

**STAKEHOLDER PARTICIPATION AND PERFORMANCE OF COMMUNITY  
WATER BOREHOLE PROJECTS IN KIBRA SUB-COUNTY IN NAIROBI  
COUNTY, KENYA**

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## DECLARATION

This research project report is my own work and has not been presented to any other Institution of higher learning or University.

**Signature**



**Date:** November 18, 2022

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This project report has been submitted for examination with my approval as the University Supervisor



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## **DEDICATION**

This project is dedicated to my dad Mr. Zablon Onderi, my mother Mrs. Alice Bikeri, my wife Damaris Nyaboke, my son Daniel Dexter and daughters Daisy Deodante and Donnah Dieudonne for their reliable support, encouragement, and love in the course of this endeavour and beyond. I am and forever will be very grateful to them for they encouraged me to follow my dreams tirelessly and relentlessly.

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## **ABBREVIATIONS AND ACRONYMS**

<b>CWBPs</b>	Community Water Borehole Projects
<b>CGoN</b>	County Government of Nairobi
<b>IWRM</b>	Integrated Water Resources Management
<b>M&amp;E</b>	Monitoring and Evaluation
<b>NCWSC</b>	Nairobi County Water and Sewerage Company
<b>RBV</b>	Resource Based View
<b>SPSS</b>	Statistical Package for Social Sciences
<b>WRUAs</b>	Water Resources Users Associations
<b>WUAs</b>	Water User Associations

## ABSTRACT

Due to poor public service delivery and a lack of sustainability, projects in the developing countries have faced a number of difficulties. Experience has shown that when donors withdraw its support, particularly financial support, community water borehole initiatives typically don't function well and don't continue. Stakeholder participation strategies used correctly will increase the likelihood that projects will succeed by staying on budget, on time, and with outstanding results. Thus, the purpose of this study was to investigate how stakeholder participation influences community water borehole initiatives in Kenya's Kibra Sub-County. The following objectives served as a guide for the study: to determine the impact of stakeholder resource mobilization, stakeholder monitoring and evaluation, and stakeholder planning programs on the performance of community water borehole projects in Kenya's Kibra Sub-County. The study utilized a cross-sectional survey design. The unit of analysis consisted of 33 community water borehole projects that were completed in the 2011 to 2021 financial years. The target population of 395 composed of representatives of borehole management committee, Nairobi County Water and Sewerage Company officials, community leaders chosen from the Nyumba kumi initiatives, NGOs, and development partners involved in water projects in Kibra Sub-County. A sample of 106 respondents was used. The study employed the stratified random sampling technique to choose the sample members. The study used self-administered questionnaires to gather primary data. Data analysis was done with SPSS Version 25.0. For all the quantitative data, descriptive statistics, such as frequency and percentages, mean scores, and standard deviations, were computed whereas inferential statistics was used to confirm any significant relationships. Thematic analysis was used to analyse the qualitative data from the open-ended questions. The research found that it was not certain whether the Nairobi county water and sewerage company officials mobilizes resources for community water borehole projects and that NGOs and development partners' officials mobilize for resources community water borehole projects. The study found that majority of the stakeholders were somewhat involved in the monitoring and evaluation for the community water borehole projects in Kibra Sub-County. The study concluded that stakeholder planning programs had the greatest influence on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya, followed by stakeholder monitoring and evaluation, and then stakeholder resource mobilization had the least influence on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya. The study recommends that the local community should be mobilized so as to build an interest in participating during project planning activities. The project leaders should also be transparent in their dealings with the members of the community and call for regular meetings where the project beneficiaries are briefed on the sustainability efforts and challenges ahead. The study also recommends that there is need for the community to be involved in monitoring and evaluation of the projects. This can be by ensuring that the community members are included in project progress briefs and maintaining feedback lines (reports, social audits).

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

The performance of community water borehole projects is a crucial factor for the success of any government related project (Binder, 2017). According to Rivett (2018), project performance is measured through various variables including timeliness, project quality, budget compliance, and degree of customer satisfaction. The quality as well as the eventual performance of a project are defined by meeting and/or exceeding the expectations of the customer and upper management in terms of cost, time, and performance of the project (Bonsor, MacDonald, Casey, Carter & Wilson, 2018). Community water borehole projects (CWBPs) are important programs for tackling related issues and fostering development in majority communities. In light of this, a variety of projects are developed and carried out annually with a range of objectives in mind, such as providing clean supply of water, enhancing community health, minimizing poverty, ensuring peace and human rights, managing natural resources, adapting to changes in climate, and so forth (Mbui, 2018). The government was the single decision maker authority in water management but recently, this instance has been replaced by poly-centric and multi-level management. This transition spearheads the importance of contribution of other stakeholders from different cadres towards efficient, inclusive and effective water management. However, with all this in place, stakeholder's participation in decision making has not been fully adopted within water policy across the world (Turere, 2020).

Stakeholders' participation is the practice of applying stakeholder inclusiveness in a project (Kelly et al., 2017). All project stakeholders should be included in the formulation of the development problem and the suggested development solution. Increased ownership, learning, and commitment among stakeholders come from early involvement in the project cycle. In this study, stakeholder's participation entails stakeholder participation in resource mobilization, stakeholder participation in monitoring and evaluation and stakeholder participation in planning programs. Prior studies have emphasized the significance that stakeholder's participation may have on performance of projects. Indeed, according to Chukwuma (2020), the importance of stakeholders varies depending on the context. Jawahar and McLaughlin's (2019) stated that stakeholders brought into any decision or project development from the get-go are able to help provide ideas and help create potential solutions. Often, stakeholders come from varying backgrounds, and so

they look at issues from differing perspectives hence better planning. However majority of these studies have not looked into the influence of stakeholder's participation and performance of community water borehole projects. This study therefore sought to examine the influence of stakeholder's participation and performance of community water borehole projects.

Behnke et al. (2017) show how proactive influence techniques used by project management, such as active conversation and early stakeholder participation, changed opposing stakeholders into neutral ones. Chukwuma (2021) asserts that for a project to perform effectively several resources should be mobilized to maximize their effectiveness. Examples of these resources are; tools, facilities, finance and manpower among others. Resource mobilization is utilized to ensure that new and additional resources are secured in your organization. This is achieved by maximizing and making good use of available resources. Resource mobilization is also termed as new business due to its ability of ensuring continuation of organization services to satisfy clients, improvement and step-up of products within the organization and last but not least, encourages organization stability. According to Etongo, Fagan, Kabonesa, and Asaba (2018), all stakeholders and partners involved in the performance of a project should be persuaded to participate in the assessment process. Participation of stakeholders in the evaluation process grants the convenience to influence the evaluation process. Although the evaluation process put stakeholders in risk, it also provides a platform for their grievances to be had. According to Marks, Kumpel, Guo, Bartram, and Davis, stakeholders and youth can actively contribute to producing change in the following four areas of operation: policy, organizational development, planning, implementation, and monitoring and evaluation (2018).

Due to a deficiency in key crucial human processes, many development projects have stalled or collapsed, creating management gaps that endanger the projects' viability and completion (Kulinkina, Plummer, Chui, Kosinski, Adomako-Adjei, Egorov & Naumova, 2017). Evidence from numerous circumstances demonstrates that the presence of project finance is not a ensure the success and, consequently, sustainability of the project. Participation of individuals in management, monitoring, and assessment is essential. Traditional community structures must be respected since they give the project legitimacy, regardless of whether it is funded by the government or a donor group. They might support the initiative while also

holding the local authorities responsible for the amount of money spent and the caliber of the project.

Over 200 million people in rural areas use community-managed hand pump water boreholes, which are used by about 1.5 billion people every day (WHO, 2017). According to Tran, Phan, Bui, Bui, Hoang, Tran, and Trinh (2022), informal management arrangements that required customers to pay both the initial capital costs of building systems of water supply as well as the post-execution operation and maintenance costs resulted in low quality and reliability for rural Vietnam's water supply. In Vietnam, access to sustainable resources like drinking water improved by more than 30% between 1990 and 2012, although the poorest rural populations still only had 35% of urban residents have access to piped water. According to a 2011 FAO assessment, 1.7% of rural Vietnamese inhabitants rely on ground water retrieved through tube wells (Kelly, Lee, Shields, Cronk, Behnke, Klug & Bartram, 2017).

Otti and Ezenwaji (2019) claim that during the past ten years, the failure rate of projects in Europe and emerging nations to achieve their stated aims has been astronomically high, often approaching 60%. Even if they didn't offer much to the community, several of these projects have been finished. Others were found to be unsustainable, and others came to an early end. They lacked suitable Monitoring and Evaluation (M&E) structures, effective financial accountability, stakeholder participation in all project phases, and sufficient skills and community empowerment (Ifejika, Kiteme, Wiesmann & Jörin 2018).

