CAPACITY CHARACTERISTICS AND PERFORMANCE OF WATER DEVELOPMENT PROJECTS FUNDED BY DAVIS AND SHIRTLIFF LIMITED IN MERU COUNTY, KENYA

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DECLARATION

This research is my original work and has never been presented for the award of any

Degree in any other university.

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This research has been submitted for registration with my approval as the university.

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DEDICATION

This research is dedicated to my parents, Stanley Mmbukane and Shirley Minage, for their belief and support through my education journey, my wife Damaris Wamaitha for ensuring the environment in which I conduct my studies is always conducive, and lastly my son Trevor Mbukane Jumba from whom I draw much of my motivation and inspiration.

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ABBREVIATIONS

COO	- Chief Operations Officer
CSR	- Corporate Social Responsibility
D&S	- Davis and Shirtliff
Dr.	- Doctor
Etc	- Et cetera (and so on)
Ltd	- Limited
MCT	- Measures of Central Tendencies
MEWASCO	- Meru Water and Sanitation Corporation
MEWASS	- Meru Water and Sanitation Services
NGO	- Non-Governmental Organization
O&M	- Operation and Maintenance
PWP	- Public Works Project
Q & I	- Questionnaires and interviews
SPSS	- Statistical Package for the Social Sciences

TABLE OF CONTENTS

ABSTRACT

With the growth of population in most parts of the country, proper management of water resources has proved to be very vital in the quest to supply communities with safe and clean water. Water is a basic need for human livelihoods, but this function cannot be fully undertaken by government. Local and international NGOs need to partner with government to assist especially parts of the population that are less privileged with availability of such safe water. Companies can also partner with government on this important task outside their commercial aspects through CSR programs. In this perspective, CSR projects and programs need to be handled differently as opposed to commercial projects by companies to achieve success. This study seeks to assist Davis and Shirtliff Ltd to come up with standards to manage its CSR projects effectively. This will also assist beneficiaries to manage the projects well and understand the importance of environmental conservation. The study has sampled CSR projects done in Meru County by Davis and Shirtliff. Projects of this nature have proved to be successful in meeting humanitarian needs. From the failures in some of the projects, lessons can be drawn to improve the handling of the projects. Post implementation steps need to be taken to ensure the projects are sustainable and meeting the intended purposes. This research draws lessons from CSR projects in Meru County to formulate standards to better manage the docket.

CHAPTER 1

INTRODUCTION

1.1 Background of The Study

Water scarcity and the adverse effects it causes are a global issue impacting all countries, with particular urgency in places like Africa, the Arab-Asian countries, as well as other parts of the world. Unfortunately, efforts to ease the shortage of water through a variety of projects have often proven unsustainable, consistently delaying progress on the global development agenda. As Rodriguez (2019) stated, sub-Saharan Africa (SSA) experiences the burden of this issue, grappling more keenly than other countries of the world with the lack of clean and safe drinking water, inadequate sanitation, and insufficient personal hygiene. Given the critical nature of the situation, the UN Assembly recognized it as a priority in 2010 and added it to the UN development agenda.

According to estimates from WHO/UNICEF (2018), a staggering 2.5 billion people, equivalent to 36% of the global population, lack proper access to safe and clean water, and are forced to endure substandard sanitation facilities. WHO (2015) further underscores the dire situation faced by 768 million individuals who are compelled to use unhygienic and unsafe drinking water due to the absence of alternative water sources. Water is a vital resource essential for sustaining human life and driving economic progress. Nevertheless, its scarcity often triggers competition and conflicts among its users. To address these challenges, the Water Resources Management Authority (WRMA) has issued comprehensive guidelines for the administrative organization and standard operations of Capacity-based water projects in Kenya. The success or failure, measured by the project's performance, hinges on several key factors. These include the level of Capacity involvement and ownership, the training and education provided to project leaders, the governance structure in place, and the fundamental management skills of project leaders. Additionally, factors like financial and technical support play pivotal roles in ensuring the prudent use and management of water resources. In sum, responsible stewardship of this invaluable resource remains paramount.

The importance of water for the survival of humanity cannot be overstated. Access to safe water is not only crucial for the well-being of individuals and communities but also plays a pivotal role in the economic development of nations. Consequently, many developing countries have implemented various strategies and interventions to address this pressing issue. However, despite

these concerted efforts and the allocation of substantial resources, achieving the desired level of access to water has proven to be a persistent challenge. Kwena (2021) has observed that, despite the dedicated endeavors and resource allocation to tackle water scarcity, acute shortages of water persist worldwide. This persistence of the problem may be attributed to the inadequate implementation of water development projects. For instance, as highlighted by Boonstra (2018), the proper monitoring and evaluation of these projects serve as a critical gateway for adopting demand-driven approaches and enhancing decision-making capabilities. These evaluations also inform decisions related to technology choices and the overall project's scope and nature, among other crucial aspects.

1.1.1 Performance of water projects

Capacity water supply projects in Kenya have garnered attention as a promising avenue for various communities, as highlighted by Dube in 2022. The overarching concept involves amalgamating physical, social, and economic elements into a comprehensive approach that acknowledges their interconnectedness. This approach aims to ensure that both the immediate Capacity and pre-existing water supply initiatives continue to reap benefits over time. This integration serves as a cornerstone in defining sustainable water supply projects. Such projects are meticulously designed and managed to not only fulfill the current societal objectives but also to meet the needs of future generations while preserving their ecological, environmental, and hydrological integrity.

In Ethiopia, the water resources in Addis Ababa are facing multifaceted challenges encompassing biological, sociological, economic, and ecological issues. These challenges pose significant risks to the general public. Unfortunately, Addis Ababa's approach to addressing these problems has been ineffective and unstable, as highlighted by Meklit in 2017. One of the primary water-related issues in Addis Ababa is the lack of robust collaboration among stakeholders. Various sectors, including industry, institutions, pollution management, and households, exhibit weak connections, as noted by the Environmental Protection Authority of Addis Ababa in 2008. It is imperative that diverse stakeholders unite to address water-related problems, but this endeavor proves to be a formidable task.

Efforts by the Environmental Protection Authority of Addis Ababa and the Addis Ababa Riversides Climate Change Adaptation Project Office (AAR RCCAPO) to rally stakeholders and promote cohesion have encountered substantial challenges. There exists a notable lack of trust between the government and other stakeholders, often resulting in exacerbating the government's efforts to protect water resources. In this context, it is evident that achieving a cohesive approach to addressing these challenges is a significant challenge.

1.1.2 Water development projects in Meru County

Meru County, situated in the upper eastern region of Kenya, falls within the arid and semi-arid lands (ASALs) classification. The county spans an area of 25,605 square kilometers. In Modogashe Sub County, the primary economic activities revolve around pastoralism and cattle trading, underscoring the crucial need for reliable access to water systems. According to a 2015 report from the Government of Kenya (GoK), the majority of Meru's population resides approximately 25 kilometers away from sources of clean and safe water. Regions such as Merti, Garbatulla, and Sericho face significant challenges in accessing water sources, particularly during dry seasons.

Since 2014, the county government has allocated nearly Sh.472 million from the Equalization Fund to construct water pans across all three sub-counties. This initiative aims to mitigate long-standing conflicts between farmers and pastoralists, which have historically resulted in deadly clashes. Additionally, an additional Sh.211 million is pending payment to contractors who are in various stages of completing several water pans, with most of them exceeding 95 percent completion. This information was reported during a meeting of the County Development Implementation and Coordination Committee (CDICC) in 2021, as documented by Ali.

