civil society organization in urban water sector reforms in Ghana has changed the governance. The investigation discovered that there was an adequate conference on the municipal water change process in Ghana. The

examination also showed that there is optimal importance of allowing the stakeholders to participate in the changes of any reform before implementing it. The investigation likewise discovered that there was insufficient private sector interest towards changes usage. Also, the researchers determined that there was a requirement for coordination and worldwide battling on the advantages of the water part privatization. The investigation recommended all the key water contractual workers to deal with transparency, integrity and increase the level of the association if the reforms are anything to be achieved. The study concluded that privately-owned businesses ought to be given different responsibilities like credit to supply water and plan development under various agreements to increase the water supply.

As per Dill and Crow (2014), water division in Kenya and its set-up after 2002 changed to have the separation of 'water resource management' and 'water administrations' arrangement. The management of water assets is increasingly identified with the conventional standard in which the country in which the boards are to oversee the enforcement of the implementation of the policies and reforms with much consultation (Okechi, 2015). Managing water means confronting a 'double administration' framework: assets the executives and administration arrangement which are carefully interlinked; yet institutional, political, responsibility courses of action, and motivating forces and interests will, in general, vary significantly, making administration exceptionally complex (Connor, 2015).

2.1.4 Challenges and Governance of Water Reforms

Water Sector reforms are faced with a lot of challenges and most of the improvements that were considered to be achievable in the early 2000s have not yet been possible up to date (Okechi, 2015). K'Akumu, (2016) argued that execution the water reforms in the country has been accelerated by lack of resources, poor governance, accountability, fundings and poor infrastructure. Efficient provision and availability of water is both enshrined in Kenya

Constitution 2010 and the economic blueprint of Kenya Vision 2030. The difficulties confronting the water sector in the country have not been solved and they are mostly related to the governance in the water sector. Endeavours by the government, organizations and NGOs to improve various parts of administration in the water sector have been done indiscriminately (Schwartz, Tutusaus & Savelli, 2017).

Jeuland and Whittington (2014) investigated the difficulties for water sector changes in a case of the developing economies, particularly to the Blue Nile in Ethiopia. The examination discovered that financial and institutional factors portray challenges to water and sanitation improvement in the vast majority of the growing nations. The investigation also found that political interference in the water reforms, low investments, non-compliance of the customers and imperfect administration process are factors that upset the usage of the water changes in these developing countries in the World.

In their study, Jeuland and Whittington (2014) delved into the challenges faced in implementing water sector reforms in developing economies, using the case of the Blue Nile in Ethiopia as an example. The research highlighted that financial and institutional factors play a significant role in hindering progress in water and sanitation improvements in many developing nations. Insufficient financial resources allocated to the sector and limited institutional capacity pose significant challenges to the successful implementation of water reforms. Moreover, the study identified political interference as a key obstacle to effective water sector reforms. Political factors, such as changes in government priorities or lack of political will, can disrupt the implementation process and impede progress in the water and sanitation sector. Additionally, the low level of investment in the water sector, both from domestic sources and international aid, contributes to the difficulties faced in achieving comprehensive improvements in water and sanitation services.

Chedié (2014) investigated how the private sectors in Tanzania were supplied with water. From the study, it was discovered that commitment of the partners, government involvement and proper management in the areas responsible with the provision of water enhanced positive results and water was available to many sectors in Dar es Salaam region. The examination recommended that the government and other stakeholders should be fully involved in ensuring the reforms have been implemented and the areas responsible with the distribution of water to be given enough funding to improve on the infrastructure.

Khayota (2014) examined the effect of the execution of the change on managing the water changes and improving the administration governance on account of Lake Victoria South Water Services. The examination found that the area still required more resources to finish the water section changes. Besides, there was inadequate information structure to complete the water sector reforms effectively since the management was faced with corruption and nepotism. Likewise, the study reported that it existed insufficient reforms components for checking and assessing the achievement. The analysis concluded that investment in the water sector is very crucial and ought to include an assortment of partners that can give conclusions and can keep the administration checked frequently. The study recommended that there should be a well-established mechanism for pooling of the resources together to implement the changes conveniently.

2.1.5 Government Regulations and Governance of Water Reforms

Government regulations was used as a moderating variable. A moderating variable is one that can change the relationship between independent and dependent variables in one of several ways, including by strengthening, weakening, negating, or other means. Moderating variables have the power to reverse the direction of a link between independent and dependent variables. The administration of the water institutions is crucial, but has frequently been impacted by political interference and government laws, according to Okechi's (2015) study. The study's

findings are going to be highly significant because they will help us better understand the many things that prevent water utilities from recovering their costs and how we can fix them.

In their study, Yatim, Rusuli, and Yatim (2019) explored the role of government rules in bringing together institutional frameworks to a certain extent. Government rules serve as a crucial tool in establishing a framework that guides the functioning and interactions of institutions within a particular context. These rules aim to provide a structured approach to governance, enabling institutions to operate cohesively and efficiently. Policies and regulations play a vital role in ensuring that laws are updated, established, and adhered to in accordance with the Kenyan Constitution of 2010, as highlighted by Chacha, Nyangau, and Omare (2021). The constitution sets the foundation for governance and legal frameworks in Kenya, and policies and regulations are designed to align with its provisions. These policies and regulations serve as instruments for implementing constitutional mandates, providing guidelines and directives for various sectors, including water, education, health, and infrastructure, among others.

Kimani, Mouni, Wanjau, and Mung'atu (2015) showed that externalities, low users' charges, and inefficient water pricing are some of the issues that prevent cost recovery. Cross-subsidization, a slow increase in user fees, and service improvement are suggested solutions for cost recovery. Any action taken by the government with the goal of changing a situation can be referred to as government regulation. The implementation of laws and regulations, taxes, interest rates, and market control are just a few of the challenges the government utilizes policies to address (Alabi, David & Aderinto, 2019). In summary, government rules, policies, and regulations serve as essential tools for bringing together institutional frameworks and ensuring effective governance. By aligning with constitutional mandates, these rules provide guidance, establish standards, and promote accountability, ultimately contributing to the overall development and well-being of a country and its citizens.

2.1.6 Governance of Water Reforms

The Athi Water Services Board faces various water governance issues in different areas, which affect its ability to provide quality and reliable water services to its customers. One of the significant challenges is water scarcity, which is exacerbated by climate change and overreliance on surface water sources (Ng'ang'a & Mbataru, 2022). In some areas, there is a lack of infrastructure for water storage, treatment, and distribution, leading to inadequate service coverage, especially in rural areas. The Board also faces issues related to water quality, including contamination of water sources due to industrial pollution and improper disposal of waste (Mwangi, 2015). Poor water governance practices, including corruption, lack of transparency, and weak institutional capacity, also contribute to the challenges faced by the Board. These issues require a collaborative effort from all stakeholders, including the government, civil society organizations, private sector actors, and communities, to ensure sustainable water management and service delivery (Gitau, 2013).

Governance is one of the vital components of the management and its an everyday aspect of our lives (Cosens & Chaffin, 2016). According to Knieper and Pahl-Wostl (2016), the type of governance in an institution coordinates and generates systems that help to succeed in performing various tasks. When an Institution has developed a proper governance structure, all its systems and processes follow suit and help it deliver on mandate and it becomes very productive compared to other institutions in the same industry. Likewise, Megdal, Eden and Shamir (2017) reported that good governance ensures the success of any institution, whether private or public. Governance stipulates the responsibilities of each of the employee in the institution and avoids ny misunderstanding and conflicts.

Governance of water reforms is a complex issue, involving numerous factors such as policy development, implementation, and regulation. Araral and Wu (2016) emphasize the importance of robust governance structures in effectively managing water resources and ensuring equitable

distribution. They argue that governance plays a crucial role in the successful implementation of water reforms, as it involves making critical decisions, mediating differing interests, and ensuring the coordination of various stakeholders. The scholars also highlight that effective governance can help overcome challenges such as corruption, inefficiencies, and conflicts that may arise during the implementation of reforms. By promoting transparency, accountability, and stakeholder participation, good governance can enhance the effectiveness and sustainability of water reforms.

A study was conducted by Leclert, Nzioki and Feuerstein (2016) to establish how governance and management difficulties affect the supply of water to the customers in Kenya. The outcome of the study showed that the governance of the water boards in Kenya is abysmal that have caused shortages of water despite the country been blessed with rivers, lakes and water ground waters. The study recommended that the board of directors and other management organs should be restructured over time and none of the employees in the highest rank should be maintained in those position for an extended period.

2.2 Theoretical Review

This part will review the stakeholder and dynamic capabilities theories to explain both the concept of community involvement and better governance of water resources.

2.2.1 Stakeholder Theory

Stakeholder theory provides a valuable framework for understanding the complex relationships between organizations and their stakeholders. It challenges the narrow focus on shareholder value and emphasizes the importance of considering the interests of all stakeholders in decision-making processes. Stakeholder theory promotes a more inclusive and socially responsible approach to management, recognizing that organizations have a broader set of responsibilities beyond financial performance. The works of Freeman (1983) and the

contrasting views of Friedman (1970) have been instrumental in shaping the discourse and application of stakeholder theory in the field of management.

The hypothesis applied to the investigation. The idea demonstrates that it is each individual entity's duty to manage the firms in a way that balances the interests of all stakeholder groups and improves efficiency and performance. According to the stakeholder hypothesis, an organization can function better if its stakeholders are consulted, participating in decision-making, and fully informed about organizational changes. Allowing the stakeholders to conduct the audits strengthens their allegiance and dedication to the company.

In any event, the stakeholder approach has been discredited for assuming that the interests of the many partners can be balanced, sold off, or adjusted against one another (Phillips, Freeman & Wicks, 2003). Furthermore, it is possible to distinguish between two methodological strands that are primarily distinct when adopting stakeholder theory. On the one hand, the governing stakeholder writing emphasizes moral and ethical standards as the primary defensible course for business behavior, regardless of the effects of these actions on the company's reputation (Deegan, 2006). Managers must reveal more information than is legally needed in order to fulfill the interests of their stakeholders due to the intense pressure from the firm's stakeholders to be more transparent and accountable about their actions (Ponnu & Okoth, 2009).

It suggests that organizations should take into account the perspectives and interests of various stakeholders, including customers, employees, suppliers, the community, and the environment. The theory recognizes that each of these groups has a stake in the success of the organization and that they can impact its performance and sustainability. Athi Water Services Board (AWSB) is a Kenyan government agency responsible for the provision of water and sanitation services in the Athi River Basin. Its stakeholders include the government, water users, suppliers, employees, the community, and the environment. These stakeholders have different

interests and needs that the organization needs to balance to ensure that its operations are sustainable and effective. The government, for example, may be interested in the financial performance of the organization, while water users may be concerned about the quality and reliability of the water supply.

The relevance of stakeholder theory to AWSB lies in the need to balance the interests and needs of its various stakeholders. The organization needs to consider the perspectives of all its stakeholders and ensure that their needs are met in its operations. For instance, the board needs to ensure that the water supplied to the community is safe for human consumption, that the environment is protected, and that the suppliers are paid on time. Failure to address the interests and needs of these stakeholders can lead to conflicts, loss of trust, and ultimately, a decline in the organization's performance.

In terms of governance, stakeholder theory suggests that the organization's management and board of directors should act as stewards of the stakeholders' interests. They should be accountable for the decisions and actions taken by the organization and ensure that these decisions align with the interests of all stakeholders. The board of directors should oversee the management's actions and ensure that they are acting in the best interests of the organization and its stakeholders.