Rural Sub-Saharan Africa's water availability lags behind that of urban places. As a result, concerted and focused efforts must be done to increase the availability of drinkable water in rural communities throughout Africa (Whaley & Cleaver, 2017). 25 countries in Sub-Saharan Africa, including the Democratic Republic of the Congo, Niger, Ethiopia, and Sierra Leone, reported disparities of more than 25% in the use of improved drinking water between urban and rural areas, according to Abubakar (2019). The amount of money pledged and help for basic water systems in Sub-Saharan Africa declined from 27% to 16% in the five years before to 2008, notwithstanding this large gap. As a result, the disparity in water access between rural and urban areas was emphasized. For drinking water, most rural residents of low-income countries rely on basic infrastructure, which included inexpensive equipment like hand pump water boreholes (Mlenga, 2021). Although hand pump water boreholes are frequently used to speed up the provision of drinking water in rural areas, research has

indicated significant failure rates, with roughly 30%–40% of hand pumps in Africa malfunctioning at any given time.

According to research in Ethiopia, 21% of water borehole hand pumps were inoperable (Mangai & De Vries, 2018). A lack of preventive maintenance, spare parts scarcity, village committees' inability to manage community services without external assistance, and a lack of financing structures for operation and maintenance costs have all been proposed as reasons for high failure rates and lack of sustainability for hand pumps in Africa (Abanyie, Ampadu, Saeed, Amuah, Douti & Owusu, 2019).

Only 46% of Tanzania's prevailing rural water stations are operational, and a quarter of newly built systems fail after only two years. Lack of money, particularly for operations and maintenance, as well as a lack of technical skills at the project level, spare parts, and community involvement, are all linked to lack of sustainability. The CWBPs in Matumbatu village in Dodoma, which were supported by international donor agencies, have not been sustained. Its long-term viability has been questioned due to poor technology selection, governance, and a lack of expertise and experience (Kim, Sohn & Park, 2019). Bagamoyo Sanitation Park, which operated from July 2005 to February 2008 in Bagamoyo Township, was another initiative that failed. The project's goal was to improve community health in Bagamoyo by improving sanitation and giving training.

In Kenya, around 70% of the population in the 2020 relied on volunteer water user associations (WUAs) to manage wells, rivers, ponds, and sand dams (Omanwa & Muchai, 2020). Because these organizations frequently face difficulties managing these sources, one-third of them are malfunctioning at any one time. Small rural water systems still face challenges in terms of sustainability and expansion due to a lack of or poor operation and maintenance plans (Kiveu, 2020). Despite government attempts to provide clean drinking water to houses within reasonable distances, a National Demographic and Health Survey 2019-2020 found that less than 50% of the population in rural areas had access to safe drinking water. The government and its partners in development devised a plan to build water boreholes and surface water gathering structures to address these water access issues. These initiatives were designed to provide economic and social advantages to Kenyan rural areas while ignoring societal demands and extensive beneficiary participation in decision-making (Omanwa & Muchai, 2020). According to Kinyua, Mwangi, and Riro (2019), hand pump



water boreholes and protected wells provided water to 40% of Kenyan rural households, but only 30% of all hand pumps constructed in Kenya were operational.

The majority of Kenya's water borehole projects have failed miserably, with the majority becoming inoperable or in need of rehabilitation (Maina, 2019). In Kenya, it is typical to witness non-operational water projects in almost every region (Amuma, 2020). Nevertheless, if the present pattern of poor community water borehole project results continues, water infrastructure will be completely non-functional, reducing effective coverage dramatically. According to a report published by Tana Water Services Board (2018), 25 percent of water borehole hand pumps in the Mbeere region were non-functional because of technical breakdowns. This demonstrates that investing in hand pumps without a solid planning program results in ineffective community water projects.

Kenya's most recent Constitution (Constitution of Kenya 2010) was promulgated into effect in 2010, making water supply and sanitation services a basic human right and devolving most of the critical water and sanitation functions down to the County level. The County Government of Nairobi (CGoN) in conjunction with the Ministry of Water has invested significantly in many more sinking water boreholes, but no significant steps have been taken in the investigation of the role of borehole management committees in the long-term performance of boreholes that have already been dug and fitted. Although 93 water boreholes dug by the government for the financial year 2020/2021 (CGoN, 2021) provide free water to at least two million city residents, mostly in slums, the proportion of functional committees for borehole management is not encompassed as a performance measure of the water schemes.

Poor management of boreholes has major consequences for Nairobi County residents' health, economic, educational, and social lives. The skyline water pipes' installation stands out as a positive development for Kibra slum residents, one of the biggest slums. Having to deal with the delivery of water that is contaminated through the manner in which it is delivered until recently, the locals can now be happy as they source portable water directly from boreholes. As Nairobi expands, there are more poor urban dwellers being pushed into informal and low resource settings, where their water and sanitation standards are poor. Poor infrastructure leads to poor living conditions and most people in these communities have to grapple with these conditions including challenges brought about by overcrowding, which exacerbate the already hazardous health conditions. Although the available NGOs and

government partnerships have managed to establish some water boreholes in Kibra, they are not to the scale required for the large population living in this area. Therefore, the purpose of this study is to look into the influence of stakeholder participation on the performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya.

## **1.2 Statement of the Problem**

Projects in the developing world have had various challenges due to sustainability issues and poor service delivery. Experience shows that community water borehole projects in most cases are not performing as expected which is evidenced by the beneficiaries not being satisfied (Amuma, 2020). Water boreholes can assist in reducing the demand placed on the municipalities supplies by way of enhancing agricultural projects and other farming activities, or even construction projects. Water boreholes can be utilized in irrigating farms, maintaining gardens and parks, and even for watering livestock. One reason for this could be the lack of stakeholder participation in the projects. With proper employment of stakeholder participation actions, projects are likely to perform better by being within the budgeted costs and time schedules and also realize their purpose by serving the entire community.

According to Nyakwaka and Benard (2019), Nairobi's water demand has increased to more than 810, 000 cubic meters per day, compared to 525, 600 cubic meters per day installed output, resulting in a demand gap of 284, 400 cubic meters. In Kibra, citizens do not have running water and, for years, supply has been controlled by cartels (Karegi, Macharia, Muthengia & Mwiti, 2018). In Kibra, there is not only scarcity of water but moreover it is expensive not consistent and contaminated. Many people buy water from vendors whose sources is not trustworthy. The cost of water is higher for Kibra's poorer residents than in its wealthier neighboring communities. Furthermore, there is no assurance that the water is clean, even if the populace can pay the exorbitant prices.

Most of Kibra's water pipes are made of plastic and are located above ground, exposing them to structural fraud. Such pipes frequently break from either unintentional interfering by a rival distributor or accidental foot traffic, allowing sewage to easily seep in and contaminate the water supply. By disconnecting or rerouting water pipes, water vendors could also quickly generate unnatural water shortages. Even though damaging water pipes and making unauthorized water connections are crimes, nobody has ever been detained, meaning the issue persists without consequence. Residents keep accusing the local government of being ineffective in taking action against the well-known dishonest water vendors. The

government's absence of political goodwill tends to encourage water mafias to seize control of Kibra's water supply. These challenges are exacerbated by poor management and short-term planning (NCWSC, 2017). The community water borehole initiatives also cannot solve the water crisis in Kibra Sub-County without stakeholders' assistance in resource mobilization, monitoring and evaluation, and planning. Therefore, this presents the need for this study to be conducted.

Stakeholder participation in resource mobilization, monitoring, and evaluation, as well as planning, aims to encourage the neighborhood to contribute significantly to such projects' decision-making. Several scholars have studied water borehole projects in Kenya (Mwakazi, 2017; Omanwa & Muchai, 2020; Musau, 2020). However, there haven't been many thorough studies precisely measuring the performance of community-managed water borehole supply systems. Therefore, the purpose of this study was to ascertain how stakeholder participation affects the success of community water borehole initiatives in Nairobi County's Kibra sub-county.

### **1.3 Purpose of the Study**

The purpose of the study was to examine the influence of stakeholder's participation and performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya.

### **1.4 Objectives of the Study**

The specific objectives were:

- i. To establish the influence of stakeholder participation in resource mobilization on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya.
- ii. To determine the influence of stakeholder participation in monitoring and evaluation on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya.
- iii. To examine the influence of stakeholder participation in planning programs on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya.

### **1.5 Research Questions**

The study sought answers to the following research questions:

- i. To what extent does stakeholder participation in resource mobilization influence performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya?
- ii. How does stakeholder participation in monitoring and evaluation influence performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya?
- iii. What is the influence of stakeholder participation in planning programs on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya?

### **1.6 Research Hypothesis**

H<sub>01</sub>: There is no significant relationship between stakeholder participation in resource mobilization and performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya.

H<sub>02</sub>: There is no significant relationship between stakeholder participation in monitoring and evaluation and performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya.

H<sub>03</sub>: There is no significant relationship between stakeholder participation in planning programs and performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya.

