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MONITORING AND EVALUATION (M&E) CAPACITY BUILDING AND PERFORMANCE OF WATER AND SANITATION PROJECTS IN MIGORI COUNTY, KENYA

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ABSTRACT

Water and sanitation projects are crucial for the development and well-being of any nation, particularly in developing countries like Kenya. However, water and sanitation projects in Migori County, Kenya, face a range of challenges that hinder their effective implementation and sustainability. The general objective of the study is to examine the influence of monitoring and evaluation (M&E) capacity building on performance of water and sanitation projects in Migori County, Kenya. Specifically, the study sought to determine the influence of knowledge sharing on performance of water and sanitation projects in Migori County, Kenya and to evaluate the influence of resource allocation on performance of water and sanitation projects in Migori County, Kenya. This study was anchored on Social Exchange Theory and Resource-Based View (RBV). The study used descriptive research design. The focus was water and sanitation projects in the County. The unit of observation was employees involved in the projects, national government representatives and local authorities from the county (Ministry of Water and Sanitation, 2023). According to the county report (2023) Migori County has 105 ongoing water and sanitation projects. This study targeted three individuals in each project including project manager, national government representative and local authority representative. The total population was therefore 315 respondents. The study's sample size was reached at using Krejcie and Morgan sample size determination formula. The 173 respondents were chosen with the help of stratified random sampling technique. Before the data could be analysed, the researcher ensured the data is checked for completeness, followed by data editing, data coding, data entry, and data cleaning. Inferential and descriptive statistics were employed for analysis of quantitative data with the assistance of Statistical Package for Social Sciences (SPSS version 25). The study results were presented through use of tables and figures. From the pilot test results; all the variables were found to have Cronbach alpha value greater than 0.7. This suggested that all the variables were reliable and hence there is no need to change the measures and indicators in the questions. This implies that the research instrument met all the requirements. The study concludes that knowledge sharing has a positive and significant influence on performance of water and sanitation projects in Migori County, Kenya. The study also concludes that resource allocation has a positive and significant influence on performance of water and sanitation projects in Migori County, Kenya. Based on the findings, the study recommends that by offering regular training programs that focus on both technical skills and community engagement, staff members can better understand local challenges, such as water scarcity, poor infrastructure, and health risks, which are prevalent in the region.

Key Words: Monitoring and Evaluation (M&E) Capacity Building, Knowledge Sharing, Resource Allocation, Performance, Water and Sanitation Projects

Background of the Study

Water and sanitation projects are essential initiatives aimed at improving access to clean water and proper sanitation facilities, particularly in underserved or developing regions. These projects often focus on constructing and upgrading water infrastructure, such as wells, pipes, and filtration systems, while also promoting hygiene practices and waste management solutions to prevent waterborne diseases (Jahaf, 2021). By improving access to safe water and sanitation, these projects significantly reduce the risk of illness, enhance public health, and promote socio-economic development. They are typically supported by governments, NGOs, and international organizations, and can also address environmental concerns by promoting sustainable water usage and waste disposal practices (Lee, *et al*, 2022).

Water and sanitation projects play a critical role in improving public health and overall well-being, especially in areas with limited access to clean water. Access to safe drinking water is a fundamental human right, yet millions of people worldwide still lack it, resulting in widespread waterborne diseases like cholera and dysentery (Borisch, Amer & Jahaf, 2023). By providing communities with reliable water sources, these projects reduce the spread of infectious diseases, ultimately saving lives. They also support better hygiene practices, which are essential in preventing illness and promoting health in households and communities. In addition, water and sanitation projects contribute to economic development (Projahnmo, Heblinski & Jahid, 2022). Access to clean water and sanitation enables individuals, particularly women and children, to spend less time collecting water and more time on education, work, and community activities. This boosts productivity and empowers marginalized groups, leading to improved quality of life. Sanitation systems, such as toilets and sewage treatment plants, also play an important role in creating cleaner environments, preventing the contamination of water sources, and improving urban infrastructure (Aftab, *et al*, 2020).

Furthermore, water and sanitation projects promote environmental sustainability. They often involve practices like rainwater harvesting, waste treatment, and efficient water use, which help manage local water resources and reduce environmental pollution (Endris & Deribe, 2022). These projects can also enhance resilience to climate change by building infrastructure that withstands droughts, floods, or other extreme weather events. In sum, water and sanitation projects are integral to public health, economic stability, and environmental sustainability, playing a key role in reducing inequalities and fostering long-term development (Kwareh, Mgale & Rwela, 2024).

Monitoring and Evaluation (M&E) capacity building refers to the process of strengthening the skills, knowledge, and systems necessary to effectively monitor and evaluate programs, projects, or policies (Kissi, 2020). This involves training individuals and organizations to design, implement, and assess M&E activities, ensuring they can collect, analyze, and use data to make informed decisions. Capacity building includes enhancing technical expertise in data collection methods, analysis techniques, and reporting standards, as well as fostering organizational structures that support continuous learning and improvement (Nsefu & Mumba, 2024). Involving stakeholders—such as beneficiaries, community members, and partners—in the design and implementation of M&E activities helps ensure that the system is relevant, inclusive, and responsive to their needs (Roba & Odollo, 2023). Knowledge sharing among staff and partners enables the exchange of lessons learned, best practices, and insights that can enhance the effectiveness of the M&E process. Appropriate resource allocation, including financial, human, and technological resources, is essential to sustaining M&E efforts (Amolo, Rhambo & Wafula, 2021). Ensuring adequate funding and support for M&E activities empowers staff and stakeholders to engage meaningfully in the process and ultimately contributes to the achievement of program objectives (Omunga & Gitau, 2023). This study

aimed to examine the influence of monitoring and evaluation (M&E) capacity building on performance of water and sanitation projects in Migori County, Kenya.