In conclusion, stakeholder theory is relevant to AWSB's operations and governance in ensuring that the interests and needs of its various stakeholders are met. The organization needs to balance these interests and ensure that its operations are sustainable and effective. The board of directors and management have a responsibility to act as stewards of the stakeholders' interests and ensure that the decisions and actions taken by the organization align with the interests of all stakeholders.

2.2.2 Dynamic Capabilities Theory

Dynamic capabilities theory is a management theory that focuses on an organization's ability to adapt to changing environments and develop new capabilities to achieve sustained competitive advantage. It suggests that organizations need to be able to sense changes in the market and adapt quickly to remain relevant and successful. This theory is particularly relevant to organizations operating in dynamic and complex environments. Athi Water Services Board (AWSB) operates in a dynamic environment characterized by changes in population, climate, and infrastructure. Its stakeholders include the government, water users, suppliers, employees, the community, and the environment. These stakeholders have different interests and needs that the organization needs to balance to ensure its operations are sustainable and effective.

AWSB may need to develop new technologies to improve the efficiency of its operations, new pricing strategies to remain competitive, or new partnerships with other organizations to enhance its service delivery. In terms of governance, dynamic capabilities theory suggests that the organization's management and board of directors should be proactive in identifying and exploiting new opportunities to enhance its capabilities. They should be aware of changes in the market and environment and take steps to develop new competencies to meet the changing needs of its stakeholders. The board of directors should oversee the management's actions and ensure that they are taking steps to enhance the organization's dynamic capabilities.

In conclusion, dynamic capabilities theory is relevant to AWSB's operations and governance in ensuring that the organization can adapt to changes in the market and environment to remain competitive and effective. The organization needs to develop new capabilities and competencies to meet the changing needs and demands of its stakeholders. The board of directors and management have a responsibility to be proactive in identifying and exploiting new opportunities to enhance the organization's dynamic capabilities. The presentation of the

theoretical framework is illustrated in Figure 1

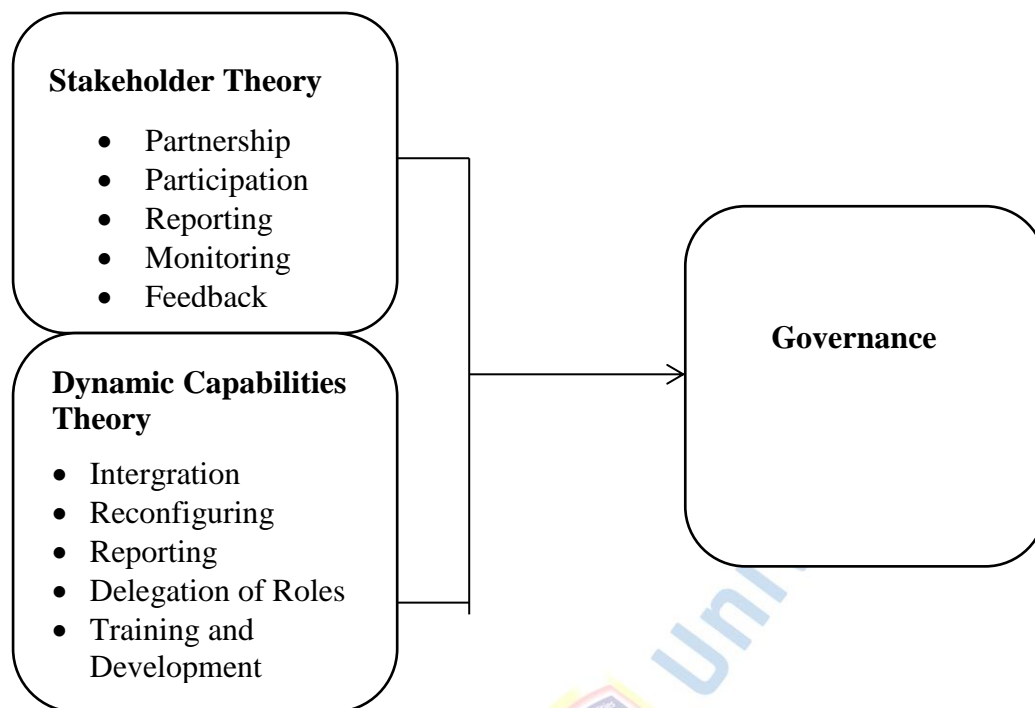


Figure 1: Theoretical Framework

Source: Researcher (2023)

2.3 Conceptual Framework

Figure 2 presents the conceptual framework

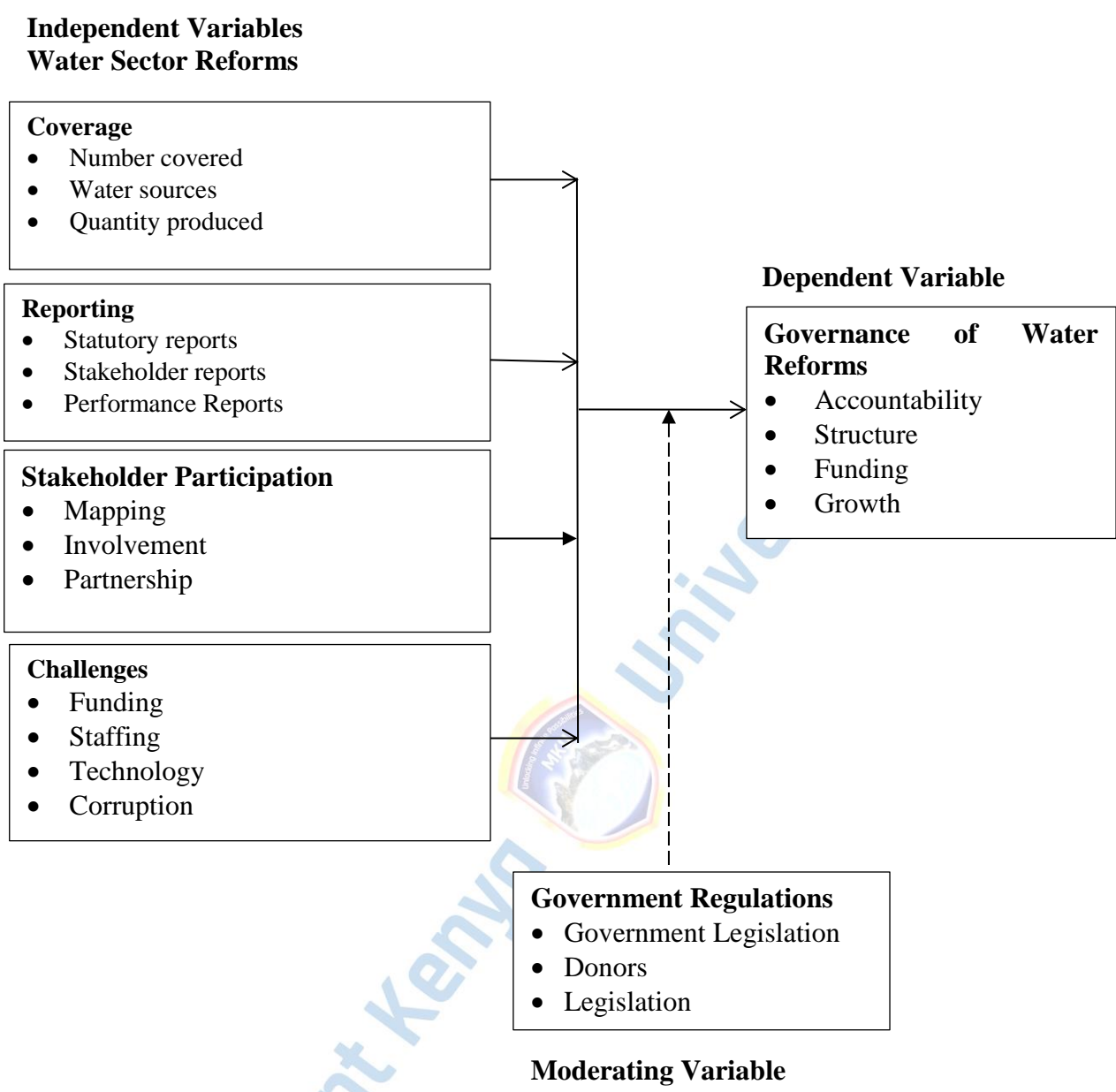


Figure 2: Conceptual Framework

Source: Researcher, (2023)

Coverage is the total Population who can access to clean water through an instantaneous connection or through using designated areas established by the government as water points (Bandaragoda, 2016). Coverage can also be defined in terms of the number of people covered with water, the water sources and the quantity of water produced at a given period. The main

driving force behind Water sector reforms was to enhance growth in coverage and ensure the availability of water to all users by the year 2030.

Further reporting is showing high levels of integrity, responsibility and transparency. This can only be achieved through a well-defined framework where roles and powers are clarified and the books of accounts are checked frequently (Barreiro, 2013). Reporting becomes successful through empowering the employees, having proper legislation and allowing the development partners to monitor the management. Stakeholder participation is a crucial plank for management which means involving other members in the process of decision making sharing through Mapping, Involvement and Partnership.

Challenges are the setbacks that hinder the institution from meeting their targets. In the water sector reforms, these challenges are brought up by inadequate funding, inappropriate, Staffing, not in a position to adapt to the modern technology and taking of the bribes and high corruption levels in the departments (Khayota, 2014). The government involvement in the organizations, donors, and the legislation affects the independence of the institutions. Likewise, governance is very critical and it involves how the resources are utilized by the institutions to generate the output. Good governance comprises of proper accountability, structure, funding and the growth of the institutions (Araral & Wu, 2016).

2.4 Summary of the Literature and Research gaps

All around, endeavors have been going through to change the governance of the water administration. A portion of these focused changes was the devolution of essential leadership authority from national or central governments to grassroots governments and the establishment of the boards (Kemper, 2007). This basically was the Intergrated Water Resource Management framework (IWRM) which was later adopted for worldwide application .

Despite the fact that IWRM is generally observed as a valuable and enduring water the executives approach (Matondo, 2012), a few researchers have taken increasingly basic perspectives on IWRM (Biswas, 2014; Blomquist, 2015). Since a significant part of the IWRM writing stays hypothetical and prescriptive, it is unclear in what ways the advantages or constraints of IWRM happens (Chediak (2014). A significant inquiry that has been raised as of late is the means by which the highlights of IWRM encourage the limit of administration in organizations to change and adjust after some time

A vital element of the Water Sector Reforms in Kenya and its institutional set-up after the 2002 reforms was the division between water assets the board and water administrations. The examination of the sector constituents and discussions with partners focuses on the need for cooperation among different parties. The provision of water is seen as compulsory to everyone and been categorized as a public good; however, the administrations of water are progressively identified with benefit making exercises with enrolled organizations, buyers and market courses of action taking the middle stage. Managing water signifies 'double administration framework'; and the administration communication is interlinked. Institutional, political, responsibility courses of action, incentive and interests will, in general vary, making administration complex and challenging to implement the reforms successfully. The different institutional components have outcomes on the water change sector in the nation; accordingly, it influences the implementation of the reforms negatively in most cases (Bo Jensen, 2010).

The ramifications of all the literature are the requirement for reasonable and proficient measures to be taken in the utilization and the executives of freshwater assets. This would not just guarantee the nonstop accessibility of the asset, however, besides, guarantee the proficient use of assets in water the executives and in this way decrease the cost engaged with the administration of water administration conveyance. Following these targets, during the most

recent couple of decades, specialists in the part have propounded different administration strategies that would guarantee both the proficient use and supportability of the asset. Various techniques have been set up by the legislature and the management of the institutions responsible for water sector reforms in Kenya. The literature takes into consideration all the possible factors and steps to be taken to realise the achievement of better results.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The importance of research methodology lies in its ability to provide a structured approach to problem-solving, ensuring that the research is reliable, verifiable, and can be replicated. It guides researchers in choosing the appropriate design and method for their study, contributing to the credibility and validity of the findings. Moreover, a well-planned research methodology helps to communicate the research process clearly, facilitating understanding and critique by other researchers and enhancing the overall quality of the research.