### **1.7 Significance of the Study**

This study might be of great benefit to the county governments since it might help them establish what determines effective performance of community water borehole projects, and that might contribute to guaranteeing a higher rate of project success. The study findings might also be used by government to get insight of how stakeholder's participation play a role in projects performance through resource mobilization, monitoring and evaluation, and planning.

The findings might contribute to the body of knowledge for academics and professionals working in the stakeholder participation field. The research study might be of great use, especially to upcoming researchers, as it might add to existing knowledge about stakeholder

participation and project performance and act as a critical source of literature reviews and secondary data references.

### **1.8 Delimitation of the Study**

The study was based on Kibra Sub-County, one of the seventeen Sub-Counties in Nairobi County due to the precarious living standard of its residents relative to other Nairobi residents. The study was carried out in five wards within the Sub-County: Sarang'ombe, Woodley/Kenyatta golf course, Laini Saba, Makina and Lindi Wards. The study sought to establish the influence of stakeholder's participation on performance of community water borehole projects in Nairobi County. The study focused on the aspect of stakeholder's participation because the area lacks the policy which would be inclusive and ensure functionality in the community water borehole projects. The study specifically focused on community water borehole projects in Kibra Sub-County, Nairobi County.

The study targeted the borehole management committee officials, Nairobi County Water and Sewerage Company officials, Community leaders drawn from the Nyumba kumi initiatives, NGOs and development partners' officials related to water in Kibra Sub-County. The study was done in a period of six months.

### **1.9 Limitations of the Study**

The study's target respondents were reluctant to disclose information out of concern that it would be used against them or to create an unfavorable impression of them. In order to get over this restriction, the researcher had an introduction letter from the university with them, promising them that the data they supply would be kept private and used only for academic purposes.

Due to the fact that many water boreholes were located in slum areas, the people who consumed the water were illiterate. The researcher employed translators, which could reduce accuracy. The results of the study were also restricted by the respondents' willingness to provide accurate and reliable information. In order to assess the consistency and dependability of the data, the researcher therefore performed validity and reliability tests.

### **1.10 Assumptions of the Study**

The study assumed that participants would be open to participating. The questionnaires for the respondents would be finished and sent back for evaluation. The respondents would

provide truthful responses to the instrument's inquiries. All responders to the sample would meet the proper inclusion criteria, guaranteeing that they have all encountered the study's phenomenon. Last but not least, the analysis assumed that the authorities would issue the required authority to collect data.

### **1.11 Definition of Significant Terms Used in the Study**

**Community water borehole projects:** these are deep, narrow wells that tap into naturally occurring underground water to assist the people of Kibra sub-county.

**Monitoring and evaluation** is a combination of data collection and analysis and assessing to what extent a community water borehole project in Kibra sub-county has, or has not, met its objectives.

**Resource mobilization:** involves raising funds for maintenance of water borehole project in Kibra sub-county to ensure they meet their deliverables.

**Stakeholders' participation:** is the process by which community water borehole projects in Kibra sub-county involve people who may be affected by the decisions it makes.

**Planning programs:** these are identification of the project objectives and the development of a statement of work that identifies the community water borehole projects' priorities and activities in Kibra sub-county to be performed by the stakeholders.

### **1.12 Organization of the Study**

This report is divided into five chapters. The first chapter contains the study's introduction. It includes the study's background, problem statement, purpose of the study, objectives of the study, study's questions, research hypotheses, research significance of the study, delimitations, assumptions, study limitations, and definition of significant terms. The second chapter examined the literature in light of the study's objectives. The chapter also presents the theoretical as well as the conceptual frameworks and, finally a summary of the research gaps. The third chapter discusses the study's research methodology. The methodology involves the research design, target population, sampling procedure, data collection tools and techniques, pre-testing, data analysis, ethical considerations, and, finally, variable operational definition. The fourth chapter presents the analysis of data on the basis of the research objectives. The findings are presented in tables. Chapter five

concludes the study by presenting the discussion of findings, conclusions, and recommendations for action and further research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter provides an overview of the literature based on studies done on stakeholder's participation and performance of community water borehole projects. The chapter also subsumed the theoretical framework and a conceptual framework derived from the theoretical framework as well as a conclusion that contains the research gap.

#### **2.2 Performance of Community Water Borehole Projects**

The project's ultimate achievements are determined by staying within the assigned technical needs for quality, operations, functionality, safety, and satisfaction of beneficiaries (Rad & Fung, 2016). In terms of meeting the project's objectives, project performance guarantees that organizations maximize profits while minimizing the effects of risks and uncertainty events (Adeniyi, Yusuf, Okedeyi & Sowemimo, 2016).

The main aspects and criteria for evaluating a project's performance are cost, time, scope, and quality, according to Langston and Ghanbaripour. Previous project management assessors have largely agreed with this (2016). For instance, a significant factor in determining whether or not buyers will accept a project is its quality. The specification of quality demands should be made plainly and undeniably evident in planning and contract agreements to assure conformance and effectiveness of quality performance. Since many firms desire to see a return on their project investments, the project performance indicators for this study will be specified in terms of cost, time, quality, scope, and profitability. Project cost, quality, user satisfaction, punctuality, and the accomplishment of the project's ultimate purpose are all used to measure project performance in Guinea and are all viewed as helpful indications of project success (Okereke, 2017).

Since most sponsored projects are carried out on behalf of communities, community participation and ownership may be crucial to the project's effectiveness and success. Participating in the community increases a project's long-term viability by educating the residents on its importance. The community might not have the means or know-how to support a hardware project developed by an outside project implementer, on the other hand, and it will undoubtedly fail over time. Therefore, a project with good planning, execution, and community involvement may yield better results than one with no initial community input (Gachui, 2017).



Using data from parents, school administration, and project implementers, Akumu and Onono (2017) made the argument that a project is considered to be successful if it is completed within the allotted time, budget, and specified requirements. According to Etongo et al. (2018), a project's performance is determined by how well it achieves its objectives, and it is judged to be performing when it does so. According to Chukwuma (2021), a project is deemed successful if its goals have been attained while adhering to a specified level of performance, in a reasonable amount of time and money, and while making effective and efficient use of the resources allotted.

### **2.3 Stakeholder Participation and Performance of Community Water Borehole Projects**

Participation from the community is necessary for projects to succeed. Communities develop their capacity for group action, maintenance, and sustainability through involvement, claim Mikkelsen, York, and Arritola (2019). Most of the developing nations in Asia and the Pacific do not have access to clean drinking water. 37 of the 49 countries in the Asia-Pacific region have low levels of water security, according to a 2017 WHO assessment. Additionally, it was discovered that a water catastrophe is imminent in more than 75% of the Asia-Pacific nations. Additionally, research revealed that over 60% of families in the Asia-Pacific region still lack access to safe drinking water, as well as proper cleanliness. In Europe, 120 million people lack access to clean drinking water, and countless more lack proper sanitation.

According to Chukwuma (2020), of all the continents in the world, Africa has the greatest number of unsuccessful rural water supply projects. For instance, the study found that 33 percent of Ethiopia's rural water supply projects were not operational. Only 10% of the 7,000 wells and community water borehole projects evaluated in Tanzania had been operational for 25 years. According to Behnke et al., Sub-Saharan Africa's rural water supply frequently has low sustainability levels (2017).

This is also evident in the Takete-Ide Community Development Project in Nigeria's Kogi State's Mopamuro Local Government Area. They built roads, community centers, hospitals, and schools. People have been able to reach their full potential because to these activities. Local societies have transformed into the development organization through their own initiatives to address needs, strengthen their positions, and convince decision-makers, notably local and state governments, of their merits (Kulinkina, Plummer, Chui, Kosinski, Adomako-Adjei, Egorov & Naumova, 2017).

In Kenya, community-focused projects served as the foundation for stakeholders' participation in economic development, and this was reportedly communicated to them for a considerable amount of time. According to Kenya's 2010 constitution, the main element of public reforms is meaningful stakeholder participation in governance. Transparency, commitment to the process, ideas, acknowledgment of alternative viewpoints, human resources, time, and are all necessary for stakeholders' participation. Consensus and acceptability of the plan are influenced by carefully managed involvement, which will also make implementation easier (Kiveu, 2020). Stakeholder resource mobilization, stakeholder monitoring and evaluation, and stakeholder planning programs were covered in this section's review of the research variables.

### **2.3.1 Stakeholder Participation in Resource Mobilization and Performance of Community Water Borehole Projects**

The community's participation in resource mobilization is closely tied to the question of project ownership and sustainability. Community initiatives must be funded since they incur ongoing expenses for implementation and maintenance. As observed by Miruka, the mobilization of resources does not always have to be financial in nature; it may also be in-kind, labor, and local materials (2016). In order to address concerns regarding inactivity, Ikejamba et al. (2017) emphasized that it would be crucial to supply labor, time, financial assistance, and resources. Water is a common resource, thus local communities must work to manage the resources and invest in water services, according to Adams et al. (2020). Communities may become more involved in civic organizations as a result, and donors may sustain the current incentives for collaboration or service co-production. Projects must collect tariffs in addition to recovering costs in order to support routine operations from beneficiaries for the upkeep and operation of the infrastructure. On the other hand, they need continuing community involvement from both men and women in the various facets of system management and maintenance.