Statement of the Problem

Water and sanitation projects are crucial for the development and well-being of any nation, particularly in developing countries like Kenya. Access to clean water and proper sanitation is essential for public health, economic growth, and social stability (Amolo, Rhambo & Wafula, 2021). However, Water and sanitation projects in Migori County, Kenya, face a range of challenges that hinder their effective implementation and sustainability. Time management issues are a significant challenge in the execution of water and sanitation projects in Migori County, as delays lead to missed opportunities for the community and ineffective service delivery (Otundo, 2024). One of the main causes of delays is poor planning, which often arises due to political influence or administrative bottlenecks. According to a report from the Kenya Water Sector Board (2020), 58% of water and sanitation projects in Kenya experience delays of more than six months beyond the planned timelines (Njeru & Kirui, 2022). In Migori County specifically, the delays are exacerbated by the geographical challenges and poor infrastructure in rural areas. For instance, a study by the Ministry of Water and Sanitation in 2021 revealed that nearly 70% of rural water supply projects in Migori face time delays, with only 30% of the projects completing on schedule (Roba & Odollo, 2023). These delays are often attributed to the lack of skilled personnel and inconsistent funding streams. In some instances, political instability or changes in local leadership can further complicate project timelines, delaying project kickoffs or approvals (Amolo, Rhambo & Wafula, 2021).

The Kenya National Bureau of Statistics (2021) reported that over 50% of water and sanitation projects in Kenya face budget overruns, with an average budget shortfall of 25% from initial projections. This is a significant issue in Migori County, where inadequate county-level financial allocation for water and sanitation contributes to the delayed or incomplete nature of the projects (Otundo, 2024). In fact, only 1.5% of Migori's county budget is allocated to water and sanitation, far below the recommended 5% allocation by the United Nations for essential infrastructure like water and sanitation. Furthermore, the reliance on donor funding further complicates the situation, as donor support may be inconsistent, and disbursements may be delayed, leaving projects stalled (Njeru & Kirui, 2022). The lack of sufficient budget has also led to the abandonment of critical water supply systems, with 40% of the water supply projects in the county either underdeveloped or never fully completed, according to the Water Resource Management Authority's 2020 report (Roba & Odollo, 2023).

A study conducted by the Kenya Water and Sanitation Civil Society Network (KEWASNET) in 2018 indicated that over 35% of rural water and sanitation projects in Kenya failed to meet their objectives due to poor planning and lack of accurate data on community needs (Omunga & Gitau, 2023). In Migori County, where the population is largely rural and economically disadvantaged, a mismatch between project goals and community needs has been identified as a key factor contributing to project failure. For example, a survey by the Kenya Rural Water Supply and Sanitation Programme (KRWSSP) in 2020 found that 42% of the water projects in Migori did not meet the expected water coverage targets because the objectives were set without considering the population's growth rate, land use patterns, and the availability of sustainable water sources (Otundo, 2024).

Various studies have been conducted in different parts of the world on M&E capacity building and project performance. For instance, Thambiura, *et al* (2023) examined on monitoring and evaluation capacity building, and performance of livelihood development programme. Roba and Odollo (2023) assessed on monitoring and evaluation capacity building on performance of water projects and Njeru and Kirui (2022) researched on monitoring and evaluation capacity building and performance of Kenya National Highway Authority Road Construction Projects.

However, none of these studies focused on knowledge sharing and resource allocation on performance of water and sanitation projects in Migori County, Kenya. To fill the highlighted gaps, the current study sought to examine the influence of monitoring and evaluation (M&E) capacity building (knowledge sharing and resource allocation) on performance of water and sanitation projects in Migori County, Kenya.

Objectives of the Study

The general objective of the study is to examine the influence of monitoring and evaluation (M&E) capacity building on performance of water and sanitation projects in Migori County, Kenya

The study is guided by the following specific objectives

i. To determine the influence of knowledge sharing on performance of water and sanitation projects in Migori County, Kenya
ii. To evaluate the influence of resource allocation on performance of water and sanitation projects in Migori County, Kenya

LITERATURE REVIEW

Theoretical Framework

Social Exchange Theory

Social Exchange Theory, developed by George Homans (1958), is a social psychological and sociological concept that explains human interactions and relationships as the result of an exchange process where individuals seek to maximize benefits and minimize costs (Maziar, 2020). It is based on the premise that people evaluate relationships in terms of the rewards they receive (such as social approval, love, or material gain) compared to the costs incurred (such as time, effort, or emotional strain). According to the theory, individuals are motivated by self-interest, and they weigh the potential outcomes of interactions to determine whether they are worth pursuing (Adedolapo & Wole, 2020). Relationships are seen as a form of social transaction, where individuals engage in behaviors that are rewarding and avoid those that are costly. Social Exchange Theory also highlights the idea of reciprocity, where people expect mutual benefit in interactions and are likely to maintain relationships that are perceived as equitable and beneficial (Mullei & Misuko, 2022).