3.2 Research Design

A research design entails a roadmap, structure and an action plan to be utilized in probing the research problem and obtaining the retorts to the research queries (Creswell, 2017). The study adopted the descriptive research design. The primary purpose behind using the descriptive research design was that not much was known yet about the topic or problem. The design helped examine why something happens, how, when and where. A descriptive research approach was utilized for this investigation to highlight the characteristics of a particular situation, event, or case. When gathering information regarding people's views, opinions, and habits, the descriptive study design is used, according to Chandran (2004). The best study design was therefore a descriptive one. The study utilized a descriptive research design with questionnaires and statistical analysis to provide a comprehensive understanding.

3.3 Location of The Study

Kombo and Tromp (2006) defines study location as pertinent geographical or the definite zone considered appropriate to understanding the study phenomena and thus gives the answers

required for an inquiry. The study was conducted at the Athi Water Services Headquarters offices located at 3rd floor African Re-Centre , Hospital Rd- Upper Hill area, County of Nairobi. This is found to be the most suitable location since most of the top management of the organization, who are the policy makers and the custodians of good corporate governance will be found . AWSB overseas Nairobi County, Muranga County and Kiambu County environs

3.4 Target Population

The target population included employees of Athi Water Services Board (AWSB), consisting of 80 individuals in various management levels, including 19 in top management, 22 in middle management and 39 in functional management roles. The study only focused on the management since they are well informed about the internal operations, thus gave a comprehensive data for the analysis. By focusing on management, the study was able to gather comprehensive data on the organization's operations, as managers typically have access to information and resources that other employees do not. The goal was to gain a detailed understanding of the organization's internal operations and decision-making processes.

Table 1: Target Population

Strata	Targeted Population
Top Management level	19
Middle level management	22
Functional level of management	39
Total	80

Source: Athi Water Services Board (2019)

3.5 Sample and sampling procedures

The study conducted a census . According to Kothari (2004), conducting census gives a more accurate and reliable analysis since all the population are involved in giving out their opinions.

According to Findlay (2006), when the researcher finds the total population is small and manageable, conducting a census gives more reliable results. Therefore, since our targeted population was 80 respondents, which was small and manageable, the researcher opted to do a census which covered all the targeted population.

Table 2: Sample size

Strata	Technique	Sample Size
Top Management level	Census	19
Middle level management	Census	22
Functional level of management	Census	39
Total		80

Source: Author (2019)

3.6 Description of Research instruments

Questionnaires were administered. The reason why questionnaires were used was that they had a high response rate and just needed to be handed to respondents to be completed, took less time to administer, and provide the prospect of anonymity and first-hand data collection. Respondents were given the opportunity to reply to open-ended questions in the manner that best reflected their thoughts and opinions. Additionally, closed-ended questions were asked.

Closed-ended questionnaires are commonly used to collect quantitative data, and for good reason. These types of questionnaires are structured to provide predetermined responses, typically in the form of multiple choice, yes/no, or rating scale options. This format allowed for standardized responses, making it easier to analyze and compare data across different respondents. Closed-ended questionnaires were also efficient, as they were administered quickly and easily to a large number of participants. Additionally, the use of closed-ended

questionnaires reduced response bias, as participants were less likely to be influenced by interviewer or surveyor bias, as well as social desirability bias.

On the other hand, open-ended questionnaires were used to collect qualitative data. These types of questionnaires allowed participants to respond in their own words, providing a rich source of information on their thoughts, feelings and experiences. Open-ended questionnaires were particularly useful since the goal was to gain an in-depth understanding of a specific issue or topic, as they allow participants to express their opinions and ideas in their own unique way. Additionally, the use of open-ended questionnaires helped to identify unexpected or previously unknown issues, which can be further explored in subsequent research.

3.7 Validity and Reliability of research instruments

Prior to distribution to the chosen sample, the researcher's data gathering tool was pilot tested to make any necessary adjustments. Pilot testing is an essential step in the process of data collection, as it helps to ensure that the research tool is effective in achieving the research objectives. Prior to distributing the questionnaire to the chosen sample, the researcher conducted a pilot test to identify any necessary adjustments. The purpose of pilot testing was to evaluate the research tool's reliability and validity, identify any problems, and refine the research tool to ensure that it is clear and understandable for respondents. The pilot test allowed the researcher to assess whether the questions were appropriate, understandable, and easy to answer for the respondents. If any issues were identified during the pilot testing, adjustments were made to the questionnaire. These adjustments included changing the wording of questions, reordering questions, or removing questions altogether.

3.7.1 Reliability

In evaluating the reliability of the research instruments, Cronbach (1951) highlighted the significance of consistency and repeatability, and in this particular study, the reliability was tested using ten employees from the Rift Valley Water Services Board.

3.7.2 Validity

To ensure the validity of the data collection instruments, the supervisor reviewed and confirmed the relevance of the questionnaire questions, incorporating suggestions from the lecturer, thus enhancing both the content and construct validity.

3.8 Data collection procedures

The data collection tool used in the study was a questionnaire that included both closed and open-ended questions, administered directly to the respondents, enabling comprehensive data gathering and ensuring clarity and accuracy in responses. After the questionnaires were completed, they were collected by a research assistant one week later. This time gap may have been used to give participants enough time to think through their responses or for the research team to analyze the responses of the initial respondents and decide if any changes to the questionnaire were necessary before administering it to the remaining respondents. The data collection was conducted across three levels of management. This approach allowed for a more comprehensive understanding of the research topic across different levels of management, as the perspectives and experiences of each level may differ.

3.9 Data analysis Procedures

The study employed content analysis to analyze qualitative data from open-ended questions, presenting the findings in prose format. For quantitative data, the SPSS statistical package was utilized for data organization, coding, and analysis, including the use of descriptive statistics

(e.g., mean, standard deviation, frequencies) and inferential statistics (e.g., Pearson correlation coefficient, multiple regression model) to examine the relationships among the variables. Additionally, an ANOVA analysis will quantify the best fit and determine the statistical significance of the whole model. The multiple regression model was;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon_i$$

Where: -

Y = Governance

β_0 = Constant

$B_1 \dots B_4$ = regression coefficient

X_1 = Coverage

X_2 = Reporting

X_3 = Stakeholders Participation

X_4 = Challenges

ε = Error term

The multiple regression model after moderation will be

$$Y = \beta_0 + \beta_1X_1 *M + \beta_2X_2 *M + \beta_3X_3 *M + \beta_4X_4 *M + \varepsilon_i$$

Where: -

Y = Governance

β_0 = Constant

$B_1 \dots B_4$ = regression coefficient

X₁= Coverage

X₂= Reporting

X₃= Stakeholders Participation

X₄= Challenges

ε = Error term

M= Moderation

3.10 Ethical Considerations

In research, it was important to observe ethical norms so as to ensure the aims of the study; which include creating or enhancing knowledge, truth and elimination of error. At the same time, research involves a lot of clearance with different parties and it is therefore important to uphold ethics and mutual respect if the study is to be a success.

3.10.1 Ethical Considerations Related to Researcher

If ethics is not applied to this research then the results could be misleading to both future research in this area, and legislation and policies that could be crafted and implemented on the basis of wrong data, results and recommendations, which could become impeding to officials and could wind up disintegrating open certainty and confidence in discoveries. This way, it was essential to be sincere, able, legitimate, and to pursue moral rules concerning this research.

3.10.2 Ethical Considerations Concerning Participants

Prospective research participants was fully informed about the procedures and the reason of the reseach as being purely for academic purposes. They were asked to give their consent to participate in the reaserch from an informed point of view. This consent was given through providing each willing participant with a consent letter to read and sign as evidence of their

consent. This letter also gave them the option of withdrawing at any time should they feel uncomfortable continuing with the survey. Those who do not give consent will not be coerced to do so. Further, the participants were assured of confidentiality through being guaranteed that information to identify them won't be made accessible to any individual who is not straightforwardly engaged with the investigation. This means that they were assured of anonymity throughout the study.

3.10.3 Ethical Considerations Concerning the Research Process

The researcher engaged the management and obtained their permission before conducting the survey. It would be unethical to go to employees of an organization and get data from them and come up with a research paper when the management are not aware.



CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

The chapter presents the response rate, demographic information, reliability test, descriptive statistics, correlation analysis, regression analysis and discussion of the findings.

4.1 Response Rate

Table 3 presents the response rate of the 80 questionnaires administered to the management of the Athi Water Services Board.

Table 3: Response Rate

Response	Frequency	Percent
Returned	74	92.5
Unreturned	6	7.5
Total	80	100%

The response rate was 92.5%, according to the findings in Table 3. A more than 50% response rate is deemed sufficient for descriptive research, as suggested by Mugenda and Mugenda (2008) and Kothari (2004). Babbie (2004) also found that a return rate of over 50% is acceptable for analysis and publication, whereas rates of 60%, 70%, and above 80% are considered good, very good, and exceptional. Hence, the study's 92.5% response rate was considered outstanding for the analysis.

4.2 Demographic Information

This section presents the findings of the gender of the managers, age, educational qualifications, position in the board and number of years served in the current position.

4.2.1 Gender of the Respondents

Figure 3 displays the results obtained from the study.

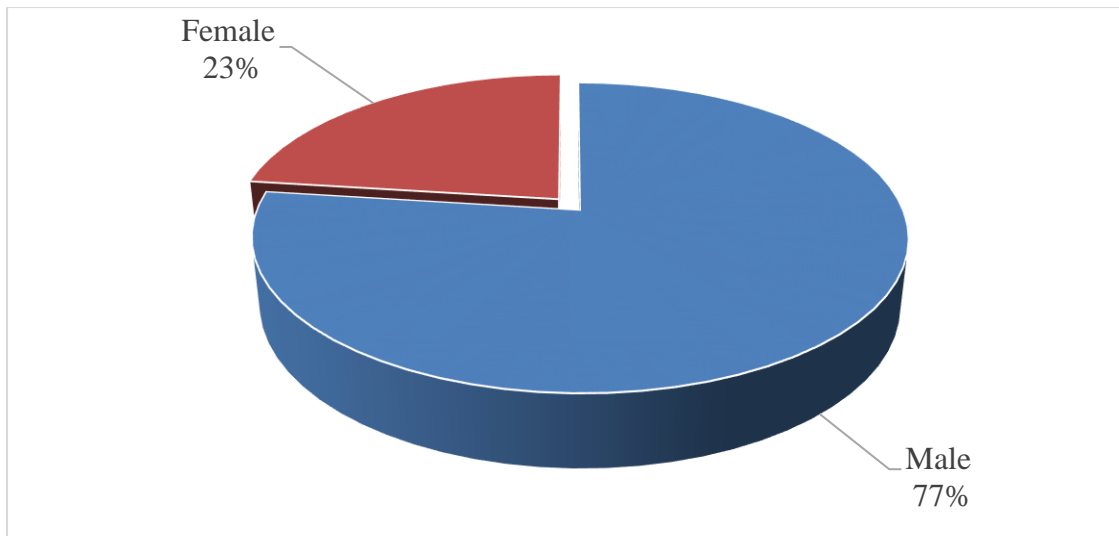


Figure 3: Gender

Based on the results presented in Figure 3, most (77%) of the management at Athi Water Services Board are male. The results found that only 23% were of female gender. This means that there are fewer opportunities for women to hold leadership positions in the organization compared to men. This gender disparity in management can have negative consequences on the organization, including the loss of diverse perspectives, reduced innovation, and decreased productivity. Women bring unique perspectives, experiences, and skills to the workplace, and their absence in leadership positions can limit the organization's potential for success (Jama & Mourad, 2019).