Despite these efforts, there remains a severe water shortage in Meru County, impacting a substantial population. A study conducted by Ababa in 2018 revealed that both government and non-governmental organizations have struggled to address the water problem effectively. To address this shortfall, the county government has undertaken the construction of water pans, with 26 such pans constructed by 2016. In to the ongoing water scarcity, numerous NGOs and

Capacity-based organizations have collaborated with both county and national authorities to alleviate the issue.

1.1.3 Davis and Shirtliff

Davis and Shirtliff Limited, a private company with over 75 years of experience, has been providing water and energy solutions in Africa since its establishment in Nairobi, Kenya, in 1946. The company's presence has expanded to various African countries in East, Central, and Southern Africa. Their focus on providing clean water has had a transformative impact on communities, empowering them by addressing dilapidated living conditions and enabling access to education and improved agricultural productivity.

The Kenyan government has also recognized the importance of addressing water-related issues to enhance the well-being of its citizens, allocating significant funds for water-related projects. Water and famine have been persistent challenges in Kenya and other African nations, affecting livelihoods, causing loss of life, and contributing to social issues like theft and conflict between humans and wildlife due to scarcity of water.

Davis and Shirtliff Ltd. plays a pivotal role in ensuring the availability of clean water where needed, adapting to changing consumer needs through innovation and research. Their introduction of solar solutions for pumping has been particularly impactful, as solar energy is abundant in Sub-Saharan Africa and offers environmental benefits, reliability, and convenience compared to traditional manual pumping systems.

As part of their commitment to corporate social responsibility (CSR), the company has undertaken various projects aimed at providing water and energy solutions to underserved communities. The establishment of a formal CSR department in 2019 has brought structure to the selection process for beneficiary communities, emphasizing factors such as impact, sustainability, and alignment with environmental conservation goals. Capacity involvement and training, particularly involving women, have played a crucial role in project success and sustainability.

1.2 Problem Statement

Water scarcity is a pressing global issue with far-reaching impacts, particularly in regions such as Africa, the Arab-Asian countries, and beyond. Despite numerous projects aimed at addressing water shortages, sustainable solutions have often remained elusive, impeding progress on the global development agenda. Sub-Saharan Africa (SSA) bears a disproportionate burden, grappling with inadequate access to clean and safe drinking water, sanitation, and hygiene, as recognized by the United Nations (UN) Assembly in 2010.

According to WHO/UNICEF (2018), a staggering 2.5 billion people, or 36% of the world's population, lack proper access to safe and clean water, enduring substandard sanitation facilities. An additional 768 million individuals are forced to use unhygienic and unsafe drinking water due to the absence of alternative sources (WHO, 2015). This dire situation not only jeopardizes individual and Capacity well-being but also hinders economic development. Competition and conflicts among water users are exacerbated by water scarcity, highlighting the critical need for effective water resource management.

In Kenya, the Water Resources Management Authority (WRMA) has issued comprehensive guidelines for Capacity-based water projects, emphasizing factors such as Capacity involvement, governance, training, and financial and technical support. However, despite these efforts, achieving the desired level of access to water remains a persistent challenge. Inadequate implementation and monitoring of water development projects, as noted by experts like Kwena (2021) and Boonstra (2018), contribute to the persistence of water scarcity issues.

In Meru County, Kenya, which falls within the arid and semi-arid lands (ASALs), access to clean and safe water is particularly challenging, with many communities residing far from reliable water sources. Although substantial government funding has been allocated for water pans construction, the severe water shortage persists. A study by Ababa (2018) reveals ongoing difficulties in addressing the issue effectively. To alleviate this problem, both governmental and non-governmental organizations have embarked on collaborative efforts.

Amid these challenges, Davis and Shirtliff Limited, with its extensive experience in providing water and energy solutions in Africa, has played a pivotal role in addressing water scarcity issues.

The company's commitment to corporate social responsibility (CSR) and its innovative approaches, including solar solutions for water pumping, offer promise in mitigating water-related challenges. However, the effectiveness and sustainability of these initiatives warrant further investigation.

1.3 Purpose of the Study

The purpose of this study was to investigate the influence of Capacity characteristics and performance of water development projects funded by Davis and Shirtliff limited in Meru county, Kenya.

1.4 Objectives of the study

The main objective of the study was to investigate relationship between the dependent variable and the following independent variables:

i. To establish the influence of end user need analysis on the performance of CSR Capacity water projects done by Davis and Shirtliff Limited in Meru County.
ii. To establish the extent to which capacity building influence performance of CSR water projects done by Davis and Shirtliff Limited in Meru County.
iii. To examine the influence of organizational structure on the performance of Davis and Shirtliff Limited Capacity CSR water projects in Meru County.

1.5 Hypothesis

This research tested the following hypothesis postulating the possible relationship between the dependent and independent variables.

Ho_1: End user need analysis has no significant influence on performance of CSR water projects done by Davis and Shirtliff Limited in Meru County.

Ho_2: Capacity building has no influence on the performance of CSR water projects done by Davis and Shirtliff Ltd in Meru County.

Ho_3: Organizational structure has no significant influence on the performance of CSR water projects done by Davis and Shirtliff in Meru County.

1.6 Significance of The Study

The study will validate the CSR project selection criteria put in place by the CSR department in Davis and Shirtliff Ltd. and propose other criteria to ensure that CSR projects are successfully implemented and are sustainable.

It will also propose project post implementation steps to assess impact to inform future selections and promote sustainability.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents literature review from various scholars concerning the topic of the study. The review is based on each independent variable under the research

2.2 Theoretical framework

This study was guided by the following theories

2.2.1 Agency Theory

In 1976, Meckling and Jensen introduced agency theory, which centers on the potential conflict between principals (such as shareholders or owners) and agents. This conflict is commonly known as the principal-agent relationship. According to this theory, shareholders expect returns on their investments, which can diminish the internal resources under the control of managers. Because managers often receive compensation based on accounting returns, they may be inclined to manipulate information to favor projects with poor net present value (NPV) if immediate returns are demanded. This manipulation can lead to a decline in the value of public entities and projects. Essentially, agency theory defines an agency relationship as a contract in which one or more principals delegate decision-making authority to an agent to perform services on their behalf.

Within the principal-agent relationship, the actions taken by the agent have consequences for both the principal and the agent. These consequences can be positive or negative for each party, and the agent's choice affects the well-being of both. This relationship is established because the agent typically possesses the necessary skills, abilities, or time to perform specific tasks. However, challenges arise for the principal, especially in selecting the right agent.

In the context of agency theory, managers are motivated to manipulate indicators, budgets, or debt targets to attain higher rewards, potentially harming the project's value. Jensen and Mackling (1976) suggest that agency costs can be minimized by factors like competition, executive labor markets, and incentive plans. When applied to rural community-managed water pan projects, the community acts as the principal, and the project's financial manager serves as the agent. The

sustainability of such projects largely hinges on the availability of project funds, emphasizing the significance of financial management in achieving long-term viability.

2.2.2 Resource Based View Theory

The Resource-Based View (RBV) theory has its roots dating back to 1950, with Penrose's perspective that organizations are essentially pools of resources, a concept later elaborated upon by Penrose in 1995. RBV posits that a firm's competitive advantage and performance are fundamentally linked to its resources. These resources can be broadly categorized as tangible and intangible, with tangible resources aiding in the execution of business processes, while intangible resources have the potential to confer a competitive advantage by enabling the adoption of unique and valuable practices.