A key aspect of Social Exchange Theory is the concept of reciprocity. In social interactions, people tend to expect a fair return for the resources (time, effort, etc.) they invest in a relationship (Muleke, Sakwa & Simiyu, 2023). If one person gives something, they typically expect to receive something of equal value in return, which helps to maintain balance and fairness in relationships. Reciprocity is considered an essential foundation for trust and stability in social interactions, as it encourages individuals to continue engaging with one another, knowing that the exchange will be mutually beneficial over time (Ndegwa *et al*, 2021). However, if one party feels that they are consistently giving more than they are receiving, the relationship may experience tension, dissatisfaction, or even termination. Another important element of Social Exchange Theory is the idea of comparison levels. Individuals develop expectations of what constitutes a fair or satisfactory exchange based on past experiences and social norms. This creates a standard or reference point against which they evaluate new relationships or interactions (Wamitu, 2020). For example, someone who has experienced supportive and rewarding friendships will have higher expectations for future relationships. If a new relationship does not meet these expectations, it may lead to dissatisfaction or a decision to exit the relationship. Additionally, the theory suggests that people may compare their relationships to alternative options, weighing whether staying in the current relationship offers

better rewards than possible alternatives (this is known as the comparison level for alternatives) (Maziar, 2020).

Social Exchange Theory also emphasizes the role of power and dependency in relationships. Power dynamics are often shaped by the distribution of resources, where individuals who can offer more valuable resources (such as financial support, emotional stability, or expertise) tend to have more influence in the relationship. Dependency occurs when one person relies heavily on the other for rewards, which may create an imbalance in the relationship (Adedolapo & Wole, 2020). For instance, if one partner is financially dependent on the other, this could lead to unequal power dynamics that affect decision-making and overall satisfaction. Social Exchange Theory thus provides a framework for understanding not only how relationships are formed and maintained but also how they can evolve over time based on shifting expectations, rewards, and the balance of power between individuals (Mullei & Misuko, 2022). Social Exchange Theory is based on several key assumptions. One fundamental assumption is that individuals are rational actors who make decisions based on a cost-benefit analysis, seeking to maximize rewards and minimize costs in their relationships and social interactions. This assumption implies that people are self-interested and motivated by personal gain, whether that is material or emotional. Another assumption is that relationships are transactional in nature, where both parties involved expect to gain something from the interaction (Muleke, Sakwa & Simiyu, 2023). Despite its strengths, Social Exchange Theory has faced several critiques. One major criticism is that it overly emphasizes rational decision-making, ignoring the role of emotions, unconscious influences, and irrational behavior in human interactions. Critics argue that not all human behavior can be reduced to a simple cost-benefit calculation, as relationships often involve deep emotional connections and altruistic actions that don't fit neatly into a transactional framework (Ndegwa *et al*, 2021). Social Exchange Theory was used to determine the influence of knowledge sharing on performance of water and sanitation projects in Migori County, Kenya

Resource-Based View (RBV)

The Resource-Based View (RBV), developed by Birger Wernerfelt (1959), is a strategic management theory that suggests a firm's competitive advantage and performance are largely driven by its unique resources and capabilities (Harjit & Sanjay, 2020). According to RBV, resources can be tangible (such as physical assets, financial capital, or technology) or intangible (such as brand reputation, intellectual property, or organizational culture). For a resource to provide a sustainable competitive advantage, it must be valuable, rare, inimitable, and non-substitutable—often referred to as the VRIN framework. The theory emphasizes that firms should leverage their internal resources effectively, rather than solely focusing on external market conditions, to achieve long-term success and differentiation in the marketplace. This perspective underscores the importance of resource management, strategic capabilities, and internal strengths in driving business success (Mubangizi & Kabanda, 2024). One of the foundational principles of RBV is the VRIN framework, which stands for Valuable, Rare, Inimitable, and Non-substitutable resources. A resource must be valuable in that it allows the firm to exploit opportunities or neutralize threats in the market. It must be rare, meaning it is not widely available to competitors, giving the firm a unique edge (Ali, Ogolla & Nzioki, 2022). Furthermore, the resource must be inimitable, meaning it is difficult or impossible for competitors to copy or replicate, either because of its complexity, historical conditions, or the unique way it is integrated into the organization. Finally, the resource must be non-substitutable, meaning there are no equivalent alternatives that could serve the same function or provide the same benefit (Mwaura *et al*, 2021).

RBV also emphasizes the role of capabilities in a firm’s strategic positioning. While resources are the assets a firm possesses, capabilities refer to the firm’s ability to deploy and leverage

those resources effectively to create value (Gitau, Abayo & Kibaine, 2020). Capabilities are developed over time and through experience, and they are often complex combinations of resources that are difficult for competitors to replicate. For instance, a company's ability to innovate or its reputation for customer service can be seen as capabilities that enhance the firm's ability to use its resources in ways that competitors cannot easily imitate. Thus, capabilities often become a source of sustained competitive advantage because they are developed over time and cannot be easily copied by competitors. RBV encourages firms to focus on their internal strengths rather than solely on external market factors, such as competition or market demand (Harjit & Sanjay, 2020). The theory advocates for firms to identify and exploit their unique resources, whether that's proprietary technology, skilled employees, or a strong organizational culture, to achieve differentiation and long-term success. This inward-focused approach challenges the traditional emphasis on market positioning and external factors, arguing that the true source of competitive advantage lies in how well a firm can leverage and protect its valuable, rare, inimitable, and non-substitutable resources. The theory also underscores the importance of aligning a firm's strategy with its core competencies, helping organizations build and sustain an advantageous position in the market (Mubangizi & Kabanda, 2024).