The underrepresentation of women in management may also suggest that there are underlying issues of gender bias and discrimination within the organization. It is essential to address these issues to create a more inclusive and diverse workplace (Ullman's 2017). To address this issue, the organization may consider implementing policies and practices that promote gender diversity and inclusivity in leadership positions. Additionally, the organization may consider conducting diversity and inclusion training to raise awareness of unconscious bias and to promote a more inclusive workplace culture. In conclusion, the results presented in Figure 3 indicate a significant gender disparity in the management of Athi Water Services Board. The

underrepresentation of women in management is a cause for concern, and the organization should take steps to address this issue to promote diversity, inclusivity, and the overall success of the organization.

4.2.2 Age of the Respondents

Figure 4 illustrates the findings of the study.

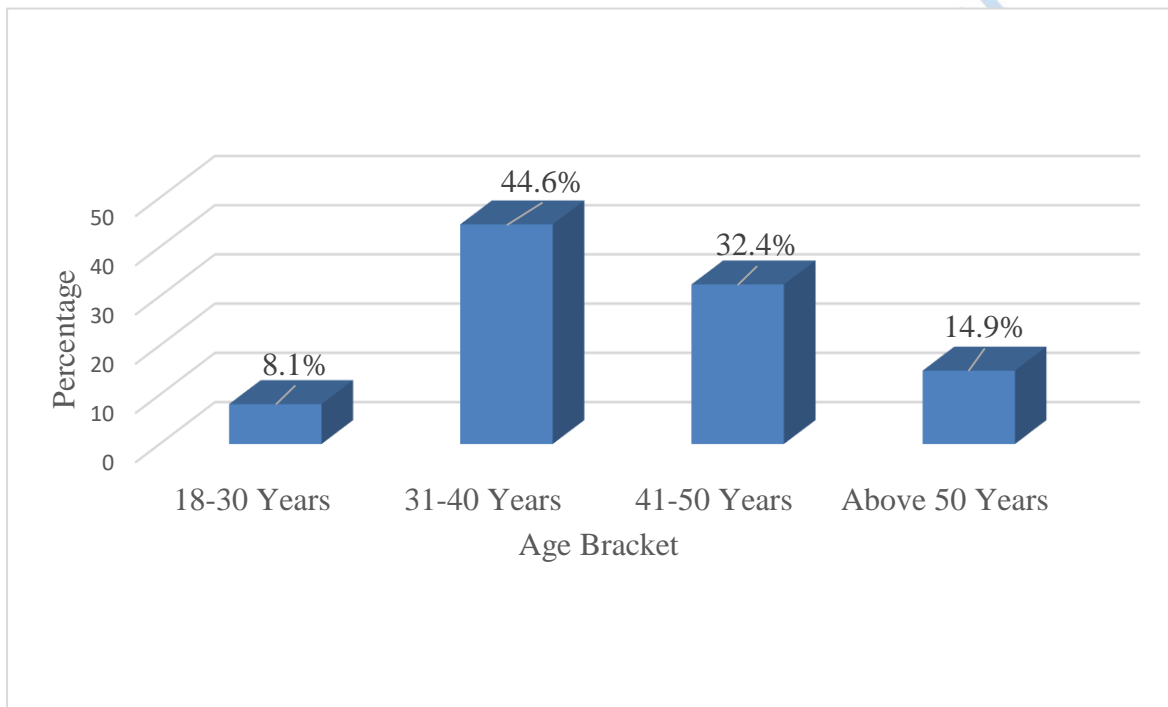


Figure 4: Age Bracket of the Respondents

Figure 4 shows that 44.6% of the Athi Water Services Board management were between the ages of 31 and 40, while 32.4% were between 41 and 50 years old, 14.9% were above 50 years, and 8.1% were between 18 and 30 years old, indicating that the majority of respondents were considered mature and responsible due to their age. Older workers make good leaders because they often have stronger communication skills and good leadership skills than their younger colleagues (Larsson, & Björklund, 2021). Hence, the organization has a relatively young and dynamic management team, which could bring new perspectives and ideas to the organization.

4.2.3 Educational Qualifications

Figure 5 illustrates the findings of the study.

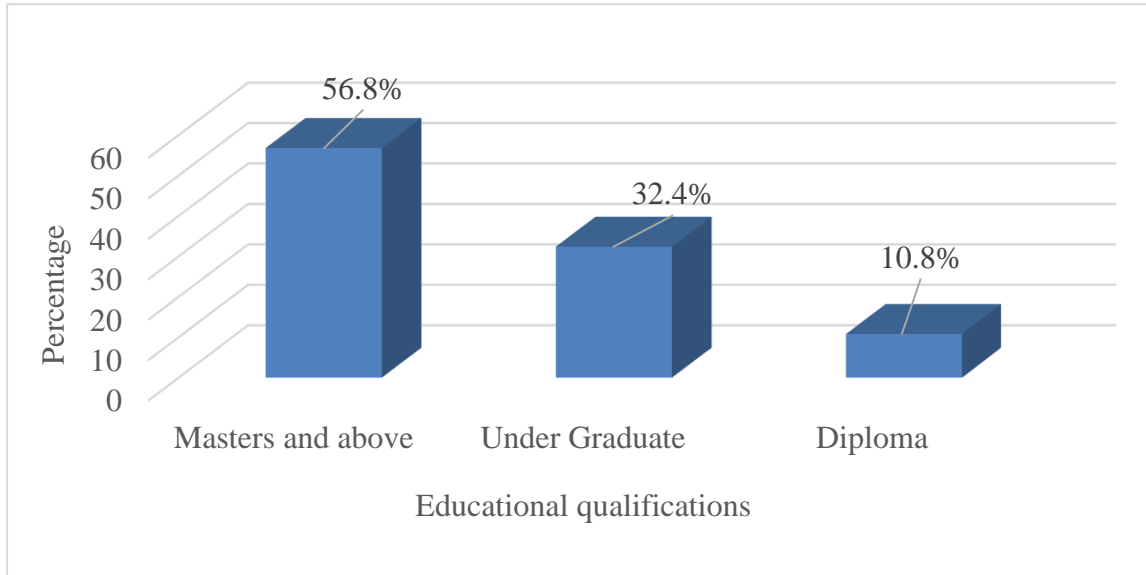


Figure 5: Educational Qualifications

The respondents from figure 5 show the majority (56.8%) of the management had masters and above. Further, 32.4% were undergraduate and only 10.8% had a diploma. This implied most managers had masters and above and thus, they were more competent and knowledgeable. Higher qualifications in management are significant in making rational decisions that benefit everyone in the entire organization. Overall, the results presented in Figure 5 suggest that the management team within Athi Water Services Board is highly educated, with the majority of respondents holding a master's degree or higher.

A highly educated management team bring a wealth of knowledge and expertise to the organization (Marbun, Effendi, Lubis & Pratama, 2020). While this could bring a wealth of knowledge and expertise to the organization, the small proportion of respondents with a diploma suggests that the organization may not be actively recruiting and developing talent with more vocational or technical skills. To address this, the organization may need to consider

implementing strategies to attract and retain talent with a broader range of educational qualifications, including those with more vocational or technical skills.

4.2.4 Management Position distribution

Figure 6 illustrates the findings of the study.

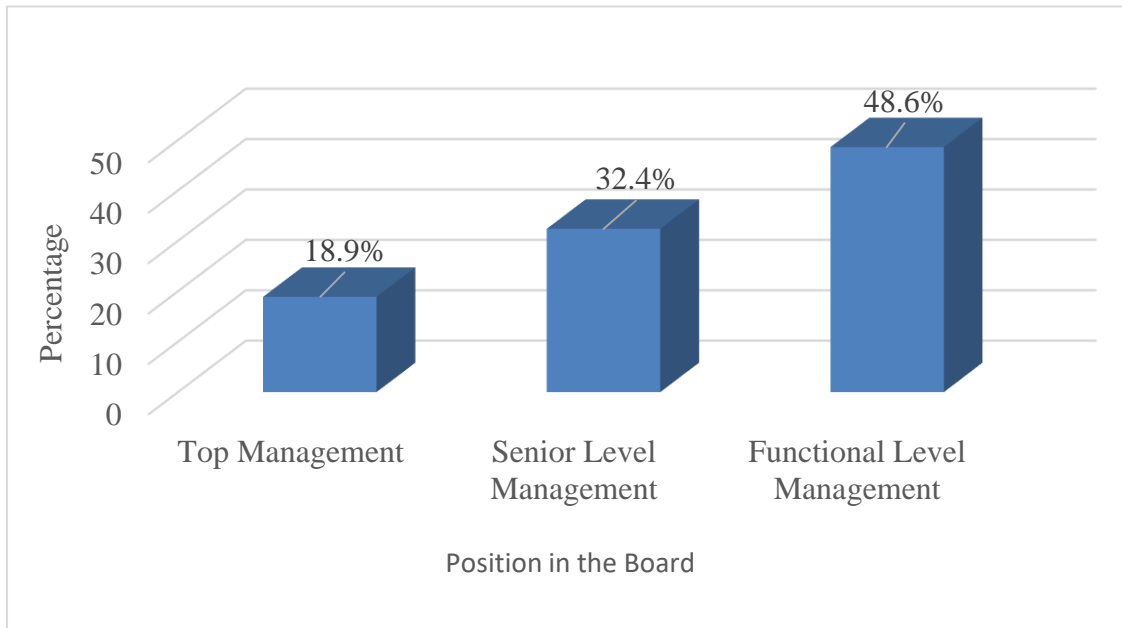


Figure 6: Position distribution

The results presented in Figure 6 provide insight into the hierarchical distribution of the management team within Athi Water Services Board. The data shows that the majority of the management team falls within the functional level management category, with 48.9% of respondents indicating that they are in this category. This suggests that the organization has a strong focus on functional areas such as operations, finance, and human resources. In contrast, the data shows that a smaller proportion of the management team falls within the senior level management and top management categories, with 32.4% and 18.9% of respondents, respectively. This suggests that the organization may have a flatter organizational structure, with fewer layers of management and a greater emphasis on functional management (Alsafadi, & Altahat, 2021).

Overall, the results presented in Figure 6 suggest that the management team within Athi Water Services Board is primarily focused on functional management. While this could provide the organization with a strong focus on operational areas, it could also suggest a need for more senior and top-level managers who can provide strategic direction and oversee the overall performance of the organization. To address this, the organization may need to consider implementing strategies to develop and promote talent within the senior and top management levels, or recruit experienced managers from outside the organization who can provide strategic guidance and leadership.

4.2.5 Number of Years Served in the current Position

Figure 7 illustrates the findings of the study.