Barney (1991) outlines two critical assumptions forming the foundation of RBV: the heterogeneous distribution of resources across organizations and the non-transferability of productive resources between organizations without incurring costs. Consequently, RBV asserts that only intangible resources meeting specific criteria—being valuable, rare, difficult to imitate, and lacking equivalent substitutes—play a pivotal role in sustaining a firm's competitiveness. In the context of project management, RBV assumes significance as it encompasses both tangible (e.g., methodologies, templates, tools) and intangible (e.g., leadership, teamwork) resources. Notably, leadership and teamwork, being valuable, rare, and difficult to imitate, are expected to exert an influence on project outcomes.

However, RBV is not without its criticisms. One challenge lies in the lack of consensus regarding key definitional terms like capabilities, assets, resources, and competences. Additionally, RBV faces criticism related to the practicality of testing its hypotheses, primarily due to the absence of robust methodologies for measuring intangible resources.

2.3 Literature review

2.3.1 Influence of end user need analysis on the performance of CSR water projects done by Davis and Shirtliff Limited in Meru County.

Lack of water, as recurring and devastating natural disasters, demand effective and sustainable strategies. To address this pressing issue, a significant body of literature underscores the pivotal role of involving end users in the need analysis phase of water projects. This involvement is regarded as a cornerstone of disaster management, ensuring not only the immediate effectiveness of projects but also their long-term sustainability. One of the seminal works in this field is Anderson and Woodrow's Rising from the Ashes: Development Strategies in Times of Disaster (1998). They argue passionately for community participation and local knowledge as essential components of disaster and recovery efforts. Their contention is clear: projects initiated without considering the needs and perspectives of the affected populations are less likely to endure, especially in the face of recurrent waters.

A Community-Based Approach (2023), delves further into the concept of community-based disaster management. This highlights the practical benefits of engaging local communities in project planning, citing their invaluable insights and experience as key assets for sustainability in water-prone regions. Twigg's conducted a study in 2017 which expands on the idea, emphasizing active community involvement as a hallmark of disaster-resilient communities. The sustainability of projects aimed at mitigating water-related disasters, is intrinsically linked to the degree of involvement beneficiaries have in the planning and implementation phases.

Case studies also contribute significantly to this discourse with that of (Alam & Collins, 2020) offering insights into beneficiary involvement in cyclone disaster. While not water-specific, the study demonstrates how community engagement can lead to more sustainable projects. Moreover, Dutta & Herath, 2022 underlines the vital role of social work in promoting beneficiary participation. Their argument is that active involvement ensures the sustainability of water projects, which aligns with broader water management principles.

2.3.2 Capacity building and performance of CSR water projects done by Davis and Shirtliff Limited in Meru County

Capacity building in development projects has been interpreted differently by various practitioners, leading to varying levels of implementation. While some view it as a mere policy on paper, others have incorporated it as an integral practice, and for some, it only becomes relevant

at the project's conclusion during handover (Mansolff, 2020). Arnstein (2019) conceptualizes citizen building through a ladder that delineates levels of engagement. The first and second rungs, manipulation and therapy, represent non-building levels that have sometimes been wrongly perceived as genuine building. The ladder progresses with informing and consultation (3rd and 4th rungs), where the Capacity is heard but not empowered to make decisions. The subsequent rung (5th) allows for Capacity advice but retains final decision-making power. At the 6th level, communities enter partnerships for negotiation, and at the highest rungs (7th and 8th), power and control are vested in the Capacity.

Mansloff (2020) defines building as an empowering tool that educates citizens and enhances their competence to engage in decision-making processes. Encouraging Capacity ownership and acceptance of project initiatives can be achieved through Capacity involvement. Building can be initiated both externally and internally within groups, communities, institutions, or states. The effectiveness of building hinges on who participates, what they participate in, why they participate, and how they participate.

In Capacity initiatives, the involvement of Capacity members is indispensable, encompassing project initiation, execution, and closure (Kaufman and Poulin, 2021). Historically, projects were imposed on communities by elite groups and leaders, often leading to project failures upon the exit of project initiators.

Despite efforts by donor agencies and state governments to enforce Capacity building, gaps persist, impacting project ownership and, consequently, the performance of Capacity Development Projects (CDPs) (Binswanger, Jacomina, Spector, and Bank, 2020). The lack of initiative stemming from limited Capacity involvement influences transparency concerning project impact and quality. An illustrative case is the failed Lake Turkana fish processing plant project by the Norwegian Government, as reported by NBC NEWS (2017), indicating a lack of Capacity involvement, as they did not consider the Turkana nomads' preferences, demonstrating a deficiency in contextual analysis.

Chikati (2021) underscores that Capacity building should begin with context analysis, involving understanding the Capacity's culture, needs, and priorities. This should extend to project planning, execution, and ultimately evaluation and closure.

In the context of water projects in arid and semi-arid areas, such as Ewaso Ng'iro North borehole projects in Isiolo County, Kenya (Maimuna, 2017), the significance of maintenance funds on project performance has been acknowledged. However, the effect of Capacity building on project performance remains unaddressed. Similarly, in Ruiri water projects in Meru County, Kenya (Njogu, 2018), Capacity building in scrutinizing and approving financial transactions, attending governance meetings, and decision-making was found to be lacking, but the impact of Capacity building on project performance was not explored. This study aims to bridge these gaps by investigating the influence of Capacity building on the performance of Capacity water projects.

2.3.3 Influence of organizational structure on the performance of Davis and Shirtliff Limited CSR water projects in Meru County.

The organizational ownership pertains to the configuration of ownership and control within an organization, carrying significant ramifications for its strategy, performance, and conduct. This concise review of pertinent literature synthesis pivotal research on ownership. It gives citations and references to studies that have significantly contributed to this domain. Central to the discourse is a highly influential framework concerning ownership. The ownership concentration can serve as a mechanism to align managerial interests with those of shareholders, thereby curbing agency costs and bolstering firm performance. The foundational groundwork is laid by Jensen and Meckling (2021), who were among the pioneers in conceptualizing that ownership concentration can alleviate the information asymmetry between managers and shareholders. Consequently, this affords shareholders enhanced capabilities to more efficiently supervise and oversee managerial activities.

Nonetheless, the agency theory has faced challenges from other researchers who contend that it may offer an oversimplified perspective, failing to encompass the entirety of influences dictating ownership. This complexity is exemplified by the work of Demsetz and Lehn (2018), who notes that ownership may be shaped by an array of variables. These variables include organization's

dimensions, maturity, industry, and even the inclinations of its founders and managers. In recent times, scholars have ventured into exploring the influence of institutional investors on the configuration of ownership. Institutional investors, holding substantial shares across various companies, wield potential clout over the conduct of the entities in which they invest. Illustrating this point, Davis et al. (2022) unveiled a positive correlation between the presence of institutional investors and both firm value and profitability. These investors demonstrated an inclination toward proactive engagement and vigilant oversight of companies where their ownership stakes were significant. Engaging the stakeholders will ensure that they feel part of the project and take full part in it.

2.4 summary of the literature review

The literature review in this chapter encompasses a comprehensive exploration of various theoretical frameworks and empirical studies relevant to the research topic. Three primary independent variables, each associated with a different theory, are examined.