The Resource-Based View (RBV) is based on several key assumptions. First, it assumes that a firm's internal resources and capabilities are the primary sources of competitive advantage, rather than external factors like market conditions or competitive dynamics (Ali, Ogolla & Nzioki, 2022). It also assumes that resources are heterogeneously distributed across firms, meaning that not all companies have access to the same set of resources, and some resources are more valuable than others. Another key assumption is that resources can be accumulated, developed, and protected over time, and that the firm has the ability to control and effectively utilize these resources. One of the main criticisms is that the theory can be too inward-looking, focusing heavily on internal resources at the expense of external factors like market conditions, customer preferences, and competitive behavior. Critics argue that RBV does not fully account for the dynamic and rapidly changing nature of industries, where even the most unique resources can lose their value or become obsolete due to shifts in technology, regulation, or consumer trends (Ali, Ogolla & Nzioki, 2022). Resource-Based View (RBV) was used to evaluate the influence of resource allocation on performance of water and sanitation projects in Migori County, Kenya.

Conceptual Framework

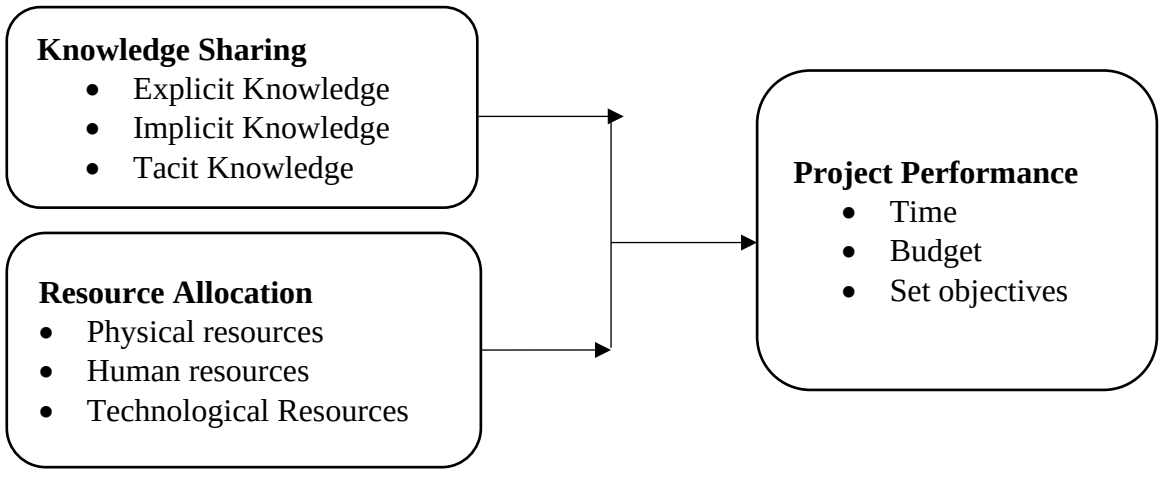

Figure 2. 1: Conceptual Framework

Knowledge Sharing

Knowledge sharing refers to the practice of exchanging information, skills, expertise, and insights among individuals or groups within an organization (Maziar, 2020). It can occur through formal channels, such as meetings, reports, or training sessions, as well as informal interactions, like discussions or mentoring. Knowledge sharing helps ensure that valuable expertise is not siloed but is accessible to others, promoting a culture of learning and continuous improvement. It encourages collaboration, innovation, and problem-solving, as employees can leverage the knowledge of their colleagues to address challenges more effectively. In the long term, knowledge sharing enhances organizational efficiency, supports decision-making, and drives overall growth by utilizing the collective wisdom of the workforce (Adedolapo & Wole, 2020). Explicit knowledge refers to information that is easily articulated, written down, and shared in a clear and structured form (Mullei & Misuko, 2022). It includes facts, data, manuals, reports, and procedures that can be easily codified and communicated. This type of knowledge is often documented and accessible to anyone within an organization or community, making it highly transferable. Explicit knowledge is typically formal and objective, and can be stored in databases, books, or digital formats, allowing for easy retrieval and dissemination. Examples include training materials, technical guidelines, and standard operating procedures (SOPs), which are essential for maintaining consistency and efficiency within organizations (Muleke, Sakwa & Simiyu, 2023).

Implicit knowledge lies between explicit and tacit knowledge. It refers to the understanding or skills that individuals develop through experience, but are not fully articulated or documented (Ndegwa *et al*, 2021). Implicit knowledge is often intuitive and partially understood by the person holding it but may not be easily expressed or communicated. This type of knowledge is typically based on practical experiences and can be learned over time through observation, trial and error, or practice. For example, someone might have an intuitive grasp of how to handle a specific work situation based on past experiences, but may not be able to clearly explain or formalize the approach. Implicit knowledge plays a key role in problem-solving and adapting to new situations (Wamitu, 2020). Tacit knowledge is the most personal and hard-to-transfer type of knowledge. It includes insights, intuitions, skills, and experiences that individuals acquire over time, often unconsciously, and which are difficult to codify or express (Maziar, 2020). Tacit knowledge is deeply rooted in personal experience, context, and actions, making it challenging to share without direct interaction or mentorship. This type of knowledge is typically learned through practice, social interactions, and informal learning. Examples include a craftsman's skill in creating a product, an expert's intuition in diagnosing a problem, or a leader's ability to motivate a team. Tacit knowledge is valuable because it often leads to innovation, creativity, and expertise, but it can be difficult to transfer to others without close mentoring or hands-on experience (Adedolapo & Wole, 2020).