The ability of households to mobilize resources can be used to estimate the demand for water. Kilasim (2016) disputes this claim and argues that community resource mobilization can be utilized to identify demand-responsive projects from participation-only projects. The amount of resources people offer to the society in exchange for services should be associated with the relative costs of providing various levels of service. Examples of these resources include money, products, and labor (Mulei & Gachengo, 2021).

Msuku (2020) asserts that there is a direct link between the success of the project and the contributions made by the local community. Other local communities did not have water-saving accounts set up where they deposited local cash for maintenance and operation. The survey found that communities continuously maintained and repaired their water infrastructure in more than 85% of projects when local contributions were used as deposits for water projects. On the other hand, there were no local engagement stories in the neighborhoods where projects failed. By guaranteeing that a project always has the resources required to meet demand from the beneficiaries, beneficiaries may be certain that there won't ever be any service interruptions. Beneficiaries might grow more devoted as a result, strengthening the bonds between them and the programs.

Chikombingo conducted research on community water projects in Ghana, Kenya, Uganda, and Zambia in 2016. Contrary to common belief, the study's findings disproved the idea that encouraging project beneficiaries to take ownership of and responsibility for ongoing project operation and maintenance will improve project success (O&M). On the other hand, the study found that, because infrastructure began to deteriorate quickly after they were put in place, community management did not necessarily convert into a desire to manage or finance water supply for a prolonged period of time.

The amount of resources accessible may affect the thoroughness of an evaluation or the precision of its findings. It is crucial to consider the program's significance, how prior assessments and evaluations understood the program, and the actions the review will affect. When it comes to resources, a software that has undergone thorough testing in a setting similar to the one in which it is currently being implemented might use considerably less. According to Abubakar (2019), 39% of initiatives fail owing to a lack of resources, which is similar to this. Local citizens and community members contribute money to the implementation of initiatives, particularly those aimed at improving project performance (Kelly et al., 2017).

New relationship building, relationship maintenance, and building a network of dedicated partners are ongoing processes that are interwoven into the firm's core business. This necessitates the dedication of the board, staff, and volunteers in addition to the creation of long-lasting alliances (Kilasim, 2016). According to Okereke-Ejiogu, Asiabaka, Ani, and Umunakwe (2019), organizations must take the required measures to ensure the effectiveness of their resource mobilization strategies and the full utilization of all available opportunities.

As Mayeka has shown, resources should be mobilized to guarantee that they are easily accessible, useable, and available (2018). The performance of Australian firms that developed resource mobilization strategies and tightly integrated them into their organizational strategic and communication plan was reportedly improved, according to Bonsor et al. (2018). Funding is easier to secure for organizations that are efficiently managed and successfully convey their core messages to their target audiences, than consequently allows organizations to develop sustainably.

In order to understand how stakeholder resource mobilization affected the implementation of NHIF projects in Kenya, Bundi, Nyang'au, and Muchelule (2022) conducted research. A descriptive research approach was used with 110 NHIF management staff members who were in charge of carrying out UHC initiatives as the target group. The census sampling method was used. Data collection involved the use of questionnaires. 10% of the target group participated in a pilot research to assess the instrument's validity and reliability. Data both quantitative and qualitative were gathered. Analyzing qualitative information and the prose outcomes were done using thematic analysis. The analysis of qualitative data employed both descriptive and inferential statistics. Descriptive statistics included frequency distribution, mean, standard deviation, and percentages. Regression analysis and the Pearson correlation coefficient were used for inferential data analysis. To determine the impact of stakeholder resource mobilization on the execution of NHIF projects in Kenya, multiple linear regression analysis was utilized. Tables were used to present the results. The study discovered a substantial and favorable relationship between stakeholder resource mobilization and project execution. The study came to the conclusion that increased stakeholder resource mobilization will result in more projects funded by Kenya's National Health Insurance Fund being implemented.

Moulid, Muchelule, and Wechuli's (2021) analysis of Coast Development Authority projects in Kenya found that stakeholder management had an impact on project performance. This study used a descriptive research methodology with 171 important project technical members as its target population. These participants included project managers, project team leaders, project officers, and key beneficiaries representatives from seven CDA projects. The sample size was determined to be 120 using the Yamane 1967 formula. The study employed simple random sample methods and purposeful sampling methods. SPSS version 25 was used to examine quantitative data, and correlation and regression analysis were used to

determine the relationships between the variables. The hypothesis was put to the test with a 95% confidence level. According to the study, there is a strong correlation between the performance of Coast Development Authority projects in Kenya and the mobilization of resources. According to the research's findings, resource mobilization significantly and favorably impacted the success of Coast Development Authority projects in Kenya.

In Siaya County, Kenya, Beldinne and Gachengo (2022) looked into how resource management by stakeholders affected the success of road construction projects. Stakeholder theory served as the study's foundation, and an explanatory research approach was used. Four road construction projects in Siaya County were the target population. Kenya Urban Roads Authority (KURA) employees, contractors, and Siaya county government representatives made up the respondents. All urban road construction initiatives were counted. Primary data was gathered using a questionnaire, and descriptive and inferential statistics were utilized to evaluate it. The results showed that the management of resources by stakeholders has a favorable and significant impact on road construction projects. The study came to the conclusion that the performance of road construction projects in Siaya County is significantly influenced by stakeholders' resource management.

### **2.3.2 Stakeholder Participation in Monitoring and Evaluation and Performance of Community Water Borehole Projects**

Active project stakeholders keep an eye on the project's performance indicators. This makes sure that projects get done as planned and that designs and plans get adjusted as needed to take changing internal and external policy settings into account. On the other hand, evaluation and control entail a thorough examination of the effectiveness and efficiency of the project as well as the discovery of flaws that may be resolved by the application of regulations. These methods evaluate resource utilization and provide a foundation for strengthening a current strategy to promote post-implementation sustainability. One of the things that encourages process innovation is the active participation of end users in demand specification for development efforts (Maimuna & Kidombo, 2020).

A process known as participatory monitoring and evaluation involves having participants at various levels monitor and/or evaluate a particular project, project, or policy, share control over the activity's content, process, and results, and participate in

identifying or putting corrective measures into place. Participatory M&E strongly emphasizes the participation of important stakeholders (WHO, 2017).

Stakeholder participation in project monitoring and evaluation is an element of organizational competency that deals with decision-making related to stakeholders in the context of project performance. They discovered that good decision-making through interaction with stakeholders has an impact on the performance of a firm's project. Etongo, Fagan, Kabonesa, and Asaba (2018) contend that integrating stakeholders in projects through monitoring and reporting aids in identifying difficulties with performance. In order to persuade other organizations and bring about alignment with structures and procedures that will support the project's vision and objectives, senior executives in organizations might employ stakeholder engagement (Whaley & Cleaver, 2017).

Case studies show that project finance is not a guarantee of the project's performance or, subsequently, of its success. Project committees ought to be set up early on and should continue to function after that (Ifejika, Kiteme, Wiesmann, & Jörin, 2018). According to Rivett (2018), participatory M&E has the following advantages: Increases the body of knowledge essential for evaluation and, if necessary, corrective action, gives the project flexibility, improves ownership, offers a way for hearing criticism and proposals for remedial measures, stimulates learning among all participants.

In emerging countries, M&E systems are becoming more typical, and this trend is growing. The reliability of conclusions and judgments is significantly impacted by how monitoring and evaluation are conducted. Indicators that will make it possible to rate the desired outputs and results must be chosen before the project is launched in order to assess performance. According to the United Nations Development Project, an outcome indicator consists of two parts: the baseline, or the situation prior to the project or project starting, and the target, or the anticipated situation at the project's conclusion (UNDP). An output indicator that lacks a baseline because the output's objective is to create something new (Rad & Fung, 2016).

Monitoring and assessment have many applications. Without effective monitoring and assessment, it would be difficult to determine whether activities are having a positive impact on human development. Determining the necessary corrective action to guarantee the achievement of the desired goals would likewise be difficult. Results that have already been identified in the development plan are always taken into consideration during monitoring and

assessment. They are driven by the need to account for the achievement of expected results and provide a factual basis for making corrective decisions. They are an essential management tool that supports the UNDP's commitment to results accountability, resource commitment, and organizational learning. Additionally, both have a vital role in fostering commitment and are essential parts of the entire project management process. Additionally, both are essential for managing for development results and contribute to the overall project administration processes (Kilwake, Mwakio & Musundi, 2017).