Agency Theory, introduced by Meckling and Jensen in 1976, delves into the potential conflicts between principals (such as shareholders) and agents within organizations. It centers on the principal-agent relationship, where managers, driven by their compensation linked to accounting returns, may manipulate information to favor projects with poor net present value (NPV). This manipulation can potentially diminish the value of public entities and projects. Agency Theory underscores the importance of factors like competition and incentive plans in curbing managerial self-interest. When applied to projects such as rural community-managed water pans, it highlights the critical role of financial management in long-term sustainability.

RBV Theory, rooted in Penrose's 1950 perspective, highlights the connection between a firm's competitive advantage and its resources. Resources are categorized as tangible and intangible, with intangible resources often possessing characteristics like rarity and difficulty of imitation, making them pivotal for sustaining competitiveness. In the context of project management, RBV Theory is pertinent as it encompasses both tangible (e.g., methodologies, tools) and intangible (e.g.,

leadership, teamwork) resources, all of which influence project outcomes. However, RBV Theory faces criticism due to definitional ambiguities and challenges in measuring intangible resources.

The third independent variable involves the influence of organizational structure on the performance of CSR water projects. Ownership concentration is a key aspect within this context, with theories such as Agency Theory emphasizing its role in aligning managerial interests with those of shareholders and reducing agency costs. Scholars like Demsetz and Lehn have expanded on ownership dynamics, considering factors like organizational dimensions, industry, and founder/manager inclinations. Furthermore, the impact of institutional investors on ownership configurations is explored, highlighting their potential to enhance firm value and profitability.

Beyond these theoretical frameworks and independent variables, the literature review also discusses specific studies related to the research topic.

The involvement of end users in the need analysis phase of water projects is stressed as crucial for immediate effectiveness and long-term sustainability. Studies like Anderson and Woodrow's Rising from the Ashes and Twigg's work underscore the significance of community participation in project planning, highlighting the value of local knowledge and active involvement.

Capacity building within development projects is examined from various perspectives, emphasizing its importance in empowering citizens to engage in decision-making processes. Arnstein's ladder of engagement levels, Mansloff's definition of building as an empowering tool, and the role of Capacity involvement throughout project phases are discussed. The impact of Capacity building on project performance is a key concern, with gaps in implementation noted as potentially affecting project ownership and transparency.

2.5 Conceptual Framework

Independent Variables

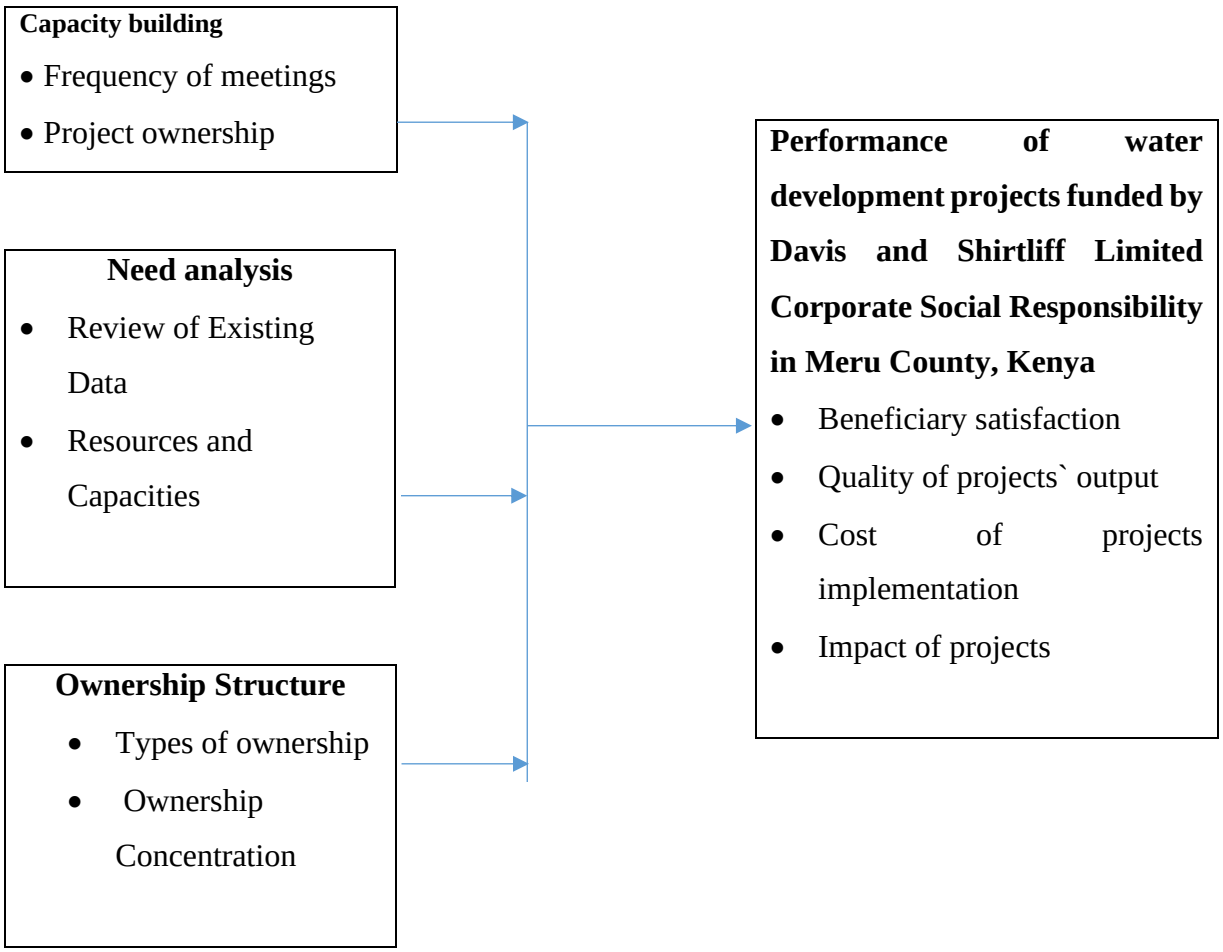

Figure 2.1 Conceptual framework

2.6 Summary of the research gaps

Table 2.1: Summary of research gaps

Author and Year	**Methodology**	**Study findings**	**Gaps**	**Study focus**
Dickson Mwiti & Makaa Margaret, (2021)	Comprehensive literature review & Preliminary survey	Main performance metrics are improved efficiency, sustainability, & responsiveness.	Less focus on post completion training.	Involvement of Wananchi on borehole projects` selection and implementation
Umoja Women, (2011)	Case Study	Background need analysis is important for project sustainability	Less focus on gender issues in domestic responsibilities.	Background need analysis
McLeod, S. A. (2018, May 21)	Questionnaires and comprehensive literature review	Some projects were executive without being affirmed that the Capacity members needed them.	Lack of education of Capacity members on need levels	Understanding project`s need level of the Capacity
Huggins, C. (2011)	Comprehensive literature review	Negative correlation between end user involvement and number of cases of resource-based conflicts.	Lack of root cause analysis of Capacity conflicts.	Resource based conflict as a manifestation of a project`s failure.