Resource Allocation

Resource allocation refers to the process of distributing available resources—such as time, money, personnel, and materials—across various tasks, projects, or departments to achieve specific goals or objectives (Harjit & Sanjay, 2020). It involves determining how best to use these resources efficiently and effectively, balancing competing priorities to maximize productivity and meet deadlines. Proper resource allocation is critical for optimizing performance and ensuring that each project or task receives the necessary support for success (Mubangizi & Kabanda, 2024). Effective allocation takes into account factors like urgency, importance, and resource availability, helping organizations avoid bottlenecks, reduce waste, and make informed decisions about where to invest their resources for the greatest impact (Ali, Ogolla & Nzioki, 2022). Physical resources refer to the tangible assets and materials that an organization uses in its operations (Mwaura *et al*, 2021). These can include buildings,

machinery, equipment, vehicles, raw materials, and inventory. Physical resources are essential for producing goods or delivering services and often require significant investment. Effective management of physical resources ensures that they are available when needed, maintained in good condition, and used efficiently. Proper allocation of physical resources can help minimize downtime, reduce costs, and improve productivity, ensuring that an organization can meet its operational demands and remain competitive in the market (Gitau, Abayo & Kibaine, 2020).

Human resources refer to the people within an organization, along with their skills, expertise, knowledge, and abilities. Human resources are often considered the most valuable asset of any organization, as they directly contribute to the success and growth of the business (Harjit & Sanjay, 2020). Managing human resources involves recruiting, training, developing, and retaining employees, ensuring that the workforce is skilled, motivated, and aligned with organizational goals. Effective human resource management helps foster a positive workplace culture, boosts employee morale, and enhances overall performance. It also involves addressing issues such as compensation, benefits, and employee well-being to maintain a productive and engaged workforce (Mubangizi & Kabanda, 2024). Technological resources encompass the tools, systems, software, hardware, and digital infrastructure that an organization uses to improve efficiency, streamline operations, and innovate (Ali, Ogolla & Nzioki, 2022). These resources can include computers, networks, cloud services, specialized software, and advanced technologies like artificial intelligence or automation. Technological resources are crucial for enhancing productivity, facilitating communication, and enabling data-driven decision-making. Organizations that effectively leverage technological resources can improve their competitiveness, reduce operational costs, and enhance their ability to adapt to market changes. Staying updated with technological advancements also ensures that an organization can meet the demands of an increasingly digital world (Ali, Ogolla & Nzioki, 2022).

Empirical Review

Knowledge Sharing and Project Performance

Maziar (2020) researched on the effect of knowledge sharing on organizational performance through customer satisfaction in the Malaysian banking industry. this study presents and discusses empirical findings of a survey on the effect of knowledge sharing on organizational performance done on 384 Malaysian bank employees. Structural equation modeling (SEM-Smart PLS 3) was used to perform the analysis on the hypothesized model. The results revealed that knowledge sharing has a strong positive effect on business process improvement and after sale services. The study concluded that knowledge sharing has a strong positive effect on business process improvement and after sale services

Adedolapo and Wole (2020) examined the factors influencing knowledge sharing among academics in Bowen University, Nigeria. The study utilized a survey design approach (quantitative) covering academics in various faculties in Bowen University. The population of the study comprised Professors, Readers, Senior Lecturers, Lecturer I, Lecturer II and Assistant Lecturers in the university which came to a total of 250 academics. Data were collected using a validated questionnaire, the questions in which were structured in sections based on the variables the study intended to measure. Findings showed that among the organizational factors, only university policy significantly influences knowledge sharing while among individual factors only trust significantly influences knowledge sharing. None of the technological factors was found to influence knowledge sharing. Gender has a significant influence on knowledge sharing while academic cadre and faculty do not. The study concluded that personal satisfaction, personal belief, mentoring, being knowledgeable and availability of fund/sponsorships were the other factors identified to influence knowledge sharing behavior.

Mullei and Misuko (2022) assessed the effect of knowledge sharing and ownership on organization performance in selected state corporations in Kenya. The study adopted a descriptive research design since the information is collected without changing the environment. The target population is the population which the researchers are concerned about in the study. In this study, the target population is the 179 State Corporations in Kenya. The study adopted a selection approach in choosing participating State Corporations based on those that are Head quartered in Nairobi. The study found that knowledge sharing has a significant influence on organizational performance due to increased privacy on information breach. The study concludes that knowledge sharing has a significant influence on State Corporation.

Muleke, Sakwa and Simiyu (2023) conducted a study on knowledge sharing practices and performance of public research institutions in Kenya. The study used stratified random approaches to sample 135 respondents out of 6,799 employees in the 12 publicly funded research institutions in Kenya. Both qualitative and quantitative primary as well as secondary data was collected to achieve the study objectives. The findings indicated that knowledge sharing practices have a positive significant effect on organizational performance. The study concluded that firms promote knowledge sharing by encouraging team members and departments to share their knowledge and expertise with each other.

Ndegwa *et al* (2021) researched on knowledge sharing, organizational learning and performance of top 100 medium enterprises in Kenya. Using a structured questionnaire, data on the variables were obtained from a cross-section of 65 medium-sized companies to empirically test the proposition. The companies were among 100 medium sized companies categorized as top performing medium-sized companies in Kenya by KPMG and Nation Media Group in the year 2013. The study established that knowledge sharing had a positive and statistically significant effect on organizational performance. Conversely and contrary to expectation, the study established that organizational learning had neither direct nor mediating effect on organizational performance. The study concluded that knowledge sharing had a positive and statistically significant effect on organizational performance.

Wamitu (2020) assessed the functional boundaries as a tacit knowledge sharing factor and its effect on public sector performance in Kenya. This study adopted a descriptive research design which according to [37], is used to obtain information concerning phenomena and to describe what exists based on chosen variables. The data collection instrument used in this study was a questionnaire which comprised of several questions. The target population consisted of all public sector workers who are in the public sector ministerial departments of the 47 counties in Kenya. The study was mainly centered on the 47 counties in Kenya though the complimentary influence from the national government was also taken into account. The study found that knowledge sharing had a positive and a significant influence on public sector performance in Kenya. The study concluded that knowledge sharing has a positive and a significant influence on public sector performance.