The aim of control management is to ensure that plans are carried out as planned; in the event that they are not, the project manager will take corrective action. This is how project management exercises control (Gachui, 2017). By methodically gathering data, the M&E systems support the production of evidence for the mid-term and completion outcomes assessments as well as for the beneficiary-level effect analysis. Additionally, M&E encourages innovation and education to create better results and support project scaling (Okereke, 2017). It provides a way to assess the crucial relationship between actual implementers, beneficiaries, and decision-makers; it aids in the preservation and expansion of institutional memory; and it provides a more secure base for securing funds and influencing policy.

According to Adams, Zulu, and Ouellette-Kray, stakeholder control management promotes transparency and accountability of the resources to the stakeholders, including donors, project recipients, and the greater community in which the project is carried out (2020). M&E provides a detailed analysis of everything that went right and wrong during a project. Thanks to extensive M&E documentation, projects may pinpoint particular errors rather than assuming what went wrong. Often, projects can learn more from their mistakes than from their successes (WHO, 2017).

The impact of monitoring and evaluation procedures on the Nyandungu Ecotourism Wetland Park project was examined by Zingiro and Njenga (2022). Descriptive research diagrams were utilized in the study to address the research questions. Target population was 132, while sample for the Nyandungu Ecotourism Wetland Park renewable energy project consisted of 100 respondents. With the use of simple random sampling, the study further used the probability sampling technique. In order to get the necessary statistics for analysis, a questionnaire was used. Facts were also gathered using the drop and pick up later method. To choose dependable and valid research tools, a pre-test was conducted. Version 20.0 of the

Statistical Package for Social Sciences was helpful for evaluating the data. According to the results, the majority of respondents (83.8%) agreed that stakeholders' participation in monitoring and evaluation can affect a development intervention's efficacy, and 91.2% disagreed that community members are involved in monitoring and evaluation, planning, and budgeting.

In their study published in 2022, Murorunkwere and Munene sought to determine how monitoring and assessment procedures affected the success of the Care International Village Saving and Loan Association initiative in Rwanda. Researchers may utilize this research as a source of data for additional scientific, empirical studies. Descriptive research design was employed. The 157 individuals who were the target population were Care International employees who collaborated with the Village Saving and Loan Association and members of five of the association's saving groups in the Rulindo District. Using simple random sampling, 113 respondents made up the sample size. An interviewing guide and questionnaires were used to get the data. With the use of the SPSS program, data were examined using both qualitative and quantitative techniques. Both descriptive statistics (mean and standard deviation) and inferential statistics (regression and correlation) were applied. Tables and charts were used to display the data. A mean of 4.8407 and a standard deviation of 0.45447 at a percentage of 87.6 of highly agreement show that project planning is believed to be the primary function of project evaluation that affects the performance of the project. Additionally, it was discovered that capacity building and stakeholder engagement are crucial to the project's success.

In the Savelugu-Nanton Municipality Assembly, Ghana, Sulemana, Musah, and Simon (2018) evaluated stakeholder participation in monitoring and evaluating district assembly projects and programs. A case study methodology was used in this investigation. The study had 196 participants in its sample. The study found that although stakeholder participation in M&E of projects and programs was low at the Zonal Council and community levels, it was high among Municipal Planning and Co-ordinating Unit (MPCU) members and District Assembly members. The sustainability of initiatives and programs as well as accountability and openness have suffered as a result. The study comes to the conclusion that because the MPCU did not make a concerted effort to encourage participation from grassroots stakeholders and because community level stakeholders had a poor attitude toward M&E of



projects and programmes, stakeholders were infrequently involved (1–19 projects) in projects and programs. The MPCU and Assembly members were significantly more involved than the Unit committee, the community, and the Zonal councils, who were significantly less involved.

### **2.3.3 Stakeholder Participation in Planning Programs and Performance of Community Community Water Borehole Projects**

Another crucial stage of project management is planning. It is a highly involved approach that considers the stakeholders' opinions and emotions in light of the desired situation. They outline how it should look and how to get it to the desired state (Turere, 2020). This stage is critical since the particulars are discussed. Specifics including the budget, the allocation of resources, the work plan, assessments, and phase-out methods were included in the planning phase (Obeng, Iddrisu & Eshun, 2020).

Effective development can be accomplished when community members are active in all processes, including planning, procuring, and allocating resources. Committees for the implementation of projects can be used to achieve this (Mbui, 2018). A community uses participatory planning to determine the means to meet its needs and to comprehend those needs in order to work toward its goals. Outside experts' plans might be technically sound, but they might not incorporate the required public input in their implementation (Etongo et al., 2018).

As the project moves through its various phases, project planning is essential in supporting stakeholders, sponsors, teams, and the project manager. Planning is required to set desired goals, reduce risks, avoid missing deadlines, and ultimately produce the agreed-upon good, service, or result. Additionally, initiatives with inadequate planning will almost likely function poorly, according to Rivett (2018). As of 2017, businesses were losing money on projects by an average of \$97 million for every \$1 billion invested, according to the Project Management Institute.

Project planning must be broken down into manageable tasks, a team must be put together, and a deadline must be made so as to finish the work at hand. It is also important to acknowledge that communities have the chance to create their own concepts with the support of NGOs, the government, and other groups on a technical and financial level. So, by including communities in planning and budgeting, stakeholders will be able to identify

resources that might be used for programs, initiatives, and activities, so reducing the community's reliance on donors (Marks et al., 2018).

According to Schor (2016), projects are governed by planning principles and operational concepts are pushed by significant players who play a part in the overall process. The associated principles define projects and projects, stress the value of a strong project and project team in resolving technical issues, emphasize the significance of vertical communication between project and project managers on particular goals and constraints, stress the necessity of involving key stakeholders and project participants in the decision-making process, and stress the importance of funding and staffing. Effective development is achieved when the community, the main benefit of the project, participates in planning, procurement, and allocation. This can be achieved through the usage of project implementation committees.

According to Chukwuma, process deliverables are the tools used to design, manage, and complete projects (2021). To produce the kind of high-quality, on-time project deliverables that are sought and necessary for any given project, it may really take a number of process deliverables. Amuma (2020) adds that attaining the commitment necessary to respect decisions made by people requires effective communication throughout planning and public engagement. This gives them a sense of control over the procedure. The identification of resources that can be used for programs, initiatives, and activities will therefore be aided by stakeholders through including communities in planning and budgeting. reducing rely on community donations.

In Rwanda, Ndayizeye and Munene (2022) looked at the impact of stakeholder participation on project performance. 251 people made up the study's target population, of whom 188 were chosen as a sample size for the AVEH Umurerwa project in Rwanda's Bugesera District. The researcher employed a combined method of qualitative and quantitative data in a descriptive study design. As a result, the study gathered information from the field using the questionnaires and interview guides. To guarantee that every participant in the sponsored project is chosen with an equal opportunity to take part in the research from every group of respondents, the stratified random sampling technique was employed. The first objective's findings showed that consultative planning significantly and favorably impacts financed project performance in Rwanda.

Bazimya (2018) provided evidence of how stakeholder participation affects the success of public initiatives. The researcher looked at the WASH PROJECT in Rwanda, which was run by MNIFRA in the Musanze District and supported by UNICEF Rwanda, the Government of Rwanda, and the Government of the Netherlands. Project representatives from the three donors, representatives from the implementing agency, PIC representatives, and project beneficiaries made up the responses. Purposive sampling was used for the first three groups of respondents, whereas random sampling was used for the final category (project beneficiaries). Utilizing questionnaires, information from the first three types of respondents was gathered. The study used a total sample size of 43 participants. Utilizing SPSS, descriptive design was utilized to analyze the data. Only 19.5 of the respondents (19.5%) were of the opposite opinion and denied that beneficiaries engaged in the WASH project, whereas a sizable percentage (80.5%) of respondents gave favorable comments on beneficiary engagement in the initiative. The majority of respondents claimed that planning had a significant impact on the project's performance.

In Migori County, Arieko and Kisimbii (2020) investigated the factors that influence local community involvement in the planning and execution of water borehole projects. To accomplish its goals, the study used a descriptive survey research design. Two tools were used to collect the data: a questionnaire and a focus group guide. Questionnaires were employed for quantitative data, and the Focus Group Guide was used for qualitative data. The target population for the study was 1987, and it was carried out at the Katieno II and Kajulu II sublocations in Uriri Sub County. To generate a sample of 377 respondents, the study used the Krejcie & Morgan (1970) table for calculating sample size for a population. Using the Statistical Package for Social Sciences, descriptive statistics and inferential analysis were performed on the gathered data (IBM-SPSS). According to the research's conclusions, the county's integrated development plan, literacy rates, sociocultural concerns, and community awareness significantly affect local residents' willingness to participate in the planning and execution of water borehole projects in Migori County.

## **2.4 Theoretical Review**

The theoretical basis for the investigation is discussed in this section. The resource-based view (RBV) theory, general systems theory, and stakeholders' theory served as the study's foundations.