Greiner, C. (2013, February)	Comprehensive literature review	Negative correlation between end user involvement and number of cases of resource-based conflicts.	Need for amplified efforts to provide clean water in communities	Resource based conflict as a manifestation of a project`s failure
Marshall, S. (2011, June)	Exploratory research	Positive correlation between access to clean water and social-economic development of a Capacity.	Need for amplified efforts to provide clean water in communities	Lack of safe drinking water as a source of conflict in North-eastern Kenya.
Zenobia Ismail. (2018, May 15)	Comprehensive literature review & Preliminary survey	CSR projects need to be designed and implemented as public work programs	CSR projects follow up and training to be given more focus	Difference between CSR projects and commercial projects within Davis and Shirtliff Ltd.
Otieno Aluma S. A., Eng. Prof. Patts M. A. & Eng. Prod Nyangeri E. N. (2022, February)	Case Study and literature review	Urbanization and population growth threatens availability of water and management of sources and distribution channels	Focus on water provision and neglecting need of local authorities to manage the sources and maintain distribution channels	Increasing population in Meru County leading to imbalance in revenue and non-revenue generating water sources

Stanisław Gasik. (2016, October)	Comprehensive literature review & Preliminary survey	CSR projects need to be designed and implemented as public projects.	CSR projects follow up and training to be given more focus.	Difference between public projects and projects from other sectors

Source: Author 2023

CHAPTER THREE

RESAERCH METHODOLOGY

3.1 Introduction

This chapter outlines and describes the research design, sampling techniques, data collection and analysis methods and data collection tools.

3.2 Research Design

This research study is designed to take a qualitative approach in determining the impact that end user building have on CSR water projects done by D&S across Meru County. It combines action research and phenomenological studies to investigate how CSR projects are affected by end user building. The research sampled historical data to learn on failures of projects implemented earlier, which helped in drawing recommendations. Comparison was done with structured government Capacity projects that follow structured procedures and people`s building. This assisted to recommend standardization procedures for CSR projects implementation in D&S.

Qualitative research examines how people make sense out of their own experiences with a phenomenon and subsequently analyze them to make logical inferences and to gain better understanding, (Arthur Cropley, 2021). The qualitative data collected was assigned various weighted scores and comparisons made. This research used descriptive research design.

3.3 Target Population

Umair Majid, (2018), asserts that when it is not appropriate or feasible to recruit the whole population of interest in a research study, a researcher can recruit a sample of the population on which he or she will conduct the research. This way, the findings from the sample will be generalized.

This research focused on stakeholders in CSR water projects done by D&S in Meru County, Kenya. It targeted beneficiaries of three main projects, Ngundune Water Project, St. Lucy School for the Visually Impaired and Makutano Nkanga Water Project.

From Ngundune Water Project, the research targetd 1000 beneficiaries, from St. Lucy School for the Visually Impaired, 832 beneficiaries and from Makutano Nkanga, 850 beneficiaries.

Of the respondents who participated, the research focused mostly on women and girls, since they are the main carriers of a village`s welfare. Women are the neediest of water in a society for doing household chores like cleaning and cooking.

3.4 Sampling Procedures

The research population is quite large, hence the researcher selected a representative sample to conduct the research, from whose conclusion was represented the whole population. Researchers neither have time nor the resources to analysis the entire population so they apply sampling technique to reduce the number of cases (Hamed Taherdoost, 2016). The intended sampling procedure was stratified random sampling. Yamane`s (1967) formula was applied to select the sample size. $n = \frac{\mathrm{N}}{1+N(e)^2}$

In Ngundune Water Project, 7 out 10 members of the leadership committee were sampled, 50 men, 50 women and 45 school going children were taken as correspondents from the Capacity of 990 people. In St. Lucy School for the Visually Impaired, 10 out of 18 teachers, 80 out of 460 parents and 70 out of 235 pupils were sampled. The pupils were stratified further into classes and 5 students obtained from each class as a correspondent. In Makutano Nkanga Water Project, 5 out of the 8 committee members of the leadership committee was sampled, 47 students, 20 men and 40 women from the Capacity of 245 people.

The research represented all CSR water projects the company does in Africa. This made the stratified random sampling technique most useful and convenient since the sampling frame was minimalized and stratified into homogeneous groups. The female quota was also largely considered to promote gender involvement by reducing male dominance. Sample size selection is affected by several factors including nature of research being conducted, data analysis programme and practical considerations such as time and resources.

Selection of samples from the leadership committees was random. Names of the committees' members were written on a paper and put in a box. The box was then shuffled, and the researcher selected papers randomly. Those selected were interviewed. On members of the village, households were mapped, and random pins placed on them. The required respondents were then found from tracing those pinned locations. This was done with the aid of internet maps.

3.5 Data Collection

The research employed questionnaires, carried out focused group discussion and interviews. Most of the data collected was qualitative, hence needed a structured framework and some one-on-one interaction with the researcher to also observe other non-verbal cues. According to Sir Francis Galton (1822-1911), the founder of questionnaires, questionnaires have the advantage of being cheap, easy to administer by the researcher and can be structured to make the compiling and processing work easy. Questionnaires also give respondents ample time to think through hence giving more objective and reliable feedback. In the questionnaire, the respondents were asked to fill them in anonymity to avoid prejudice, bias and fear of judgement or profiling. This method, therefore, makes it possible for the researcher to reach out to many respondents within a very short time.

Secondary data was obtained from similar previously done research and journals. This aided a lot in comparison of findings and testing validity. Some secondary data was collected from previous research for totally different objectives and purposes but were useful in this research.

3.6 Instruments Reliability and Validity

3.6.1 Reliability

Reliability refers to the truthfulness of the data collected or consistency with what is on the ground. An instrument`s reliability measures its ability to giver the same reading or output under different test conditions. For example, an instrument is reliable of a second study conducted about the same subject gives the same result. Drost (2011), instrument reliability is caused by two factors: random and systematic errors. Random errors are normally uncontrollable by the researcher. For example, respondents' mood. Sometimes feelings may not be captured by the interviewer during data collection, which may affect the reliability of data.

Systematic errors emanate from researcher`s bias or instrumental error. This should give consistent errors throughout the data collected and should be corrected. The questionnaires` reliability was first tested with volunteer respondents before being administered to the sampled respondents.

3.6.2 Validity

Blumberg et al., 2005, validity is the ability of a measuring instrument to measure what it asserts to measure. Results from the questionnaires and interviews were tested for internal and external

validity. Checking against other respondents assisted to gauge whether results had internal validity. External validity tests whether the data can have utility to other interested groups. Triangulation was used to ensure data obtained have the right validity.

3.7 Data Analysis Techniques

Quantitative data collected through questionnaires and interviews was fed into an excel sheet and exported to SPSS for further processing and scientific analysis. It was then presented in statistical tools like mean and standard deviations. On qualitative data, analytical scores were given by judges nominated by the researcher. These scores then gave a quantitative basis for processing, development and comparison. The questionnaires were coded, entered into SPSS software and analyzed. To test the hypothesis, the study carried the regression analysis based on the model used. Pearson's formula was used which is given as follows:

$\mathbf{Y} = \beta 0+\beta 1X1+\beta 2X2+\beta 3X3+\varepsilon$

Where: **Y =** Performance of water development projects funded by Davis and Shirtliff

a = Constant β0, β1, β2, β3

X1 = End user Need Analysis

X2 = Capacity Building

X3 = Organizational Structure

ε = Error Term

3.8 Operational Definition of Variables

Operational definitions are used to render variables specific, measurable and publicly acceptable by certain standards. This is done by ensuring the variables have indicators that are observable, measurable and indexed, and measuring tools calibrated.