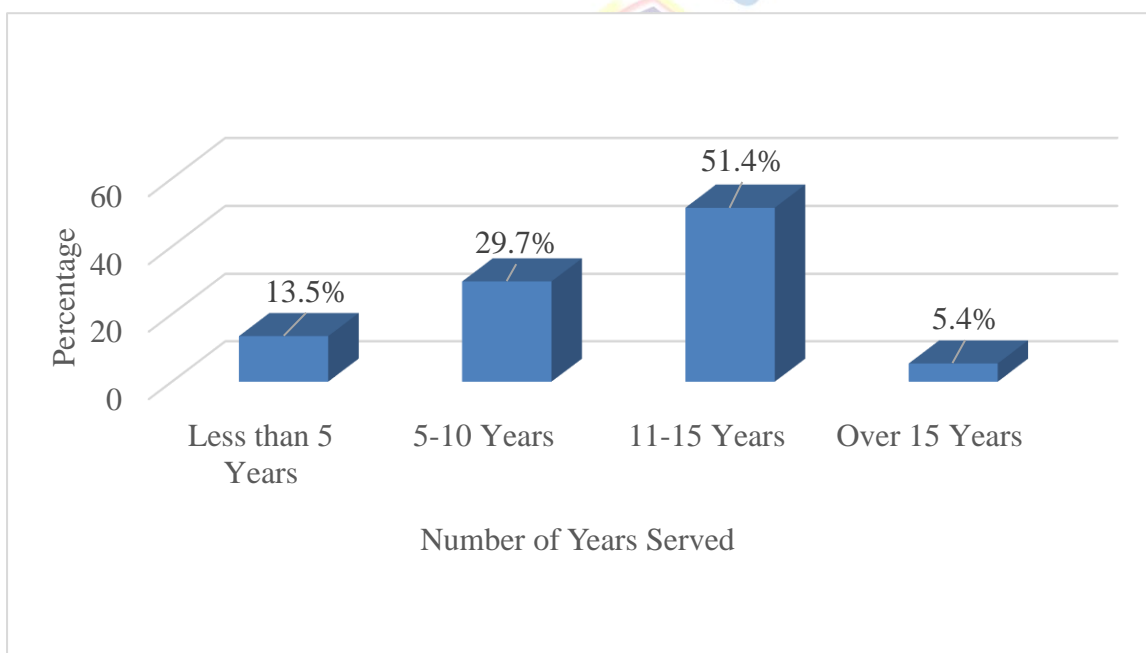


Figure 7: Number of Years Served in the current Position

The results presented in Figure 7 provide insight into the length of service of the management team within Athi Water Services Board. The data shows that the majority of the management team has worked for between 11 and 15 years, with 51.4% of respondents indicating that they

fall within this category. This suggests that the organization has a relatively stable management team, with many managers having been with the organization for a significant amount of time. In contrast, the data shows that a smaller proportion of the management team has worked for less than 5 years (13.5%) or over 15 years (5.4%). This suggests that the organization may have difficulty retaining talent in the short term, but has a strong core of experienced managers who have been with the organization for a longer period.

Hence, the results presented in Figure 7 suggest that the management team within Athi Water Services Board has a relatively stable length of service, with the majority of respondents having worked for between 11 and 15 years. While this could suggest a strong level of loyalty and commitment to the organization, it could also suggest a lack of fresh perspectives and new ideas within the management team. An organization may need to consider implementing strategies to attract and retain talent at all levels of the organization, including the management team, and promote a culture of innovation and continuous improvement to increase the performance (Ledger, Ure, Burgess & Morrison, 2020).

4.3 Reliability Test

Table 4 presents the reliability results.

Table 4: Reliability Results

Variable	Reliability Results	Number of items	Comment
Coverage	0.764	6	Reliable
Reporting	0.822	6	Reliable
Stakeholder Participation	0.778	6	Reliable
Challenges	0.708	6	Reliable
Government legislation, Donors	0.806	6	Reliable
Governance	0.829	6	Reliable

Reliability tests are used to assess the consistency and stability of measurement instruments. The results of reliability tests, such as Cronbach's alpha, provide an indication of how well the items in a questionnaire measure a particular construct or variable. The results in Table 4 indicate that the instruments used in the study are adequately reliable for measurement. The Cronbach's alpha coefficients for all items were above 0.7, which is generally considered an acceptable level of reliability. This means that the variables measured in the study are consistent and stable over time, and the instruments can be employed in future studies with confidence. The implications of these findings are that researchers can use the same instruments to measure the same variables in future studies, and expect similar levels of reliability. Overall, the findings of the reliability tests in this study provide some assurance that the measurement instruments used are sufficiently reliable to support the research findings and can be used in future studies.

4.4 Descriptive Statistics

Descriptive statistics provide a summary of the main characteristics and patterns observed in the data, offering insights into the central tendencies, variability, and distribution of the variables under study. These statistics help in understanding the basic features of the data set and provide a foundation for further analysis and interpretation.

4.4.1 Descriptive Statistics of Coverage

The descriptive statistics of coverage is presented in Table 5

Table 5: Descriptive Statistics of Coverage

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
The water coverage has consistently increased since the implementation of reforms.	5.40%	12.20%	13.50%	37.80%	31.10%	3.77	1.18
Sufficient water supply has been extended to the informal sectors in the country.	6.80%	13.80%	24.00%	36.50%	18.90%	3.50	1.13
The country now has a greater number of water sources following the reforms.	5.40%	6.80%	36.50%	40.50%	10.80%	3.95	0.97
Urban areas experience a higher frequency of water supply after the reforms.	4.10%	13.50%	24.30%	35.10%	23.00%	3.59	1.31
Natural calamities have a significant influence on water coverage.	1.40%	17.60%	12.20%	32.40%	36.50%	3.85	1.14
As a result of the reforms, additional formal water structures have been developed to expand coverage.	2.70%	16.20%	10.80%	41.90%	28.40%	3.67	1.12
Average						3.72	1.14

The descriptive statistics outlined in Table 5 demonstrate that a majority of managers concur that water coverage has progressively improved since the implementation of the reforms, as indicated by a mean score of 3.77 and a standard deviation of 1.18. Additionally, most managers agreed that the reforms have successfully extended adequate water supply to the country's informal sectors, yielding a mean score of 3.50 and a standard deviation of 1.13.

The sentiment was similar regarding the increase in water sources post-reforms, with the mean score reaching 3.95 and a standard deviation of 0.97. Furthermore, the consensus among managers was that urban areas have seen an increase in the frequency of water supply after the reforms, as evidenced by a mean score of 3.59 and a standard deviation of 1.31. The impact of

natural calamities on water coverage was also recognized by the majority of managers, reflected in a mean score of 3.85 and a standard deviation of 1.14. Lastly, most managers concurred that the development of more formal water structures post-reforms has contributed to an increase in coverage, as indicated by a mean score of 3.67 and a standard deviation of 1.12. The overall mean score of survey questions related to coverage was 3.72, with a standard deviation of 1.14, suggesting a broad agreement among managers that the reforms have had a positive impact on water coverage.

4.4.2 Descriptive Statistics of Reporting

The descriptive statistics of reporting is illustrated in Table 6

Table 6: Descriptive Statistics of Reporting

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
The preparation of annual financial statements is conducted with utmost accuracy and without any discrepancies.	6.80%	20.30%	9.50%	37.80%	25.70%	3.55	1.26
Annual financial statements undergo an annual audit process.	5.40%	13.50%	13.50%	27.00%	40.50%	3.84	1.25
Financial statements are submitted to Parliament and other stakeholders for thorough examination.	8.10%	8.10%	17.30%	39.50%	27.00%	3.66	1.20
The internal auditors collaborate with the external auditors.	9.50%	10.80%	9.20%	48.90%	21.60%	3.59	1.22
A strategic plan is prepared and maintained.	1.40%	11.50%	15.60%	33.80%	37.80%	3.97	1.03
The financial department operates independently and is not influenced by management.	12.20%	14.90%	16.20%	36.50%	20.30%	3.78	1.30
Average						3.73	1.21

According to the descriptive statistics presented in Table 6, the majority of managers concur that annual financial statements are compiled accurately, with a mean score of 3.55 and a

standard deviation of 1.26. Similarly, most managers agreed that these financial statements undergo annual audits, as indicated by a mean score of 3.84 and a standard deviation of 1.25. The collaboration between internal and external auditors also received affirmation from the majority of managers, as demonstrated by a mean score of 3.59 and a standard deviation of 1.22. Moreover, most managers agreed that strategic plans are prepared and maintained, as evidenced by a mean score of 3.97 and a standard deviation of 1.03. Lastly, the independence of the financial department and its resistance to managerial influence was acknowledged by most managers, with a mean score of 3.78 and a standard deviation of 1.30.

The average mean score for reporting-related survey questions was 3.73, with a standard deviation of 1.21, suggesting that most managers consider reporting as a critical aspect of governance at the Athi Water Services Board.

4.4.3 Descriptive Statistics of Stakeholder Participation

The descriptive statistics of stakeholder participation is presented in Table 7

Table 7: Descriptive Statistics of Stakeholder Participation

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
All stakeholders actively participate in the decision-making process.	14.90%	5.40%	18.90%	33.80%	27.00%	3.53	1.35
Stakeholders play a role in the implementation process.	6.80%	14.90%	13.50%	41.90%	23.00%	3.59	1.19
Consultation with stakeholders occurs prior to any changes made in the board.	12.20%	11.90%	22.40%	31.90%	21.60%	3.78	1.29
The policies established for water reforms are coherent and facilitate smooth implementation.	8.10%	5.40%	28.40%	28.40%	29.70%	3.66	1.20
Stakeholders have the freedom to conduct audits on the books of accounts.	2.70%	13.50%	27.00%	39.20%	17.60%	3.55	1.02
Stakeholders have the autonomy to select representatives who advocate for their interests on the board.	5.40%	12.20%	29.00%	25.00%	28.40%	3.61	1.18
Average						3.62	1.20

The results outlined in Table 7 reveal that the majority of managers concur that all stakeholders actively participate in decision-making processes, as suggested by a mean score of 3.53 and a standard deviation of 1.35. Additionally, these managers agree that stakeholders are involved in the execution process, as indicated by a mean score of 3.59 and a standard deviation of 1.19. The same trend of agreement is seen in the assertion that stakeholders are consulted prior to making any alterations within the board, with a mean score of 3.78 and a standard deviation of 1.29.

The managers also concurred that the policies established for water reforms are consistent and can be easily implemented, as indicated by a mean score of 3.66 and a standard deviation of 1.20. Furthermore, they agreed that stakeholders are allowed to audit the accounting books, supported by a mean score of 3.55 and a standard deviation of 1.02. Lastly, the majority of

managers agreed that stakeholders elect their representatives to advocate for their interests within the board, as shown by a mean score of 3.55 and a standard deviation of 1.02. The average mean score for the survey questions concerning stakeholder participation was 3.62, with a standard deviation of 1.20. This suggests that most managers believe there is significant stakeholder involvement within the Athi Water Service Board. A top manager stated, “Stakeholder participation has improved the governance after water sector reforms in Athi Water Services Board” [Top manager, 2020].

4.4.4 Descriptive Statistics of Challenges

The descriptive statistics of challenges is presented in Table 8

Table 8: Descriptive Statistics of Challenges

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
The board faces a lack of funding, hindering the implementation of reforms.	5.40%	10.80%	25.70%	32.40%	25.70%	3.62	1.14
The implementation of reforms has been impacted by corruption.	6.80%	12.20%	25.70%	28.40%	27.00%	3.57	1.21
High levels of debt in public institutions have affected the implementation of reforms.	2.70%	8.10%	20.30%	54.10%	14.90%	3.70	0.92
The presence of inadequate infrastructure has impeded the progress of the reform.	8.10%	10.80%	20.30%	41.90%	18.90%	3.53	1.16
Bureaucratic inefficiencies are evident in the management of the water board.	4.10%	7.50%	10.80%	62.20%	15.50%	3.59	0.98
There is a significant political influence exerted within the board.	9.50%	6.80%	13.50%	29.70%	40.50%	3.85	1.29
Average						3.64	1.12

The findings presented in Table 8 indicate that a majority of managers concur that there are funding shortages to the board, hindering the implementation of reforms, as evidenced by a mean score of 3.62 and a standard deviation of 1.14. Furthermore, they mostly agreed that corruption had an impact on the execution of the reforms, with a mean score of 3.57 and a standard deviation of 1.21. Additionally, they shared the belief that the implementation of reforms was affected by high levels of debt from public institutions, as suggested by a mean score of 3.70 and a standard deviation of 0.92. There was also an agreement that poor infrastructure had negatively impacted the realization of the reform, as indicated by a mean score of 3.53 and a standard deviation of 1.16.