### 2.4.1 Stakeholders' Theory

Freeman created this hypothesis in 1984. In line with this idea, Freeman said that businesses should consider the interests of all stakeholders when making strategic decisions (Mainardes et al, 2018). According to the notion, an organization should be thought of as a community of stakeholders, and its goal should be to manage their objectives, requirements, and viewpoints.

Stakeholder theory, according to Ackermann and Eden (2018), is a top management technique for controlling the interplay between the many (and possibly competing) demands of an organization's stakeholders in relation to its strategic goals. Recognizing and managing stakeholders who are either impacted by or have the potential to affect project delivery is therefore one of the most important tasks of a project leader. Ackermann and Eden (2018) also highlight three issues for strategic stakeholder management: identifying the situation's actual stakeholders, examining the impact of stakeholder dynamics, and developing stakeholder management strategies. Since one stakeholder's actions may cause a variety of other stakeholders to react in a cascade, managing project stakeholders is essential during implementation (Friedman & Miles, 2019).

According to Freeman (1999), in order to produce a successful outcome, the project manager must manage the influences of numerous stakeholders in relation to the project's requirements. For a project to be completed successfully, the project manager—who acts as the conduit between the project team and the strategy—should have the following skills: The project manager's knowledge is their comprehension of project management. Performance and Personal both refer to how the project manager behaves when working on the project or engaging in related activities. Performance relates to what the project manager can perform or accomplish using their project management skills. Personal effectiveness includes behaviors, core character traits, and leadership, which includes the capacity to oversee project requirements while directing the project team toward project objectives (Phillips, Freeman & Wicks, 2019). Once finished, water borehole initiatives ought to benefit the neighborhood in both an economic and social sense. Increased empowerment, shared project costs, capacity growth, and project effectiveness are a few advantages. Clients of water borehole projects, also known as project beneficiaries, should benefit from things like reasonably priced water, improved livelihoods, financial benefits, and project management know-how.

Implementing stakeholder inclusivity in a project is likely to increase the likelihood of more engaged and satisfied stakeholders, increase the risk of losing focus on stakeholders who have the most crucial resources for the project's survival and advancement, and increase the risk of disappointing stakeholders as a result of rising expectations and the inability to satisfy competing needs and desires. These risks are stated by Sternberg (1997). Some scholars have criticized the stakeholder concept. According to Blackburn, stakeholders represent broad and diverse groups, and their interests can't be balanced against one another (2019).

For instance, Harrison, Freeman, and Abreu (2019) assert that creating greater value is at the heart of stakeholder theory. Harrison et al. also make the claim that companies work to increase value for their stakeholders by fostering stakeholder connections, conversation, the work environment, environmental preservation, the customer base, local development, and reputation. This idea was essential to the study since it made clear how stakeholder participation in general affected the effectiveness of the community water borehole project in Kibra Sub-County, Nairobi County, Kenya. As a result, the theory supported the study's variable for stakeholder participation in planning.

#### **2.4.2 Resource Based View (RBV) Theory**

The Resource Based View idea was first put forth by Barney (1991). According to the notion, an organization's resources comprise financial, intangible, natural, and capital assets. The theory contends that a corporation can become competitive if its resources are plentiful, valuable, unique, and non-replaceable. RBV theory proponents emphasize maximizing the utilization of present capital in all new ventures rather than investing in additional resources (Barney, 2001).

According to resource-based theory, an organization's strategic resources give it a significant opportunity to create competitive advantages over its competitors (Barney, 1991). The justification is valid for both project management and long-term sustainability. Although this type of resource cannot be purchased, it can be obtained through staff training. Last but not least, beginning a project with the necessary information and materials is insufficient; among other things, the project team must engage the community or stakeholders for support.

Because it encourages the examination of the study's objectives, the RBV theory is pertinent to this investigation. A project's monitoring and assessment capabilities, in particular, give an

organization a platform to examine the efficacy, efficiency, and impact of its operations. Efficiency is also impacted by finding and deploying the appropriate resources to facilitate stakeholder resource mobilization. The part that stakeholders play in managing human resources as a crucial resource or asset for a company or project is also important. Therefore, the theory served as an anchor for this study's monitoring and assessment variables and stakeholder participation in resource mobilization.

### **2.4.3 General Systems Theory**

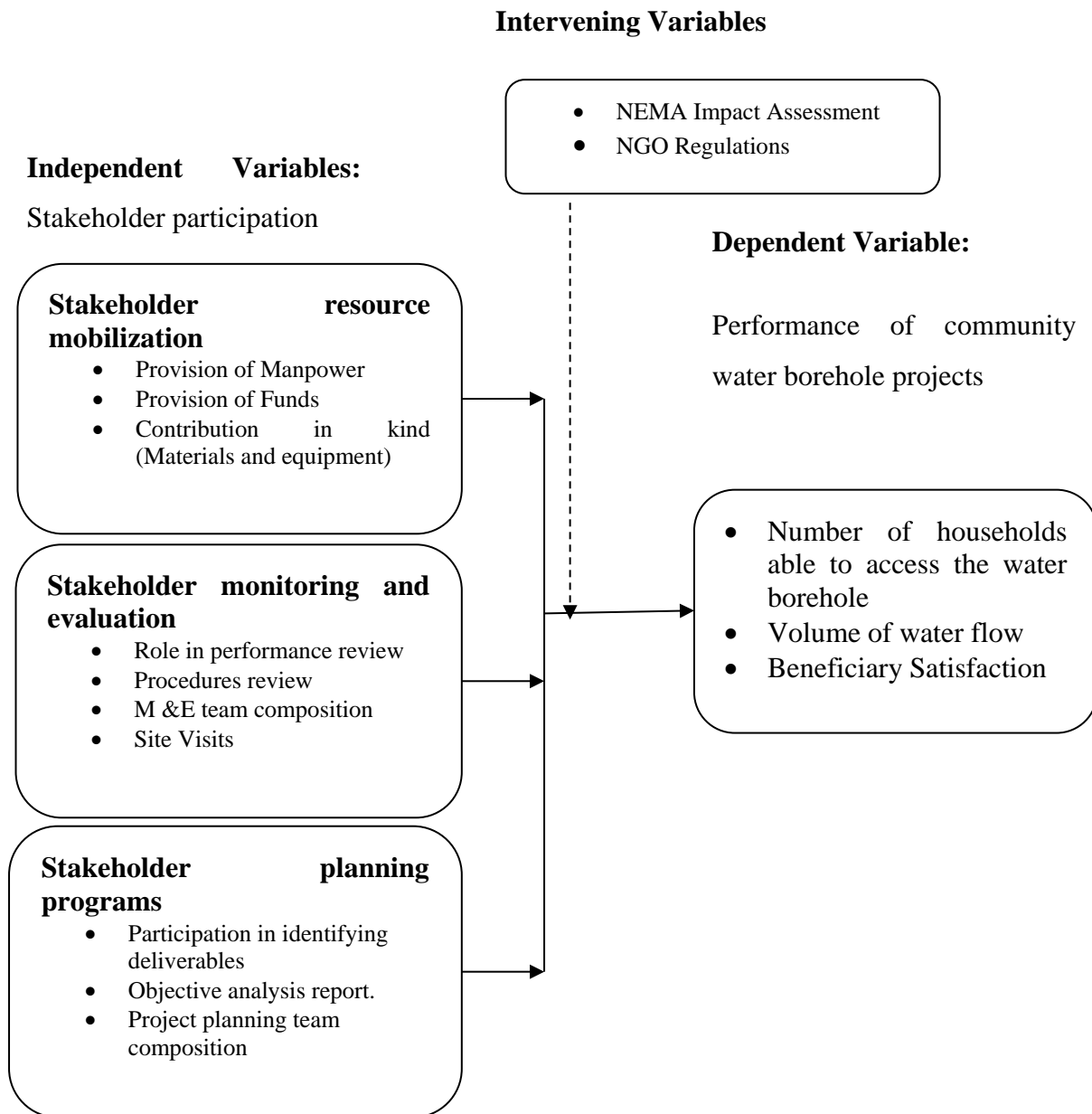
The general systems theory was established by Ludwig von Bertalanffy in 1946. Systems theory is an interdisciplinary theory that looks at the different social structures. It acts as a framework for examining and characterizing groups of people who cooperate to achieve a common goal (von Bertalanffy, 1946). The 1940s publications of Ludwig von Bertalanffy contain the principles of systems theory. The systems theory was created with the biological sciences in mind, but it has now been broadened to encompass other fields. According to the theory, a system is composed of other systems that coexist in a certain setting. These components combine to form a larger unit that differs from its component parts.