Table: 3.1 Operational Definition of Variables:

	Objectives	Variables	Indicators	Measurement	Scale	Data collection method	Data analysis
1	To investigate impact of need analysis to the success of CSR Capacity water projects done by D&S Ltd. in Meru County.	**Dependent Variable**	-Access to clean water. -Children going to school. -Health situation in the Capacity -Economic empowerment	-Increased access to clean water. -More children going to school. -Reduced spread of communicable diseases. -Increased arable land. -Hygiene	Ratio Ratio Ratio Ratio Ordinal sense	Q & I Q & I Q & I Secondary journals Interviews	MCTs and percentages
2	To establish how capacity building influence the sustainability of CSR water projects done by D&S Ltd. in Meru County.	**Independent Variable**	-Trainings -Equipment understanding	-Signed attendance of trainings -Knowledge on O&M of equipment	Number Ordinal judgement	Observation Interview	MCTs and percentages
3	To examine the influence of Capacity organizational structure to performance of	**Independent Variable**	-Representation in committees	-Number of women committee members	Number	Observation, Q & I	MCTs and percentages

	D&S Ltd. Capacity CSR water projects in Meru County		(Women involvement) -Capacity involvement in equipment maintenance.	-Frequency of committee meetings	Number of signed attendance documents and minutes	Observation, Q & I	

CHAPTER FOUR

DATA ANALYIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This is the fourth chapter of this research which includes data analysis, presentation and interpretation. The analysis is done based on the demographic information of the respondents, the independent variables and finally the regression was carried out to test the relationship between the independent variable and the dependent variable. The study sought to establish the influence of capacity characteristics and performance of water development projects funded by Davis and Shirtliff limited in Meru county, Kenya.

4.2 Response Rate

The response rate is arrived at by dividing the number of the questionnaires which were filled by the sample size and multiplying with one hundred percent. In this research, the sample size was 160 and out of this, 120 questionnaires were dully filled and returned and this is equivalent to 75% return rate. The response rate is summarized in table 4.1 as shown:

Table 4.2 Response Rate

	Frequency	**Percentage**
Fully filled questionnaires and retuned	120	75.0
Unreturned Questionnaires	40	25.0
Total	**160**	**100**

4.3 Demographic characteristics of the Respondents

In order to make sure that the data collected from the respondents is representative and valuable, the researcher first sought to establish the demographic information of the respondents which include the gender of the respondents, their age, educational qualification and the period in which they have lived in Meru County.

4.3.1 Gender of the respondents

Table 4.2 Gender of the Respondents

Gender	Frequency	Percentage
Female	77	64.2
Male	43	38.8
Total	**120**	**100**

Women were majority forming 64.2% of all the sampled with male counterparts contributing to 38.8%. This is because when collecting the data, the researcher went to the water points and majority of the respondents who could be found there were women who were drawing water.

4.3.2 Age of the Respondents

Table 4.3 Age of the Respondents

Age	Frequency	Percentage
High School	96	80
Bachelor's Degree	15	12.5
Master’s Degree	6	5
PhD	3	2.5
Total	**120**	**100**

It is evident from table 4.3 that majority of the respondents form four certificates accounting for 80% with those who have degree contributing to 12.5% of the respondents who took part in the research. Only 5% of the respondents had masters level with those who have attained PhD forming 2.5%. Majority of the respondents who had academic qualification form bachelor’s degree to PhD were those in officers while those with the lowest academic qualifications were the beneficiaries of the project.

4.3.3 Period Lived in Meru County

The researcher sought to establish the number of years which the respondents had been living in Meru and this was important since it is assumed that the longer the time an individual have been in the area; the more information they have concerning different aspects of the society.

Table 4.4 Length of Residence in Meru

Period	Frequency	Percentage
Less than 1 year	5	4.1
1-5 years	11	9.2
6-10 years	21	17.5
More than 10 years	83	69.2
Total	**120**	**100**

The results show that majority of the respondents had been a resident in Meru county for more than 10 years representing 69.2%, those who had been a resident between 6-10 years were 17.5%. Only few of the respondents had stayed in Meru for less than 1 year. This shows that the respondents had adequate information in regard to water development projects in Meru County.

4.4 Analysis of Independent Variable

This section consists analysis of the three independent variable where each statement of each objective is analyzed. The study considered three independent variables which are capacity building, ownership structure and need analysis.

4.4.1 Influence of User Need Analysis and performance of water development projects funded by Davis and Shirtliff limited in Meru county, Kenya

Need analysis is a process which entails getting the opinion of the community members on what they want and the project which they want to be implemented in their area. By requesting the respondents to point out the projects, the organization implementing the project gives the community the power to determine what they may need and by doing so, will ensure that the communities own the project and hence protect it. The researcher gave respondents some questionnaires to fill. The questionnaire had six statements in each statement had five options in which the respondents were to rate them. The results are presented in table 4.5 as follows

Table 4.5 User Need Analysis

Statement	Mean	Std. Devi
The existing data regarding our community's water needs is comprehensive and up-to-data	4.03	0.919
The data analysis process for identifying water needs in our community is well-organized and systematic.	4.17	0.877
The information from the review of existing data has been instrumental in shaping our water development project plans.	4.07	0.917
Our community has the necessary financial resources to support water development projects effectively.	4.26	0.743
We have access to skilled personnel and expertise within our community for the successful execution of water development projects.	3.48	0.988
Our community possesses the infrastructure and logistical support required for water development projects.	3.87	1.020
Mean Score, Std. Dev	**3.81**	**0.972**

The results in table 4.5 indicates that respondents agreed with all the statement that the existing data regarding our community's water needs is comprehensive and up-to-data, that data analysis process for identifying water needs in our community is well-organized and systematic, that the information from the review of existing data has been instrumental in shaping our water development project plans, that the community has the necessary financial resources to support water development projects effectively, that the communities have access to skilled personnel and expertise within our community for the successful execution of water development projects and finally that community possesses the infrastructure and logistical support required for water development projects as shown by an overall mean score of 3.81 with a standard deviation of 0.972. This shows that Davis and Shirtliff Limited carries need analysis before starting any water development project so as to get the opinion of the recipients.

4.4.2 Influence of Capacity Building on performance of water development projects funded by Davis and Shirtliff limited in Meru county, Kenya

Capacity building is very vital in the performance of any projects. In the world of water development projects, the role of capacity building cannot be overstated. Capacity building,

defined as the process of enhancing the skills, knowledge, and abilities of individuals and organizations, plays a pivotal role in shaping the success and sustainability of such projects. This study sought to establish the influence of capacity building on performance of water development projects funded by Davis and Shirtliff Limited in Meru County, Kenya, exploring the relationship between capacity building and project performance. The results are presented in table 4.6 as shown

Table 4.6 Capacity Building

Statement	**Mean**	**Std. Dev**
The frequency of meetings related to water development projects in my community is sufficient to enhance our capacity and understanding of these projects.	3.91	1.097
I feel actively involved and a sense of ownership in contributing to the success of water development projects in my community.	4.30	1.118
The capacity-building efforts undertaken by Davis and Shirtliff Limited have significantly improved our ability to manage and participate in water development projects.	4.05	1.014
The communication channels used to disseminate information about water development projects in my community are effective.	3.97	1.057
The resources provided for water development projects in my community are adequate to meet the project's needs.	3.66	1.052
The overall impact of water development projects on the community's well-being has been positive.	3.97	0.925
Mean, Std. Dev	**3.86**	**1.04**

Table 4.6 provides analyzed data for capacity building and its influence in water development projects in Meru County, Kenya, especially those funded by Davis and Shirtliff Limited. Concerning the frequency of meetings related to water development projects, respondents on average believe that the current level is adequate for enhancing their capacity and understanding, as indicated by a mean score of 3.91, the standard deviation of 1.097 shows diversity in individual opinion on this statement. On the second statement, the participants agreed that there is ownership

and active involvement in contributing to the success of water development projects in their community having a mean score of 4.30 and standard deviation of 1.118 which highlights variability in individual responses, underlining diverse viewpoints within the community.