The managers generally agreed that bureaucratic inefficiencies in the management of the water board existed, as the mean score was 3.59 with a standard deviation of 0.98. Additionally, they mostly agreed that there is a considerable political influence within the board, as shown by a mean score of 3.85 with a standard deviation of 1.29. Moreover, a top manager pointed out, "*Governance at the Athi Water Services Board is affected by challenges such as lack of commitment, self-interest and corruption*" [Top manager, 2020].

4.4.5 Descriptive Statistics of Government Legislation, Donors

The descriptive statistics of government legislation, donors is illustrated in Table 9

Table 9: Descriptive Statistics of Government Legislation, Donors

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
The board receives policy documents from the Government for guidance.	2.70%	6.80%	14.90%	52.70%	23.00%	3.86	0.94
Periodic reporting to the government is mandatory for the Athi Water Services Board.	5.40%	9.50%	13.50%	24.30%	47.30%	3.99	1.22
The board collaborates with donors to implement its activities.	3.80%	8.10%	12.20%	25.70%	50.30%	4.02	1.14
Periodic reports for specific funded projects are submitted to donors by the Athi Water Services Board.	4.10%	13.50%	16.20%	17.60%	48.60%	3.93	1.25
The laws governing the water sector in Kenya undergo regular reviews.	9.50%	10.80%	16.20%	36.50%	27.00%	3.61	1.26
Various government agencies regulate the operations of the Athi Water Services Board.	1.40%	2.70%	18.90%	43.20%	33.80%	4.05	0.87
Average						3.91	1.12

According to the descriptive statistics shown in Table 9, the majority of managers agreed that the government produces policy documents for the board's use, as evidenced by a mean score of 3.86 and a standard deviation of 0.94. Furthermore, they predominantly concurred that the Athi Water Services Board is obligated to provide the government with regular reports, as indicated by a mean score of 3.99 and a standard deviation of 1.22. They also largely agreed that the Athi Water Services Board collaborates with donors in carrying out its operations, as reflected by a mean score of 4.02 and a standard deviation of 1.14. Additionally, most managers concurred that the Athi Water Services Board submits regular reports to donors for specifically funded projects, as demonstrated by a mean score of 3.93 and a standard deviation of 1.25.

Most of the managers agreed that the laws governing Kenya's water sector are periodically reviewed, with a mean score of 3.61 and a standard deviation of 1.26. Moreover, they largely agreed that the Athi Water Services Board is overseen by various government agencies, as indicated by a mean score of 4.05 and a standard deviation of 0.87. A senior manager stated, "The government has a pivotal role in the governance of the Athi Water Services Board, primarily through direct involvement in decision-making processes" [Senior Manager, 2020].

4.4.6 Descriptive Statistics of Governance

The descriptive statistics of governance is presented in Table 10

Table 10: Descriptive Statistics of Governance

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
Improved governance within the board has been achieved through regular reporting.	4.10%	14.90%	18.90%	39.20%	23.00%	3.62	1.12
The governance of the board has been impacted by the challenges it faces.	6.80%	8.10%	33.80%	29.70%	21.60%	3.51	1.13
Efficiency in governance has been enhanced through the regular participation of stakeholders.	1.40%	10.80%	29.70%	32.40%	25.70%	3.70	1.02
Donors express willingness to sustain funding for the board due to the improved governance.	2.70%	12.50%	23.00%	36.50%	25.40%	3.78	1.05
The Athi Water Services Board has implemented measures to address challenges that hinder the fulfillment of its mandate.	2.70%	14.90%	13.50%	45.90%	23.00%	3.72	1.07
Average						3.70	1.09

According to the descriptive statistics shown in Table 10, a majority of managers agreed that regular reporting has enhanced the board's governance, as indicated by a mean score of 3.62 and a standard deviation of 1.12. Furthermore, they largely concurred that the challenges the board faces have had an impact on governance, as demonstrated by a mean score of 3.51 and a standard deviation of 1.13. The majority also believed that consistent stakeholder participation has boosted governance efficiency, as shown by a mean score of 3.70 and a standard deviation of 1.02. Additionally, most of the managers agreed that donors are inclined to continue funding the board's activities due to improved governance, as indicated by a mean score of 3.78 and a standard deviation of 1.05.

Most managers agreed that the Athi Water Services Board maintains a positive working relationship with its stakeholders, as reflected by a mean score of 3.84 and a standard deviation of 1.14. They also largely agreed that the Athi Water Services Board has implemented measures to overcome obstacles that impede its mandate, as evidenced by a mean score of 3.72 and a standard deviation of 1.07. A functional manager pointed out, "*The governance within the board has shown notable effectiveness and change following the reforms*" [Functional Manager, 2020]. Also, a top-level manager noted, "*The reforms have fostered increased transparency and accountability in the board's governance*" [Top Manager, 2020].

4.5 Correlation Analysis

Correlation analysis is a statistical technique used to measure the strength and direction of the association between two or more variables. The correlation analysis does not imply causation. It can help researchers better understand the association between variables and can inform future research and decision-making. The correlation results are shown in Table 11

Table 11: Correlation Analysis

Variable		Governance	Coverage	Reporting	Stakeholder participation	Challenges
Governance	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Coverage	Pearson Correlation	.726**	1.000			
	Sig. (2-tailed)	0.000				
Reporting	Pearson Correlation	.734**	.666**	1.000		
	Sig. (2-tailed)	0.000	0.000			
Stakeholder participation	Pearson Correlation	.611**	.590**	.565**	1.000	
	Sig. (2-tailed)	0.000	0.000	0.000		
Challenges	Pearson Correlation	-.458**	-.295*	-.483**	-0.224	1.000
	Sig. (2-tailed)	0.000	0.011	0.000	0.055	

The correlation results in Table 11 reveal significant positive associations between coverage and governance ($r=.726$, $p=.000$), reporting and governance ($r=.734$, $p=.000$), and stakeholder participation and coverage ($r=.611$, $p=.000$), while a significant negative correlation was found between challenges and governance ($r=-.458$, $p=.000$). These results are echoed by Okechi (2015), who found a positive correlation between reporting and effective governance. Barreiro (2013) highlighted that managerial incompetence and widespread corruption have hampered water reform implementation in various countries. Brikke and Rojas (2011) further stressed the importance of reporting for improving public sector management globally. Additionally, Munyao (2018) emphasized that organizations responsible for water protection encounter numerous challenges, including a lack of support, funds, and coordination, alongside corruption, all of which negatively impact governance.

4.6 Regression analysis

The results presented in Table 12 indicate the model fitness

Table 12: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823a	0.677	0.659	0.484157

The results in Table 12 show that coverage, reporting, stakeholder participation, and challenges collectively account for 67.7% of the variations in governance at the Athi Water Service Board, indicating a satisfactory explanation for its governance. Table 13 provides the results of the analysis of variance (ANOVA).

Table 13: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.964	4	8.491	36.224	.000b
	Residual	16.174	69	0.234		
	Total	50.139	73			

Dependent variable: Governance

The statistical significance of the overall model presented in Table 13 suggests that coverage, reporting, stakeholder participation, and challenges serve as effective predictors in explaining governance within the Athi Water Service Board. Furthermore, the regression coefficient results are provided in Table 14.

Table 14: Multiple Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.261	0.41		3.075	0.003
	Coverage	0.337	0.091	0.363	3.709	0.000
	Reporting	0.241	0.081	0.309	2.961	0.004
	Stakeholder participation	0.182	0.086	0.186	2.106	0.039
	Challenges	-0.135	0.066	-0.159	-2.037	0.046

Dependent variable: Governance

The statistical analysis in Table 14 demonstrates significant positive relationships between coverage ($\beta=.337$, $p=0.000$), reporting ($\beta=.241$, $p=0.004$), and stakeholder participation ($\beta=.182$, $p=0.039$) with governance, while challenges exhibit a significant negative relationship ($\beta=-.135$, $p=0.046$). Munyai (2018) highlighted a negative influence of challenges on governance. K'Akumu (2016) emphasized the negative impact of poor water sector administration, while Brikke and Rojas (2011) stressed the importance of reporting for public sector management improvement. Additionally, Okechi (2015) identified a positive relationship between reporting and effective governance. Besides, Zhao (2015) reported that coordination between the national governments, local administrators, water stakeholders and the policymakers within the water sector is essential in making the reforms achievable.

The study results concur with stakeholder and dynamic capabilities theories. Stakeholder theory shows that the performance of an organization can be achieved if stakeholders are involved in the decision-making, consulted and are well notified about the changes in the organization. Enabling the stakeholders to do the audits increases their loyalty and commitment to the organization. In addition, dynamic capabilities theory indicates that integration, reconfiguring, the delegation of roles, reporting, training, and development could increase the

organization's efficiency. The theory documents that reporting increases transparency and reduces discrepancies. Thus, the study findings are essential to add more details to the dynamic capabilities theory. Thus, the study contributed to existing knowledge by empirically confirming that stakeholder participation and reporting increase governance and thus confirming the arguments from stakeholder and dynamic capabilities theories.

4.7 Moderating effect of Government Legislation

The model fitness is presented in Table 15

Table 15: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.920a	0.846	0.837	0.335047

The results presented in Table 15 indicate that when coverage, reporting, stakeholder participation, and challenges interact with government legislation, the coefficient of determination (R square) increases significantly from 0.677 (67.7%) to 0.846 (84.6%). Table 16 presents the analysis of variance after the interaction.

Table 16: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.393	4	10.598	94.411	.000b
	Residual	7.746	69	0.112		
	Total	50.139	73			

Dependent variable: Governance

The statistical analysis in Table 16 demonstrates that the overall model remains statistically significant indicating that these variables continue to play a significant role in explaining governance. The specific regression coefficient results after the interaction can be found in Table 17.

Table 17: Multiple Regression Coefficients After the Interaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.5550	0.1450		10.6960	0.0000
Coverage*Legislation	0.0620	0.0160	0.4320	3.7750	0.0000
Reporting*Legislation Stakeholder	0.0470	0.0140	0.3800	3.3460	0.0010
participation*Legislation	0.0340	0.0150	0.1930	2.2060	0.0310
Challenges*Legislation	-0.0205	0.0100	-0.0640	-2.0530	0.0296

Dependent variable: Governance

The results in Table 17 demonstrate significant positive relationships between coverage ($\beta=.0620$, $p=0.000$), reporting ($\beta=.0470$, $p=0.001$), and stakeholder participation ($\beta=.0340$, $p=0.0310$) with governance, while challenges exhibit a significant negative relationship ($\beta=-.0205$, $p=0.0296$) after interacting with government legislation. These findings are consistent with the findings of Rogers and Hall (2013), highlighting the influence of political and government interference on water management. Also, Okechi (2015) indicated that the water institutions' administration is critical but has been affected by government legislation and political interventions in many instances.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents a summary of the findings, conclusions and recommendations based on the results of the study. Furthermore, the researcher will make suggestions for further studies that can be conducted by other researchers.

5.1 Summary of Findings

The results indicate that coverage, reporting, stakeholder participation, and challenges collectively explain a significant portion (67.7%) of the variability in governance at the Athi Water Service Board, with the overall model being statistically significant.