According to systems theory, each system is composed of components that are interdependent. A system's numerous parts are interrelated in such a way that a change in one part affects the whole thing. While part strength does not directly correlate with system strength, weakness does. The interdependence of the system's parts means that any problem affecting one of them will affect the entire system. Therefore, each and every component of the system must be faultless for it to be perfect. The stakeholders and the project act as the system's fundamental parts in a project-based scenario. The notion is pertinent in illustrating how the project as a whole suffers when all stakeholders are not involved because everyone has a specific function to play in the project's success. This idea was what determined how community water borehole project outcomes in Kenya's Kibra Sub-County were impacted by stakeholder participation in planning initiatives.

### **2.5 Conceptual Framework**

A conceptual framework serves as a cohesive and consistent foundation for the development and identification of existing variables while taking into account the theoretical and conceptual issues that surround research (Fuentes, Alfaro, Vargas, Gutierrez, Ternero & Sabattin, 2020). The performance of community water borehole projects is the dependent

variable, and the independent factors include stakeholder resource mobilization, stakeholder monitoring and evaluation, and stakeholder planning programs. Figure 1 displays the theoretical framework.



**Figure 1: Conceptual Framework on Stakeholder Participation and Performance of Community water borehole projects**

## 2.6 Summary of literature and Research Gaps

The success of community water borehole programs depends on stakeholder participation. Participating stakeholders may enhance projects' physical and soft abilities, enabling the water project management committee's members to manage water projects more successfully, successfully, and sustainably. The success of community water borehole initiatives depends on the involvement of stakeholders at every level. Social inclusion promotes the concepts of justice, equality, respect, trust, and the right to equitable participation. These principles encourage project ownership, teamwork, and community willingness to support projects over the long run. This guarantees that community projects are handled properly and that conflicts resulting from the sharing of resources are kept to a minimum.

Several scholars have studied water borehole projects in Kenya (Mwakazi, 2017; Omanwa & Muchai, 2020; Musau, 2020). However, there haven't been many thorough studies precisely measuring the performance of community-managed water borehole supply systems. The factors affecting the sustainability of community-based water borehole supply projects in Kenya's Kitui South sub-county were explored in Mwakazi's (2017) study. According to the study's findings, 55.8% of the community water project committee members are familiar with the committee's terms of reference and 59.2% of the committee members received leadership training. In Embu County, Kenya, Omanwa and Muchai (2020) investigated the effects of post-implementation community participation on the sustainability of water borehole projects. In terms of financial transparency and accountability, beneficiaries' willingness to pay for water, availability of sufficient funds to cover maintenance and management costs, community demand for water, application of bookkeeping skills in managing water borehole projects, and keeping financial records of household payments were statistically significant. Musau (2020), who examined the impact of project management techniques on the effective execution of water borehole projects in Makueni County, Kenya. According to the report, change management has a favorable impact on how well water borehole projects are implemented in Makueni County. The primary research gap found in the literature analysis was the absence of studies looking into how stakeholder participation affected the execution of community water borehole projects in Nairobi County. The majority of earlier studies concentrated on piped water systems in urban water supply networks and water pans in rural regions. This study therefore attempted to bridge this gap by focusing on the influence of stakeholder's participation in performance



of community water borehole projects in Kibra sub-county. Table 2.1 shows the research gaps.

**Table 2. 1: Knowledge Gaps**

<b>Author (Year)</b>	<b>Title of the Study</b>	<b>Methodology Used</b>	<b>Findings</b>	<b>Knowledge Gap</b>
Mwakazi (2017)	Factors influencing sustainability of community-based borehole water supply projects in Kitui South sub-county, Kenya	The study adopted a descriptive survey design	The study findings showed that 59.2% of the community-based borehole water project committee members got training on leadership and 55.8% of the community water project committee members know the terms of reference.	The study however was not limited to the aspect of stakeholder's participation.
Omanwa and Muchai (2020)	Effects of post-implementation community participation on sustainability of borehole water projects in Embu County, Kenya	The study adopted a descriptive survey design	Beneficiaries' willingness to pay for water availability of enough funds to cover maintenance and management costs, community demand for water, application of bookkeeping skills in borehole project management and keeping financial records of household payments were statistically significant in terms of financial transparency and accountability.	The study however was done in Embu County.
Musau (2020)	Project management practices influence levels on successful implementation of borehole water projects in Makueni County, Kenya	The study adopted a descriptive survey design	The study found that: change management positively influence implementation of borehole water projects in Makueni County.	The study did not focus on similar indicators for stakeholder participation as in the current study.
Amuma (2020)	Influence of Implementation of Community	The study adopted a descriptive	The study discovered that water financing agencies have a significant impact	The study was done in another

<b>Author (Year)</b>	<b>Title of the Study</b>	<b>Methodology Used</b>	<b>Findings</b>	<b>Knowledge Gap</b>
	Water Projects on Social Development in Kenya: a Case of Todonyang, Turkana County, Kenya	survey design	on Todonyang's socioeconomic development by promoting water infrastructure for enhanced sanitation and increasing the supply of safe drinking water.	county and was done on water projects generally
Cheruiyot (2016)	Factors Influencing Performance Of Community Based Water Projects In Bomet County	The study adopted a descriptive survey design	The results of the study showed that community's participation, project financing, management practices and governance do influence performance of community water projects.	The study was not limited to stakeholder's participation aspects
Abdi (2020)	Investigating Major Drivers of Performance in Community Water Projects: a Case of Water Projects in Saku Sub County, Marsabit County, Kenya	The study adopted a descriptive survey design	Stakeholder participation and planning at all levels of project implementation were found to have a significant impact on the success of community water projects in Saku Sub County, Marsabit County, Kenya. The study also discovered that well-trained and appropriate human resources have a significant impact on the operation of community water projects in Saku Sub County	The study looked at stakeholder participation and planning as the study's variable

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the procedures that will be followed so as to attain the objectives. This included the study design, target population, sample size and sampling procedures, data collection tools, methods of data collection, methods of data analysis, ethical considerations and variables operationalization.

#### **3.2 Research Design**

A research design, according to Snyder (2019), is a procedure, method, or plan for generating responses to research questions. This study used a descriptive cross-sectional research design because it aided in collecting both quantitative and qualitative data as supported by Al-Omari et al. (2020). Several advantages of the design include the following: it provides details regarding the state of items or relationships at a particular time and it is a snapshot of a situation's features and incidence in a population at a certain time.

The design was also ideal for this study since it made it possible to gather data on the existing degree of stakeholder participation in Nairobi County's community water borehole projects. It made it easier to acquire data on the attitudes, views, and beliefs of the sampled population. It allowed for effective data processing and collection while employing research tools like surveys.

#### **3.3 Target Population**

The target population is a comprehensive group of units from which survey findings are used to draw inferences (Kumar, 2018). 33 community water borehole projects in Kibra Sub-County that were completed from the fiscal years 2011 to 2021 served as the study's unit of analysis (County Government of Nairobi (CGoN), 2021). Officials from the water borehole management committee, Nairobi County Water and Sewerage Company, community leaders chosen from the Nyumba kumi initiatives who were to represent the water users in Kibra Sub-County, NGOs, and development partners with ties to water projects in Kibra Sub-County made up the target population of 395 respondents (Kibra Sub-County Offices, 2022).

**Table 3.1: Target Population**

<b>Categories</b>	<b>Population</b>	<b>Percentage</b>
Borehole management committee officials	124	31.4
Nairobi County Water and Sewerage Company officials	81	20.5
Community leaders drawn from the Nyumba Kumi Initiative	117	29.6
NGOs and development partners officials	73	18.5
<b>Total</b>	<b>395</b>	<b>100.0</b>

**Source: Kibra Sub-County Offices (2022)**

### 3.4 Sample Size and Sampling Procedure

According to Pandey and Pandey (2021), the population list from which the study sample was drawn is known as the sample frame. The executive borehole management committee, NCWSC officials, and project officers from non-state entities working in Kibra Sub-County made up the sample frame that was created.

#### 3.4.1 Sample Size

A sample is a group of people from a specific demographic who were chosen for the study in order to draw conclusions about the community (Flick, 2019). The population subgroup that makes up the sample size is representative of the overall population (Kumar, 2018). The suitable study sample was created using Nassiuma's (2000) formula, as illustrated;

$$n = \frac{N (cv^2)}{Cv^2 + (N-1) e^2}$$

Where:

$n$  = sample size

$N$  = population (106)

$Cv$  = coefficient of variation (take 0.6)

$e$  = tolerance of desired level of confidence (take 0.05) at 95% confidence level)

$$n = \frac{395 (0.6^2)}{0.6^2 + (395-1) 0.05^2}$$

$$n = 106$$

Thus, the sample size was 106 respondents

### 3.4.2 Sampling Procedure

Sampling is the practice of selecting a representative group of items from which to infer generalizations about a broader population. Stratified random sampling was used to obtain a sample from each stratum. Stratified random sampling was chosen because it ensures small groups are represented in the sample (Taherdoost, 2016). The categories formed strata from which the study sample was obtained. The formation of strata was based on categories of respondents making each stratum a group of units with special characteristics. The strata included representatives from the borehole management committee, Nairobi County Water and Sewerage Company officials, community leaders selected from the Nyumba kumi initiatives, NGOs, and development partners involved in water program. Then simple random sampling was used to pick respondents from each stratum. The sample was distributed among the strata as shown in Table 3.2.