Resource Allocation and Project Performance

Harjit and Sanjay (2020) assessed resource allocation for implementing strategic quality management strategies in pharmaceutical industry in India: a case study. The case study approach has been used for assessing the allocation of resources in two pharmaceutical companies that have valid quality certifications from various international regulatory authorities. The findings of the study revealed that various resources are not optimally allocated among various quality strategies, and human resources are considered to be the most critical resource for the implementation of selected quality strategies. The study concluded that resource allocation has a positive and a significant influence on organization performance.

Mubangizi and Kabanda (2024) examined the influence of resource allocation on strategic project implementation in Rwanda Irrigation System: A Case Study of Kagitumba Irrigation Project. The study adopted both descriptive and correlational designs. The researcher used stratified random sampling technique to select a sample size of 150 employees from the population of the employees of Kagitumba Irrigation Scheme. The strata were that of senior management, middle management, supervisory and administration/ support staffs. Within each of the four strata simple random sampling was done to identify individual respondents who were issued with a questionnaire to respond to research statements. Primary data was collected using semi-structured questionnaires. The questionnaires were administered by the help of research assistants in each and every department. According to the study's findings, the strategic project implementation of Rwanda's Kagitumba irrigation system is significantly influenced by resource allocation. The findings showed that strategic infrastructure development, strategic financial resource allocation, and strategic staff development, strategic information and communication technology and government regulations have a significant influence on affected the strategic project implementation of Kagitumba irrigation scheme. The study concluded that resource allocation has a significant influence on affected the strategic project implementation.

Ali, Ogolla and Nzioki (2022) researched on the influence of resource allocation on organizational performance of cement manufacturing firms in Kenya. The target population was 209 staff in five leading cement manufacturing companies in Kenya. The sampling method was stratified random sampling to obtain a sample of 137 respondents. The researcher used questionnaires to collect data. The study found that resource allocation positively and significantly influences the organizational performance of cement manufacturing companies in Kenya. The study concluded that resource allocation positively and significantly influences the organizational performance.

Mwaura *et al* (2021) examined the effects of resource allocation on strategy implementation at Kenya Police Service in Nairobi County. The study used stratified sampling technique to select a sample of forty-nine police officers of the rank of OCPDS and OCS within Nairobi. Primary data was collected by use of questionnaire. Findings indicate that there exist both positive and significant correlations between the predictor and dependent variables. Strongest and positive correlations were obtained between organizational culture and Strategy implementation followed by financial resource and strategy implementation. Technological resource and human resources also registered strong and positive correlations at and respectively. The study however concludes that there is no significant moderating effect of organizational culture on the influence of resource allocation on strategy implementation at the Kenya police service even though.

Gitau, Abayo and Kibaine (2020) determined the influence of organizational resource allocation and strategy communication on organizational performance of selected supermarkets in Nairobi County. The study adopted a descriptive research design and it targeted 27 supermarkets operating in Nairobi County and its management staff who included the operations and human resource managers. The target respondents were 54, two from each of the supermarkets. A census was used thus all of the 54 respondents were included in the study. Hence, the unit of analysis was the 27 supermarkets in Nairobi County while the accessible population was the operations and human resource managers. The researcher collected information using structured questionnaires. The study established that resource allocation had a positive and a significant influence on organizational performance followed by strategy communication, organizational and lastly senior management support. The study concluded that resource allocation had a positive and significant effect on organizational performance.

RESEARCH METHODOLOGY

This study used a descriptive research design. Mugenda and Mugenda (2018) explained the descriptive design is a process of collecting data in order to test a hypothesis or to answer the questions of the current status of the subject under study. The target population makes a part of the universal population (Creswell, 2019). The unit of analysis is what is being targeted in the research. This study was conducted in Migori County. The focus was water and sanitation projects in the County. The unit of observation was employees involved in the projects, national government representatives and local authorities from the county (Ministry of Water and Sanitation, 2023). According to the county report (2023) Migori County has 105 ongoing water and sanitation projects. Ongoing projects were chosen since the project managers are on site so they can easily be available to respondent to the questionnaire unlike completed projects. This study targeted three individuals in each project including project manager, national government representative and local authority representative.

The study's sample size was reached at using Krejcie and Morgan sample size determination formula (Russell, 2019). The 173 respondents were chosen with the help of stratified random sampling technique. Stratified random sampling technique was used since the population of interest is not homogeneous and could be sub-divided into groups or strata to obtain a representative sample. This sampling technique divides the population into groups or strata. The strata are reached upon on the basis of the shared traits (Singpurwalla, 2019). One of the advantages of stratified random sampling is that it allows for each of the strata to be well represented when the sample is chosen (Bryman & Cramer, 2019). The study then used simple random sampling to select respondents from each group. This study used both primary data and secondary data. A questionnaire which is a form of quantitative data collection tool was used to collect primary data. The study's primary data was obtained using semi-structured questionnaires. Performance of water and sanitation projects in Migori County Kenya was measured through use of secondary data. The study used data collection sheet to collect secondary data from the projects. The data collected covered a period of 5 years from 2019 to 2023.

Before the data could be analysed, the researcher ensured the data was checked for completeness, followed by data editing, data coding, data entry, and data cleaning. Inferential and descriptive statistics was employed for analysis of quantitative data with the assistance of Statistical Package for Social Sciences (SPSS version 25). Descriptive statistics such as frequency distribution, mean (measure of dispersion), standard deviation, and percentages were used. Descriptive statistics therefore enables researchers to present the data in a more meaningful way, which allows simpler and easier interpretation (Singpurwalla, 2017). Inferential data analysis was conducted by use of Pearson correlation coefficient, and multiple regression analysis.