5.1.1 Coverage

The descriptive statistics showed that a majority of managers agreed on the positive effects of reforms on water coverage, and the correlation analysis ($r = 0.726$, $p < 0.001$) and regression coefficients ($\beta = 0.337$, $p < 0.001$) indicated a significant and positive relationship between coverage and governance, suggesting that increasing coverage would lead to improvements in governance by approximately 0.337 units, controlling for other factors. Zhao (2015) emphasized the importance of coordination among national governments, local administrators, water stakeholders, and policymakers in achieving successful reforms and ensuring sufficient water coverage.

5.1.2 Reporting

The descriptive statistics showed that managers highly valued reporting in governance at the board, with a mean score of 3.73, and the correlation analysis ($r = 0.734$, $p < 0.001$) and regression analysis ($\beta = 0.241$, $p = 0.004$) indicated a positive and significant relationship

between reporting and governance, suggesting that a one-unit improvement in reporting would lead to a 0.241 unit improvement in governance. These findings align with the research by Katomero (2017), highlighting the importance of reporting for stakeholders' awareness and institutional performance. Additionally, Schliemann and Bovens (2010) emphasized how reporting enhances transparency and public perception, while Brikke and Rojas (2011) underscored the significance of reporting in improving public sector management globally. Furthermore, Okechi (2015) noted the positive association between reporting and effective governance.

5.1.3 Stakeholder Participation

The descriptive statistics showed that managers generally agreed on stakeholder participation within the board (mean = 3.62, SD = 1.20), and it was found to have a significant positive association with coverage ($r = 0.611$, $p < 0.001$) and a significant positive relationship with governance ($\beta = 0.182$, $p = 0.039$), indicating that increasing stakeholder participation by one unit would result in an improvement in governance by approximately 0.182 units. Zhao (2015) reported that coordination between the national governments, local administrators, water stakeholders and the policymakers within the water sector is essential in making the reforms achievable. Uwejamomere (2013) showed the optimal importance of allowing the stakeholders to participate in any reform changes before implementing them.

5.1.4 Challenges

The descriptive statistics showed that challenges were considered influential factors in water sector reforms at the board, with an average mean score of 3.64 (SD = 1.12), and the findings indicated a significant negative association between challenges and governance ($r = -0.458$, $p < 0.001$). Furthermore, the regression analysis revealed a negative and significant relationship between challenges and governance ($\beta = -0.135$, $p = 0.046$), suggesting that a one-unit decrease

in challenges would lead to an improvement in governance by approximately 0.135 units. The results agree with the findings of Jeuland and Whittington (2014), who discovered that financial and institutional factors portray challenges to water and sanitation improvement in the majority of the growing nations. Chedié (2014) discovered that commitment of the partners, government involvement and proper management enhances the effective implementation of the projects. Moreover, Cherop (2012) discovered that poor administration had been a challenge that has negatively impacted the governance of water reforms.

5.1.5 Government Legislation, Donors

The descriptive statistics indicated that both government legislation and donor influence have an impact on the governance of the board, as reported by the managers. The study found that the coefficient of determination increased significantly from 67.7% to 84.6%, indicating a positive moderating effect. Additionally, these factors remained significant predictors of governance even after accounting for the influence of government legislation. These findings align with previous research by Rogers and Hall (2013), who highlighted the influence of political and government interference on water management. Additionally, Okechi (2015) emphasized the impact of government legislation and political interventions on the administration of water institutions.

5.2 Conclusion

The study's findings indicate a positive and significant relationship between coverage and governance within the context of the Athi Water Services Board. This implies that an increase in coverage, which refers to the extent of water services provided to the population, is linked to improvements in governance. Adequate coverage of water resources is crucial for ensuring equitable access, promoting public health, and supporting sustainable development. The study

highlights the importance of expanding coverage as a means to enhance governance and ensure the effective delivery of water services to the population.

Additionally, the study concludes that reporting and governance are positively and significantly related. This means that an effective reporting system, which involves the timely and accurate communication of information related to water sector activities, contributes to improved governance within the Athi Water Services Board. Reporting enhances transparency, accountability, and decision-making processes, allowing stakeholders to make informed choices and hold authorities accountable. The study's findings underscore the importance of robust reporting mechanisms in promoting good governance practices within the water sector.

Furthermore, the study concludes that stakeholder participation is positively and significantly related with coverage. This implies that involving various stakeholders, such as communities, water users, civil society organizations, and local authorities, in decision-making processes and implementation activities contributes to expanding water coverage. Stakeholder participation ensures that the interests and needs of diverse groups are taken into account, leading to more inclusive and effective water sector reforms. The study highlights the significance of engaging stakeholders as active participants in the governance of water resources to achieve broader coverage and improved service delivery.

The study revealed a negative and significant association between challenges and governance within the context of the Athi Water Services Board. This implies that as challenges increase, governance tends to be negatively affected. These challenges could include factors such as lack of support, funds, corruption, and poor coordination, which hinder the effective implementation of water sector reforms. Addressing these challenges becomes crucial in order to improve governance and ensure the successful execution of the reforms.

Furthermore, the study found that government legislation, particularly from donors, plays a significant moderating role in influencing the relationship between water sector reforms and governance. This suggests that the impact of reforms on governance outcomes is influenced by the regulatory and policy frameworks established by the government and the involvement of external donors. The presence of effective government legislation can enhance governance by providing clear guidelines, accountability mechanisms, and resources necessary for the successful implementation of reforms.

In summary, the study's conclusions regarding the positive and significant associations between coverage and governance, reporting and governance, and stakeholder participation and coverage, emphasize the interdependence of these factors in promoting effective water sector governance. These findings highlight the importance of expanding coverage, implementing robust reporting mechanisms, and involving stakeholders in decision-making processes to enhance governance practices and ensure sustainable water management. The study provides valuable insights for policymakers and practitioners seeking to improve water governance and enhance the delivery of water services within the Athi Water Services Board. The study underscores the importance of supportive policies and the involvement of external stakeholders, such as donors, in fostering good governance practices within the water sector. These findings can guide policymakers and practitioners in developing strategies that promote effective governance and sustainable water management.

5.3 Recommendations

Based on the findings of the study, several recommendations can be made to improve governance within the Athi Water Services Board and enhance the effectiveness of water sector reforms:

Enhance coverage expansion efforts: Given the positive association between coverage and governance, it is crucial to prioritize and invest in measures that increase access to clean water and sanitation services. This includes improving infrastructure, increasing water sources, and ensuring equitable distribution across different regions. The Athi Water Services Board should collaborate with relevant stakeholders to develop and implement comprehensive strategies for expanding coverage and meeting the water needs of the population.

Strengthen reporting mechanisms: The study highlights the importance of effective reporting in promoting transparency and accountability. To improve governance, the Athi Water Services Board should establish robust reporting systems that provide timely and accurate information on water sector activities, performance, and financial management. This will enable stakeholders to monitor progress, identify areas for improvement, and hold the board accountable for its actions. Regular reporting should be encouraged to maintain transparency and ensure the public's trust.

Foster stakeholder participation: The study emphasizes the positive relationship between stakeholder participation and coverage, indicating that involving diverse stakeholders in decision-making processes is crucial for expanding water services. The Athi Water Services Board should actively engage with local communities, water users, civil society organizations, and other relevant stakeholders to ensure their participation in planning, implementation, and monitoring of water sector reforms. This can be achieved through regular consultations, public hearings, and the establishment of participatory platforms that facilitate dialogue and collaboration.

Address challenges and obstacles: The study identifies challenges as significant factors influencing governance in the water sector. These challenges include lack of support, insufficient funds, corruption, poor coordination, and inadequate infrastructure. The Athi

Water Services Board should proactively address these challenges by developing comprehensive strategies to overcome them. This may involve seeking additional funding sources, improving internal coordination mechanisms, strengthening anti-corruption measures, and investing in infrastructure development and maintenance.

It is recommended that the government provides a conducive legal and regulatory framework that supports effective governance practices within the water sector. This includes enacting and enforcing legislation that promotes transparency, accountability, and stakeholder engagement. Additionally, the government should allocate adequate resources and provide institutional support to the Athi Water Services Board to ensure its effective functioning and implementation of water sector reforms.

By implementing these recommendations, the Athi Water Services Board can improve governance practices, enhance service delivery, and promote sustainable water management. These actions will contribute to meeting the water needs of the population, ensuring equitable access to water services, and achieving the goals of water sector reforms in the region.

5.3.1 Implication for Theory

The study was anchored on stakeholder and dynamic capabilities theories. The study results have indicated that reporting and stakeholder participation increase the efficiency of governance. Stakeholder theory shows that the performance of an organization can be achieved if stakeholders are involved in the decision-making, consulted and are well notified about the changes in the organization. Enabling the stakeholders to do the audits increases their loyalty and commitment to the organization. The study results have indicated that a unitary increase in stakeholder participation would improve governance by 0.182units. The study results are critical to adding more knowledge to the stakeholder theory.

In addition, dynamic capabilities theory indicates that integration, reconfiguring, the delegation of roles, reporting, training, and development could increase the organization's efficiency. The study confirms the theory by showing that a unitary improvement in reporting would lead to improved governance by 0.241 units. The theory documents that reporting increases transparency and reduces discrepancies. Thus, the study contributed to existing knowledge by empirically confirming that stakeholder participation and reporting increase governance and thus confirming the arguments from stakeholder and dynamic capabilities theories. Hence, the study is more relevant in addition to more information on the theories that articulate more about stakeholder participation and reporting. Thus, it is recommended that organizations, society, policy, academia and scholars can embrace stakeholder and dynamic capabilities theories when looking at ways that could increase the performance or efficiency of an organization.

5.4 Suggestions for Further Studies

The study on the effect of water sector reforms on governance in the Athi Water Services Board provides valuable insights that can inform future research in conceptual and methodological areas. Conceptual research proposals may explore the theoretical underpinnings of water sector reforms and their implications on governance. For instance, future studies may investigate the influence of political, economic, and social factors on water sector reforms and how these factors shape governance practices. Methodological research proposals may explore alternative research designs and data collection methods to improve the validity and reliability of findings. For example, future studies may adopt a longitudinal design to examine the long-term impact of water sector reforms on governance practices.

In addition, mixed-methods research that combines quantitative and qualitative data collection techniques may provide a more comprehensive understanding of the complex dynamics between water sector reforms and governance practices. One of the suggestions for further studies is to conduct similar research in other water services boards such as Tanathi Water

Services Board and Coast Water Services Board. This would be a valuable empirical research proposal that builds on the findings of the current study. Comparing and contrasting the effects of water sector reforms on governance practices across different water services boards may provide insights into the generalizability of the current study's findings.

Furthermore, the proposed research would be instrumental in identifying common themes and factors that facilitate or hinder the success of water sector reforms in improving governance practices. The results of such a study could inform policymakers in developing effective policies and interventions to enhance the adequacy and accessibility of water supply across the region. In conclusion, the current study's findings provide valuable insights for future research in conceptual, methodological, and empirical areas. Further studies should explore the theoretical underpinnings of water sector reforms, alternative research designs and data collection methods, and replicate the study in other water services boards to provide a more comprehensive understanding of the effects of water sector reforms on governance practices.

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APPENDICES

Appendix I: Introduction Letter

Mount Kenya University

September, 2019.

Dear participant,

I, James Ambuso Omondi, will be carrying a study titled: **Analysis of the effect of water sector reforms on governance of water by athi water services board, Kenya**. Kindly tick /comment in the provided spaces on the questionnaires accordingly.