Furthermore, respondents agreed that the capacity-building efforts initiated by Davis and Shirtliff Limited have significantly improved the community's ability to manage and participate in water development projects, as reflected in the mean score of 4.05 with a standard deviation of 1.014 which implies a degree of diversity in the community's assessment of the impact of these efforts. In terms of communication channels, the mean score of 3.97 suggests that, on average, respondents find the channels effective for disseminating information about water development projects. Finally, regarding the overall impact of water development projects on the community's well-being, the mean score of 3.97 indicates a generally positive perception.

4.4.3 Ownership Structure on performance of water development projects funded by Davis and Shirtliff limited in Meru county, Kenya

The ownership structure of water development projects is a critical determinant of their success and sustainability, playing a pivotal role in shaping the dynamics of project implementation, community engagement, and long-term impact. This study looks into the specific context of water development projects funded by Davis and Shirtliff Limited in Meru County, Kenya, exploring the relationship between ownership structure and project performance. The results are presented in table 4.7

Table 4.7 Ownership Structure

Statement	Mean	Std. Dev
The concentration of ownership affects how major decisions are made.	2.77	1.660
High ownership concentration leads to quicker decision-making.	2.32	0.964
Ownership concentration influences the degree of alignment between shareholders' interests and business strategies.	2.98	1.249
The level of ownership concentration impacts the influence of individual shareholders direction.	3.29	1.299
Ownership concentration affects the stability and long-term planning.	2.96	1.098

The concentration of ownership affects how major decisions are made.	4.15	0.769
Mean, Std. Dev	**3.52**	**1.074**

Table 4.7 examines the perceived influence of ownership structure on the success of Davis and Shirtliff Limited-funded water development projects in Meru County, Kenya. The table contains a number of statements, each with its own mean score and standard deviation, that shed light on the complex dynamics of ownership concentration and its repercussions. Respondents assigned a mean score of 2.77 to ownership concentration as a significant factor influencing major choices connected to water development projects. The rather large standard deviation of 1.660, on the other hand, demonstrates great variability in perspectives within the community, emphasizing the complexities of opinions on this subject.

In terms of decision-making speed, the mean score of 2.32 indicates that increased ownership concentration leads to faster decisions. However, the standard deviation of 0.964 indicates that individual responses vary, highlighting varying perspectives on the relationship between ownership concentration and decision speed. According to the mean score of 2.98, ownership concentration influences the alignment of shareholders' interests with business strategy. Nonetheless, the standard deviation of 1.249 illustrates the community's different views on the amount of agreement.

With a mean score of 3.29, respondents accept that ownership concentration impacts the degree of influence individual shareholders have in steering water development initiatives. The standard deviation of 1.299 indicates a variety of views on the impact of ownership concentration on individual shareholder influence. The mean score of 2.96 indicates that ownership concentration plays a role in stability and long-term planning. The standard deviation of 1.098, on the other hand, demonstrates that individual opinions on the relationship between ownership concentration and project stability/long-term planning vary.

4.5 Inferential Statistics

In this study, Pearson’s correlation coefficient was used to establish the relationship between the variables. Multiple linear regression was used to predict performance of water development projects funded by Davis and Shirtliff limited using the three independent

variables, including end user need analysis, capacity building and organizational structure.

4.8 Model Summary

Model	R	R Square	Adjusted R square	Std. Error ofthe Estimate	R Square	F Change
1	.675[a]	.456	.450	.42187	.456	70.347

a) **Predictors: (Constant),** end user need analysis, capacity building and organizational structure

b) **Dependent Variable:** Performance of water development projects funded by Davis and Shirtliff limited

The results in Table 4.8 indicate that the entire model was statistically significant in predicting the performance of water development projects funded by Davis and Shirtliff limited, as shown by F statistics of 79.347 and a p value of 0.05. The R provides a 67.5% variation on the Performance of water development projects funded by Davis and Shirtliff limited which can be explained by the three independent variables. As a result, the complete model was found to be a good fit.

Table 4.28 Analysis of Variance ANOVA[a]

Model		Sum ofSquares	Df	Mean Square	F	Sig.
1	Regression	56.486	4	14.122	79.347	.000[b]
	Residual	67.452	115	.178		
	Total	**123.938**	**120**			

c) **Predictors: (Constant),** end user need analysis, capacity building and organizational structure

d) **Dependent Variable:** Performance of water development projects funded by Davis and Shirtliff limited

The analysis of variance (ANOVA) presented in Table 4.28 assesses the significance of the regression model in explaining the variability in the dependent variable, Performance of water development projects funded by Davis and Shirtliff Limited. The ANOVA table provides key

statistics to evaluate the overall effectiveness of the model. The regression model, which includes predictors such as end user need analysis, capacity building, and organizational structure, is observed to be statistically significant ($F = 79.347$, $p < 0.001$). The model's ability to explain the variance in the dependent variable is supported by a substantial sum of squares (56.486) and a mean square of 14.122. These values collectively contribute to a high F-statistic, indicating that the predictors jointly have a significant impact on the performance of water development projects. The residuals, representing the unexplained variance in the dependent variable, account for a sum of squares of 67.452. The mean square for residuals is 0.178, reflecting the average unexplained variance.

Regression Coefficient

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig**
	B	**Std. Error**	**Beta**		
Constant	2.263	.122		5.340	.000
End user need analysis	.128	.011	.112	2.376	.000
Capacity building	.476	.113	.464	2.793	.000
Organizational structure	.114	.117	.110	3.572	.001

The equation for the regression becomes: $Y= 2.262+.128X1+.476X2+.114X3$

The regression coefficient table offers a detailed examination of the relationships between the predictor variables; End user need analysis, Capacity building and Organizational structure and the dependent variable, Performance of water development projects funded by Davis and Shirtliff Limited. Starting with the constant term, which represents the estimated value of the dependent variable when all predictor variables are zero, the value is 2.263. This constant is statistically significant ($p < 0.001$), as indicated by the high t-value of 5.340.

An increase of one unit in End user need analysis is associated with an estimated increase of 0.128 units in the dependent variable. The standardized coefficient (Beta) of 0.112 emphasizes the relative importance of this variable in the model. The significance level ($p < 0.001$) suggests that End user need analysis is a meaningful predictor. A one-unit increase in Capacity building corresponds to an estimated increase of 0.476 units in the dependent variable. The relatively high standardized coefficient (Beta) of 0.464 highlights the substantial impact of this variable after

accounting for its scale. The significance level ($p < 0.001$) reinforces the statistical significance of Capacity building as a predictor. For each unit increase in Organizational structure, the dependent variable is estimated to increase by 0.114 units. The standardized coefficient (Beta) of 0.110 indicates a positive relationship, emphasizing the importance of this variable. The significance level ($p < 0.01$) suggests that Organizational structure is a statistically meaningful predictor.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, DISCUSSION, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER STUDY

5.1 Introduction

In summary, this chapter presents the findings of the study, focusing on data analysis, presentation, and interpretation. The research aimed to investigate the influence of capacity characteristics on the performance of water development projects funded by Davis and Shirtliff Limited in Meru County, Kenya.