RESEARCH FINDINGS AND DISCUSSIONS

The sample size of this study was 173. The researcher distributed 173 questionnaires to the respondents during data collection process and 153 were fully filled and returned to the researcher thus making a response rate of 88.4%. Kothari (2019) argues that a response rate which is more than 50% is considered adequate while excellent response rate is usually above 70%. This implies that the response rate in this research is good for making conclusions as well as recommendations.

Descriptive statistics

Knowledge Sharing and Project Performance

The first specific objective of the study was to determine the influence of knowledge sharing on performance of water and sanitation projects in Migori County, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to knowledge sharing and performance of water and sanitation projects in Migori County, Kenya. The results were as presented in Table 1.

From the results, the respondents agreed that knowledge sharing during M&E activities has enhanced the overall performance of water and sanitation projects (M=3.880, SD= 0.555). In addition, the respondents agreed that sharing lessons learned through M&E has led to the implementation of best practices in water and sanitation projects (M=3.878, SD= 0.789). Further, the respondents agreed that the exchange of M&E data and insights has contributed to more informed decision-making in water and sanitation projects (M=3.816, SD= 0.610).

From the results, the respondents agreed that knowledge sharing among project teams and stakeholders has improved the identification and resolution of issues in water and sanitation projects (M=3.793, SD= 0.709). In addition, the respondents agreed that effective knowledge sharing in M&E processes has helped optimize resource allocation for water and sanitation projects (M=3.740, SD=0.835). Further, the respondents agreed that the sharing of M&E results across teams and stakeholders has strengthened collaboration and improved outcomes in water and sanitation projects (M=3.725, SD=0.585).

Table 1: Knowledge Sharing and Project Performance

	Mean	**Std. Deviation**
Knowledge sharing during M&E activities has enhanced the overall performance of water and sanitation projects	3.880	0.555
Sharing lessons learned through M&E has led to the implementation of best practices in water and sanitation projects	3.878	0.789
The exchange of M&E data and insights has contributed to more informed decision-making in water and sanitation projects	3.816	0.610
Knowledge sharing among project teams and stakeholders has improved the identification and resolution of issues in water and sanitation projects	3.793	0.709
Effective knowledge sharing in M&E processes has helped optimize resource allocation for water and sanitation projects	3.740	0.835
The sharing of M&E results across teams and stakeholders has strengthened collaboration and improved outcomes in water and sanitation projects	3.725	0.585
Aggregate	**3.805**	**0.681**

Resource Allocation and Project Performance

The second specific objective of the study was to evaluate the influence of resource allocation on performance of water and sanitation projects in Migori County, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to resource allocation and performance of water and sanitation projects in Migori County, Kenya. The results were as presented in Table 2.

From the results, the respondents agreed that proper allocation of resources based on M&E findings has significantly improved the performance of water and sanitation projects

(M=3.901, SD= 0.768). In addition, the respondents agreed that M&E data helps ensure that resources are distributed efficiently to address critical needs in water and sanitation projects (M=3.894, SD= 0.512). Further, the respondents agreed that effective resource allocation informed by M&E results has led to better management and timely completion of water and sanitation projects (M=3.863, SD=0.719).

From the results, the respondents agreed that M&E processes play a key role in identifying resource gaps, leading to more targeted investments in water and sanitation projects (M=3.798, SD= 0.844). In addition, the respondents agreed that adjustments in resource allocation based on M&E feedback have enhanced the overall impact and sustainability of water and sanitation projects (M=3.742, SD=0.770). Further, the respondents agreed that the allocation of resources guided by M&E insights has contributed to more efficient use of funds in water and sanitation projects (M=3.654, SD=0.567).

Table 2: Resource Allocation and Project Performance

	Mean	**Std. Deviation**
Proper allocation of resources based on M&E findings has significantly improved the performance of water and sanitation projects	3.901	0.768
M&E data helps ensure that resources are distributed efficiently to address critical needs in water and sanitation projects	3.894	0.512
Effective resource allocation informed by M&E results has led to better management and timely completion of water and sanitation projects	3.863	0.719
M&E processes play a key role in identifying resource gaps, leading to more targeted investments in water and sanitation projects	3.798	0.844
Adjustments in resource allocation based on M&E feedback have enhanced the overall impact and sustainability of water and sanitation projects	3.742	0.770
The allocation of resources guided by M&E insights has contributed to more efficient use of funds in water and sanitation projects	3.654	0.567
Aggregate	**3.809**	**0.697**

Inferential Statistics

Inferential statistics in the current study focused on correlation and regression analysis. Correlation analysis was used to determine the strength of the relationship while regression analysis was used to determine the relationship between dependent variable (performance of water and sanitation projects in Migori County, Kenya) and independent variables (knowledge sharing and resource allocation).

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (knowledge sharing and resource allocation) and the dependent variable (performance of water and sanitation projects in Migori County, Kenya). Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients.

Table 3: Correlation Coefficients

		Project Performance	Knowledge Sharing	Resource Allocation
Project Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	153		
Knowledge Sharing	Pearson Correlation	.885**	1	
	Sig. (2-tailed)	.000		
	N	153	153	
Resource Allocation	Pearson Correlation	.852**	.114	1
	Sig. (2-tailed)	.002	.052	
	N	153	153	153

**. Correlation is significant at the 0.01 level (2-tailed).

The results revealed that there is a very strong relationship between knowledge sharing and performance of water and sanitation projects in Migori County, Kenya (r = 0.885, p value =0.000). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the findings of Mullei and Misuko (2022) that there is a very strong relationship between knowledge sharing and project performance.