Your Faithfully,

James Ambuso Omondi



Appendix II: Informed Consent

To Research Participant

C/O Mount Kenya University

February, 2020.

Dear participant,

I, James Ambuso Omondi, a Post Graduate student at Mount Kenya University, pursuing a degree of Masters of Arts in Governance and Ethics wishes to request for your participation in a research thesis as part fulfillment for award of the degree . The study is titled: **analysis of the effect of water sector reforms on governance in kenya : a case of athi water services board, Kenya.**

As a participant in the research , you will be required to spare a few minutes to complete attached questionnaire . Your confidentiality will be protected : there will be no mention of your personal details anywhere throughout the reseach process or thereafter. No benefits hall accrue to you as a participant financially or otherwise. However, the research findings are expected to improve on knowledge and planning for all stakeholders

You have a right to withdraw at any eleve. Any concers regarding this study should be raised with the undersigned.

Your Faithfully,

Name of Participant (Optional)..... Sign.....

Contact/For Any Concerns:

The Chairman, MKU IREC, P O Box 342-00100, THIKA

Mount Kenya University

Appendix III: Questionnaire

SECTION A: DEMOGRAPHICS

1. Gender
 - Male [1]
 - Female [2]

2. Age
 - 18 - 30 years [1]
 - 31 – 40 years [2]
 - 41 – 50 years [3]
 - Above 50 years [4]

3. Educational Qualifications
 - Honouary degrees [1]
 - Masters and Above [2]
 - Under Graduate [3]
 - Diploma [4]
 - High School [5]

4. position in the board
 - Top Management [1]
 - Senior Level Management [2]
 - Functional Level Management [3]

5. Number of years served in your current position
 - Less than 5 years [1]
 - 5 – 10 years [2]
 - 11 -15 years [3]
 - Over 15 years [4]

SECTION B: COVERAGE

Please rate the following statements on the coverage after water sector reforms

Where, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree

Statement	1	2	3	4	5
The water coverage has consistently increased since the implementation of reforms.					
Sufficient water supply has been extended to the informal sectors in the country.					
The country now has a greater number of water sources following the reforms.					
Urban areas experience a higher frequency of water supply after the reforms.					
Natural calamities have a significant influence on water coverage.					
As a result of the reforms, additional formal water structures have been developed to expand coverage.					

In your opinion, to what extent is the water coverage in the country after the water sector reforms. Kindly explain

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SECTION C: REPORTING

Please rate the following statements on the effect of reporting on governance after the water sector reforms in Athi Water Services Board.

Statement	1	2	3	4	5
The preparation of annual financial statements is conducted with utmost accuracy and without any discrepancies.					
Annual financial statements undergo an annual audit process.					
Financial statements are submitted to Parliament and other stakeholders for thorough examination.					
The internal auditors collaborate with the external auditors.					
A strategic plan is prepared and maintained.					
The financial department operates independently and is not influenced by management.					

In your opinion, what is the effect of reporting on governance after the water sector reforms in Athi Water Service Board. Kindly explain

SECTION D: STAKEHOLDER PARTICIPATION

Please rate the following statements on the effect of stakeholder participation on governance after water sector reforms in Athi Water Services Board.

Statement	1	2	3	4	5
All stakeholders actively participate in the decision-making process.					
Stakeholders play a role in the implementation process.					
Consultation with stakeholders occurs prior to any changes made in the board.					
The policies established for water reforms are coherent and facilitate smooth implementation.					
Stakeholders have the freedom to conduct audits on the books of accounts.					
Stakeholders have the autonomy to select representatives who advocate for their interests on the board.					

In your opinion, what is the effect of stakeholder participation on governance after water sector reforms in Athi Water Services Board? Kindly Explain

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SECTION E: CHALLENGES

Please rate the following statements on the challenges on governance after water sector reforms in Athi Water Services Board.

Statement	1	2	3	4	5
The board faces a lack of funding, hindering the implementation of reforms.					
The implementation of reforms has been impacted by corruption.					
High levels of debt in public institutions have affected the implementation of reforms.					
The presence of inadequate infrastructure has impeded the progress of the reform.					
Bureaucratic inefficiencies are evident in the management of the water board.					
There is a significant political influence exerted within the board.					

In your opinion what are the challenges on governance after water sector reforms in Athi Water Services Board. Kindly explain

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.....

SECTION F: GOVERNMENT LEGISLATION, DONORS

Please rate the following statements on government legislation and donors after water sector reforms on governance in Athi Water Services Board.

Statement	1	2	3	4	5
The board receives policy documents from the Government for guidance.					
Periodic reporting to the government is mandatory for the Athi Water Services Board.					
The board collaborates with donors to implement its activities.					
Periodic reports for specific funded projects are submitted to donors by the Athi Water Services Board.					
The laws governing the water sector in Kenya undergo regular reviews.					
Various government agencies regulate the operations of the Athi Water Services Board.					

In your opinion, what are other influence of government legislation and donors after water sector reforms on governance in Athi Water Services Board

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SECTION G: GOVERNANCE

Please rate the following statements on governance in Athi Water Services Board after the reforms.

Statement	1	2	3	4	5
Improved governance within the board has been achieved through regular reporting.					
The governance of the board has been impacted by the challenges it faces.					
Efficiency in governance has been enhanced through the regular participation of stakeholders.					
Donors express willingness to sustain funding for the board due to the improved governance.					
The Athi Water Services Board maintains a positive working relationship with its stakeholders.					
The Athi Water Services Board has implemented measures to address challenges that hinder the fulfillment of its mandate.					

In your opinion, how has been the governance in the board after the reforms.....

SECTION H: RECOMMENDATIONS

What recommendations would you give that would help in the provision of safe, clean and adequate water for the growing population in Kenya? (**Kindly give 1 or 2 recommendations**)

.....

.....

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.....

.....



Appendix IV: Authorisation and Research permits

a) Authorisation from the University



Mount Kenya University

REF: MKU/ERC/1531 Date: 05 February 2020
TO: JAMES AMBUSO OMONDI REG: MGE/09/213/1660

Dear Sir/Madam,

RE: AN ANALYSIS OF THE EFFECT OF WATER SECTOR REFORMS ON GOVERNANCE IN ATHI WATER SERVICES BOARD, KENYA


This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **430**. The approval period is .

This approval is subject to compliance with the following requirements:

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

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

Yours sincerely,


The Chairman
Mount Kenya University
Ethics Review Comm. -ec
P. O. Box 342 - 0100, Thika

Prof. Francis W. Muregi
Chairman, Mount Kenya University IERC

Main Campus, General Kago Road, P.O. Box 342-01000 Thika. Tel: +254 67 2820 000,
Cell: +254 720 790 796, 0709 153 050
Email: info@mku.ac.ke, Web: www.mku.ac.ke
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Unlocking Infinite Possibilities

b) Ethical Clearance from NACOSTI

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 348174	Date of Issue: 23/March/2021
RESEARCH LICENSE	
	
This is to Certify that Mr. JAMES AMBUSO OMONDI AMBUSO of Masare Kenya University, has been licensed to conduct research in Nairobi on the topic: AN ANALYSIS OF THE EFFECT OF WATER SECTOR REFORMS ON GOVERNANCE IN ATHE WATER SERVICES BOARD, KENYA for the period ending : 23/March/2021.	
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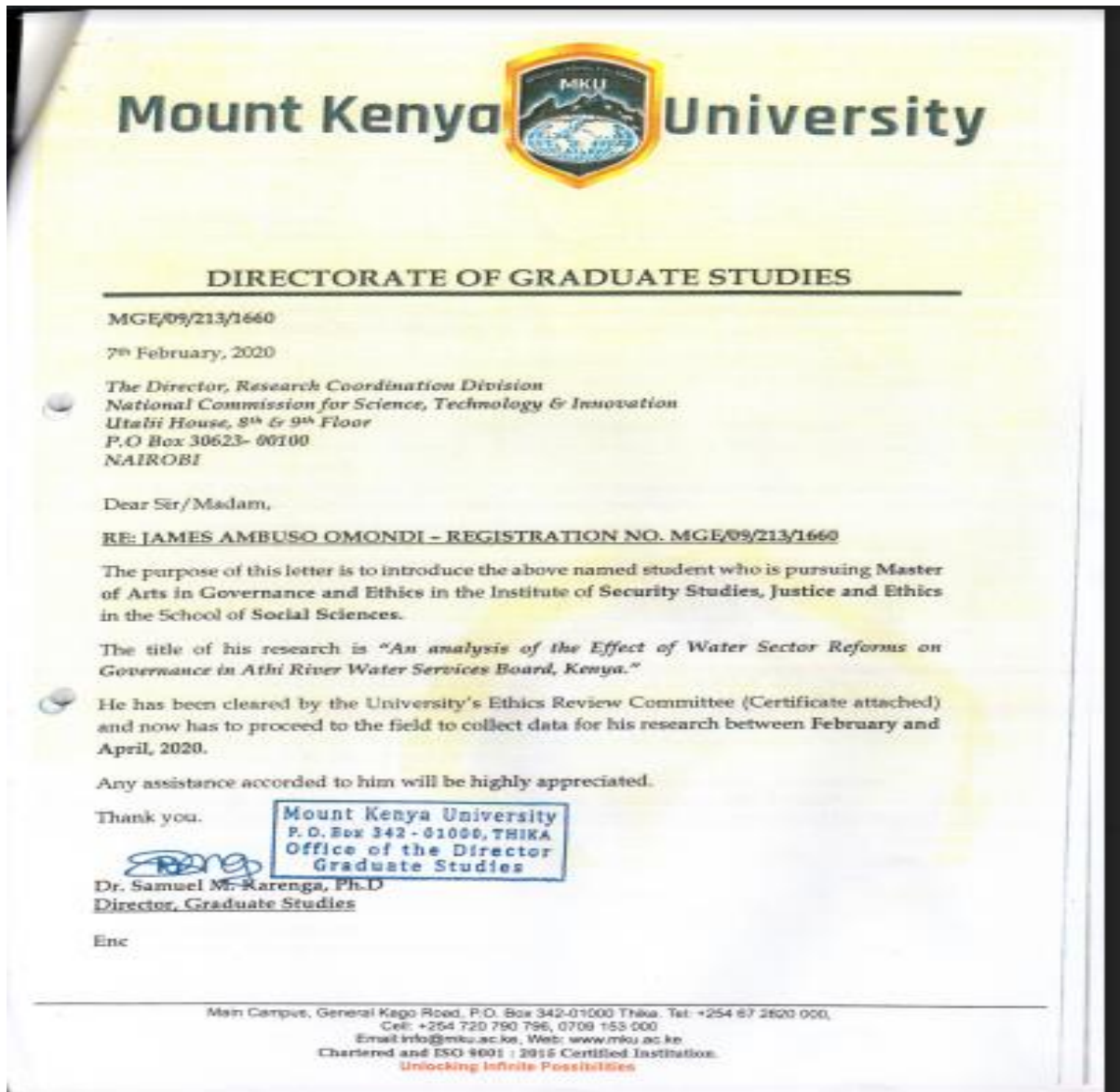
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Mobile: 0711 788 787 / 0755 404 245
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

c) University permit for Data collection



Appendix V: Plagiarism Report

ANALYSIS OF THE EFFECT OF WATER SECTOR REFORMS ON GOVERNANCE OF WATER BY ATHI WATER SERVICES BOARD, KENYA

by James Ambuso Omondi

Submission date: 25-May-2023 08:43AM (UTC-0400)

Submission ID: 2101601582

File name: Paraphrased_Thesis-25th_May_2023.docx (1.63M)

Word count: 20212

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Appendix VI: Athi Water Services Board: Physical Address