5.2 Summary

The response rate for the study was 75%, with 120 out of 160 questionnaires being fully filled and returned. Demographic characteristics of the respondents were explored, revealing that the majority were female (64.2%), with varying educational qualifications and lengths of residence in Meru County. The analysis of independent variables included three key components: end user need analysis, capacity building, and ownership structure. Notably, the study found that Davis and Shirtliff Limited actively engages in need analysis before initiating water development projects, involving the community in decision-making. The influence of capacity building on project performance was examined, revealing positive perceptions among respondents regarding the impact of capacity-building efforts. Additionally, the study explored the influence of ownership structure on project success, highlighting varying opinions within the community on the impact of ownership concentration.

Inferential statistics, including Pearson's correlation coefficient and multiple linear regression, were employed to examine the relationships between variables. The model summary indicated that the overall model was statistically significant in predicting the performance of water development projects, with a substantial variation explained by the independent variables. The regression

coefficient analysis further emphasized the significance of end user need analysis, capacity building, and organizational structure as predictors of project performance. The regression equation provided insights into the estimated impact of each predictor on the dependent variable.

5.3 Conclusion of the study

The discussion of the findings provides an opportunity to delve deeper into the results of the study and interpret their implications. Here, we will explore key themes emerging from the analysis of end user need analysis, capacity building, and ownership structure in relation to the performance of water development projects funded by Davis and Shirtliff Limited in Meru County, Kenya. The findings reveal that Davis and Shirtliff Limited actively engages in need analysis before initiating water development projects, allowing the community to voice their preferences and requirements. The positive responses from respondents indicate a general agreement on the comprehensiveness and effectiveness of the need analysis process. This approach ensures that projects align with the genuine needs of the community, fostering a sense of ownership and participation.

The high mean scores across all statements in the end user need analysis suggest that the community perceives the organization's efforts positively. The community's acknowledgment of having access to financial resources, skilled personnel, and necessary infrastructure indicates a robust need analysis process. This approach not only contributes to project success but also empowers the community by involving them in decision-making processes. Capacity building emerges as a critical factor influencing the performance of water development projects. The positive responses regarding the frequency of meetings, active involvement, and a sense of ownership highlight the perceived effectiveness of capacity-building efforts by Davis and Shirtliff Limited. These findings align with the literature that emphasizes the importance of enhancing the skills, knowledge, and abilities of individuals and organizations in project success.

The mean score for the overall impact of water development projects on the community's well-being further supports the notion that capacity building contributes to positive project outcomes. The positive correlation between capacity building and community involvement suggests that informed and empowered communities are more likely to contribute to the success and sustainability of water projects. The study explores the influence of ownership structure on the performance of water development projects. The varying responses to statements about ownership

concentration highlight the complexity of community perspectives on decision-making processes. The fact that major decisions are perceived to be affected by ownership concentration raises questions about the inclusivity of decision-making processes.

The finding that high ownership concentration leads to quicker decision-making may have both positive and negative implications. While quick decision-making can be efficient, it is crucial to ensure that it does not compromise the inclusivity and alignment of decisions with community interests. The overall model, as indicated by the model summary and regression coefficients, suggests that end user need analysis, capacity building, and organizational structure collectively have a significant impact on the performance of water development projects funded by Davis and Shirtliff Limited. The high R-squared value indicates that a substantial portion of the variance in project performance is explained by these independent variables. The regression coefficients provide insights into the strength and direction of the relationship between each independent variable and the dependent variable. End user need analysis, capacity building, and organizational structure each contribute positively to the overall model, emphasizing their importance as predictors of project success.

5.4 Recommendations

Foster active community involvement in need analysis to ensure that water development projects align with community preferences and needs.

Sustain and enhance capacity-building efforts to empower community members, promoting effective project management and participation.

Explore strategies to address varying opinions on ownership concentration, ensuring that decision-making processes are inclusive and aligned with community interests.

Implement periodic assessments to gauge the ongoing impact of water development projects on community well-being, allowing for adjustments and improvements.

5.5 Suggestions for Further Study

Conduct a longitudinal study to assess the sustained impact of water development projects over an extended period.

Compare the performance of water development projects funded by different organizations to identify best practices and areas for improvement.

Investigate different models of community engagement and empowerment to determine the most effective approaches for sustainable water development.

Explore the nuances of ownership structures in water development projects, considering cultural, social, and economic factors that may influence community perspectives

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QUESTIONNAIRE

This section contains demographic information for the project. Please tick where appropriate

SECTIO A: DEMOGRAPHIC INFORMATION

1. Gender:
    - Male
    - Female
    - Other (please specify)
2. Age:
    - Under 18
    - 18-24
    - 25-34
    - 35-44
    - 45-54
    - 55-64
    - 65 or over
3. Educational Qualifications:
    - High School or Less
    - Bachelor's Degree
    - Master's Degree
    - Ph.D. or Other Advanced Degree
    - Prefer Not to Say
4. Employment Status:

- Employed
- Unemployed
- Student
- Retired
- Other (please specify)

5. Length of Residence in Meru County:
    - Less than 1 year
    - 1-5 years
    - 6-10 years
    - More than 10 years

This section contains statements on all the independent and dependent variable. Please give your opinion by ticking where appropriate. 1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree and 5- Strongly agree

SECTION B: CAPACITY BUILDING

Statement	**1**	**2**	**3**	**4**	**5**
The frequency of meetings related to water development projects in my community is sufficient to enhance our capacity and understanding of these projects.					
I feel actively involved and a sense of ownership in contributing to the success of water development projects in my community.					
The capacity-building efforts undertaken by Davis and Shirtliff Limited have significantly improved our ability to manage and participate in water development projects.					
The communication channels used to disseminate information about water development projects in my community are effective.					
The resources provided for water development projects in my community are adequate to meet the project's needs.					
The overall impact of water development projects on the community's well-being has been positive.					

SECTION C: PERFORMANCE OF WATER DEVELOPMENT PROJECTS

Statement	1	2	3	4	5
I am highly satisfied with the quality of water development projects in my community funded by Davis and Shirtliff Limited CSR					
The overall output of these water development projects has exceeded my expectations.					
The cost-effectiveness of implementing these water development projects has resulted in exceptional value for our community.					
The maintenance and sustainability of the water development projects are being effectively managed.					
The community's input and feedback have been actively considered in the planning and execution of these water development projects.					

SECTION D: OWNERSHIP STRUCTURE

Please select the ownership structure that is applicable to your organization. Tick where applicable. Use the scale given where **1-Strongly disagree, 2- Disagree**, **3- Neutral**, **4- Agree**, **5- Strongly agree**

	SA	A	N	D	SD
The concentration of ownership affects how major decisions are made.					
High ownership concentration leads to quicker decision-making.					
Ownership concentration influences the degree of alignment between shareholders' interests and business strategies.					
The level of ownership concentration impacts the influence of					

individual shareholders direction.					
Ownership concentration affects the stability and long-term planning.					
The concentration of ownership affects how major decisions are made.					

SECTION E: NEED ANALYSIS

Statement	**1**	**2**	**3**	**4**	**5**
The existing data regarding our community's water needs is comprehensive and up-to-data					
The data analysis process for identifying water needs in our community is well-organized and systematic.					
The information from the review of existing data has been instrumental in shaping our water development project plans.					
Our community has the necessary financial resources to support water development projects effectively.					
We have access to skilled personnel and expertise within our community for the successful execution of water development projects.					
Our community possesses the infrastructure and logistical support required for water development projects.					