The results also revealed that there was a very strong relationship between resource allocation and performance of water and sanitation projects in Migori County, Kenya (r = 0.852, p value =0.002). The relationship was significant since the p value 0.002 was less than 0.05 (significant level). The findings are in line with the results of Mubangizi and Kabanda (2024) who revealed that there is a very strong relationship between resource allocation and project performance.

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (knowledge sharing and resource allocation) and the dependent variable (performance of water and sanitation projects in Migori County, Kenya)

Table 4: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.264	0.070		3.771	0.000
	knowledge sharing	0.369	0.097	0.368	3.804	0.001
	resource allocation	0.372	0.099	0.373	3.758	0.000

a Dependent Variable: performance of water and sanitation projects in Migori County, Kenya

The regression model was as follows:

$$\mathbf{Y = 0.264 + 0.369X_1 + 0.372X_2 + \varepsilon}$$

The results revealed that knowledge sharing has significant effect on performance of water and sanitation projects in Migori County, Kenya, β1=0.369, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the findings of Mullei and Misuko (2022) that there is a very strong relationship between knowledge sharing and project performance.

In addition, the results revealed that resource allocation has significant effect on performance of water and sanitation projects in Migori County, Kenya, β1=0.372, p value= 0.000). The

relationship was considered significant since the p value 0.000 was less than the significant level of 0.05. The findings are in line with the results of Mubangizi and Kabanda (2024) who revealed that there is a very strong relationship between resource allocation and project performance.

Conclusions

Further, the study concludes that knowledge sharing has a positive and significant influence on performance of water and sanitation projects in Migori County, Kenya. Findings revealed that explicit knowledge, implicit knowledge and tacit knowledge influence performance of water and sanitation projects in Migori County, Kenya.

The study also concludes that resource allocation has a positive and significant influence on performance of water and sanitation projects in Migori County, Kenya. Findings revealed that physical resources, human resources and technological resources influence performance of water and sanitation projects in Migori County, Kenya.

Recommendations

Further, the study recommends that the management of water and sanitation projects in Kenya should establish robust knowledge-sharing platforms that facilitate the exchange of best practices, lessons learned, and innovative solutions among stakeholders. By creating a collaborative environment where local communities, government agencies, NGOs, and project teams can regularly share experiences, challenges, and successes, knowledge sharing can lead to more efficient project implementation and problem-solving.

The study also recommends that the management of water and sanitation projects in Kenya should ensure efficient and equitable resource allocation that prioritizes the most underserved areas. By conducting thorough needs assessments and data-driven analysis, resources such as funding, materials, and skilled labor can be strategically allocated to the regions with the greatest demand and potential impact.

Suggestions for Further Studies

This study was limited to the influence of monitoring and evaluation (M&E) capacity building on performance of water and sanitation projects in Migori County, Kenya hence the study findings cannot be generalized to project performance in other projects in Kenya. The study therefore suggests further studies on the influence of monitoring and evaluation (M&E) capacity building and project performance in other projects in Kenya. Further, the study found that the independent variables (knowledge sharing and resource allocation) could only explain 75.2% of performance of water and sanitation projects in Migori County, Kenya. This study therefore suggests further research on other factors affecting performance of water and sanitation projects in Migori County, Kenya.

REFERENCES

Adedolapo, A., & Wole, O. (2020). Factors influencing knowledge sharing among academics in Bowen University, Nigeria. *Journal of Librarianship and Information Science, 52*(2), 410–427.

Ali, M. A. H., Ogolla, D., & Nzioki, S. (2022). Influence of resource allocation on organizational performance of cement manufacturing firms in Kenya. *International Academic Journal of Human Resource and Business Administration, 4*(1), 198–207.

Amolo, A. E. J., Rhambo, C. M., & Wafula, C. M. (2021). Monitoring and evaluation capacity building on performance of road construction projects in Kisumu Central Sub-County,

Kisumu County, Kenya. *International Journal of Research and Scientific Innovation, 8*(8), 91–86.

Gitau, P. W., Abayo, R., & Kibaine, M. (2020). Influence of organizational resource allocation and strategy communication on organizational performance of selected supermarkets in Nairobi County. *International Journal of Research and Innovation in Social Science, 4*(8), 331–341.

Harjit, K., & Sanjay, K. (2020). Resource allocation for implementing strategic quality management strategies in pharmaceutical industry in India: A case study. *International Journal of Productivity and Quality Management, 34*(2), 158–175.

Mubangizi, D., & Kabanda, R. (2024). The influence of resource allocation on strategic project implementation in Rwanda Irrigation System: A Case Study of Kagitumba Irrigation Project. *Journal of Entrepreneurship & Project Management, 8*(4), 64–74.

Muleke, V., Sakwa, M., & Simiyu, A. (2023). Knowledge sharing practices and performance of public research institutions in Kenya. *Journal of International Business, Innovation and Strategic Management, 7*(1), 32–45.

Mullei, S. N., & Misuko, N. (2022). Effect of knowledge sharing and ownership on organization performance in selected state corporations in Kenya. *International Academic Journal of Information Sciences and Project Management, 3*(5), 88–104.

Ndegwa, J. W., Machuki, V. N., Maalu, J. K., Awino, Z. B., & Iraki, X. N. (2021). Knowledge sharing, organizational learning and performance of top 100 medium enterprises in Kenya. Retrieved from http://journals.uonbi.ac.ke/damr/article/

Wamitu, S. N. (2020). Functional boundaries as a tacit knowledge sharing factor and its effect on public sector performance in Kenya. *Open Journal of Business and Management, 4*(2), 225–237.