**Table 3.2: Sample size**

Categories	Population	Sampling Ratio	Sample
Borehole management committee officials	124	0.268	33
Nairobi County Water and Sewerage Company officials	81	0.268	22
Community leaders drawn from the Nyumba Kumi Initiative	117	0.268	31
NGOs and development partners officials	73	0.268	20
Total	<b>395</b>		<b>106</b>

### 3.5 Data Collection Instruments

Questionnaires were employed to get primary data. The questionnaires had both open-ended and closed-ended questions. In contrast to closed-ended questions, which only allow a restricted range of responses, open-ended questions permit respondents to give an in-depth and emotional reaction without feeling compelled to supply any data. According to Mohajan (2018), closed or ordered questions are frequently simpler to evaluate whereas open-ended questions allow respondents to make more extensive comments.

The survey was divided into three pieces. The respondents' social demographic data, including sex, educational attainment, and age range, were included in Section A. Section B included questions about the effectiveness of community water borehole initiatives as influenced by stakeholder resource mobilization, stakeholder monitoring and evaluation, and stakeholder planning programs. Questions on the dependent variable (performance of community water borehole initiatives) are included in Section C.

### **3.5.1 Pilot Testing**

A different study group with the same features as the one being researched serves as a pilot study for the research questions (Walter & Andersen, 2016). The researcher undertook a pilot study to evaluate the validity and dependability of the information gathered through the questionnaire. In order to test the reliability of the research instruments, the researcher used the test-retest approach to conduct a pilot test. The test-retest approach is one of the simplest because the same test is administered to the same person twice, separated by a period of time. The pilot survey respondents were picked at random from Mathare Sub-County, received 11 questionnaires. Pilot testing was critical to the research process since it aided in the detection and repair of ambiguous questions and instructions. It was also a terrific chance to record important feedback and suggestions from the audience. This aided in improving the efficiency of the study tool. This method was continued until the researcher was confident that there were no variations or ambiguities in the tool.

### **3.5.2 Validity of Research Instruments**

According to Mishra and Alok (2017), validity is the significance and correctness of inferences drawn from study findings. A pilot research was crucial to figuring out the study's validity. The study made use of content validity, which connected test results to a broad range of objects that are comparable to test items. The representativeness of the sample population was important for content validity. The knowledge and skills covered by the test items, according to Snyder (2019), should be indicative of the greater area of knowledge and skills. Supervisors and lecturers with expertise in the field were asked to comment on the representativeness and applicability of the questions and offered recommendations for changes that were made to the design of the research instrument. This helped to improve the content validity of the data that were collected. Content validity drawn from opinions of the supervisor, lecturers in the field of research on whether the questionnaire was adequate.

### **3.5.3 Reliability of Research Instruments**

The degree to which research tools are free of bias and the steadiness of outcomes across time making use of the same data collection procedure is measured by reliability analysis. When a similar research procedure is done, the results are reproducible within established confidence bounds. According to Hegde (2019), an inquiry is reliable if another researcher can undertake a similar research and reach similar conclusions. The term "reliability" refers to estimations of how unstable error a measurement is. Reliable devices are durable and

perform good under a variety of circumstances (Ledford & Gast, 2018). This entailed the ability of study results to be replicated in a separate investigation. Thus, the split-half method was employed in the reliability test in order to ensure the research's findings. Split-half method enabled computation of the alpha coefficient. The alpha value ranges from 0 to 1, with higher values showing more reliability. A reliability coefficient of 0.7 is a widely acknowledged guideline that indicates acceptable reliability (Bresler & Stake, 2017). The split-half method evaluated the extent to which all parts of the exam contribute equally to the result.

This was done by comparing the results of one half of a test with the results of the other half (Yin, 2017). The alpha values for the research instrument was above 0.86.

### **3.6 Data Collection Procedures**

The researcher obtained a permit from the National Commission for Science, Technology, and Innovation (NACOSTI) (Appendix V) and also asked for an introduction letter (Appendix I) from the university which was presented to each respondent so as to be allowed to collect the essential data from them. To allow respondents adequate time to make thoughtful comments, the drop and pick later method was used for questionnaire administration. The surveys were gathered over a three-day period to guarantee a high response rate. With the assistance of research assistants, the researcher questionnaires were administered to make sure that any queries they had were answered. Moreover, due to COVID-19, the researcher ensured that they keep distance, wear a mask and carry sanitizers during the data collection exercise to minimize the spread as per the Ministry of Health (MOH) guidelines.

### **3.7 Data Analysis Techniques**

Data analysis offers a way for extrapolating inductive conclusions from data and distinguishing the subject of study from statistical outliers in the research data (Fletcher, 2017). Data analysis was done using the Statistical Package for the Social Sciences (SPSS Version 25.0). To make data entry easier, questions were coded and all completed questionnaires were referred to. Descriptive statistics including frequencies, percentages, mean scores, and standard deviation was produced for all the quantitative data and information provided in tables after data cleaning, which comprised verifying for entry errors. A content analysis was used to analyze the qualitative data from the open-ended questions, and it were then presented in a narrative format.

Simple regression analysis was used for inferential data analysis. Using a simple regression analysis, a statistical technique for quantifying the relationship between a single independent variable and a single dependent variable based on observations (Snyder, 2019). The simple regression model was therefore used for each objective and assumed the following equations;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \dots \dots \dots (i)$$

$$Y = \beta_0 + \beta_2 X_2 + \varepsilon \dots \dots \dots (ii)$$

$$Y = \beta_0 + \beta_3 X_3 + \varepsilon \dots \dots \dots (iii)$$

Where: Y= Performance of community water borehole projects in Kibra sub-county

$\beta_0$ =constant

$\beta_1, \beta_2,$  and  $\beta_3$  = regression coefficients

$X_1$ = stakeholder participation in resource mobilization

$X_2$ = stakeholder participation in monitoring and evaluation

$X_3$ = stakeholder participation in planning programs

$\varepsilon$ =Error Term

### 3.8 Ethical Considerations

Ethical considerations are essential in research. Participants first received a letter outlining the purpose of the study as well as the confidentiality of the data collected, allowing them to give informed permission. Participants retained the right to refuse to participate in some aspects of the study after receiving permission, including the right to refuse to provide any requested information, answer any questions or sets of questions, or not to provide any requested data at all. They also chose to withdraw any previously provided information. In order to validate the study, the researcher asked government organizations like the National Commission for Science, Technology, and Innovation (NACOSTI) for ethical approval. The researcher took care to avoid coercing anyone into taking part in the study; the researcher worked to collect as much data as possible with the least amount of time and resources. Second, the study employed quantitative research procedures to guarantee the researcher's



independence, objectivity, and trustworthiness. While carrying out the study, the researcher made sure that research ethics are upheld. The research was entirely voluntary. Both confidentiality and privacy were protected. The participants were informed of the study's objectives and given the assurance that the data they provide was used for academic research.

### 3.9 Operationalization of Variables

The operationalization of variables is shown in Table 3.3.

**Table 3. 3: Operationalization of Variables**

Objectives	Type of Variable	Variables	Measuring of Indicators	Scale of measurement	Type of analysis	Tools of analysis
To establish the influence of stakeholder participation in resource mobilization on performance of community water borehole projects in Kibra sub-county, Nairobi county, Kenya.	Independent	Stakeholder resource mobilization	<ul style="list-style-type: none"> <li>• Provision of manpower</li> <li>• Provision of funds</li> <li>• Contribution in kind (Materials &amp; equipment)</li> </ul>	Ordinal	Descriptive statistics  Inferential statistics	Arithmetic mean score Standard deviation Frequencies Percentages  Regression analysis
To determine the influence of stakeholder participation in monitoring and evaluation on performance of community water borehole projects in Kibra sub-county, Nairobi county, Kenya.	Independent	Stakeholder monitoring & evaluation	<ul style="list-style-type: none"> <li>• Role in performance review</li> <li>• Procedures review</li> <li>• M &amp; E team composition</li> <li>• Site</li> </ul>	Ordinal  Interval	Descriptive statistics  Inferential statistics	Arithmetic mean score Standard deviation Frequencies Percentages  Regression analysis

			meetings			
To examine the influence of stakeholder planning programs on performance of community water borehole projects in Kibra sub-county, Nairobi county, Kenya	Independent	Stakeholder planning programs	<ul style="list-style-type: none"> <li>• Participation in identifying deliverables</li> <li>• Objective analysis report.</li> <li>• Alternative analysis</li> <li>• Project planning team composition</li> </ul>	Ordinal	<p>Descriptive statistics</p> <p>Inferential statistics</p>	<p>Arithmetic mean score</p> <p>Standard deviation</p> <p>Frequencies</p> <p>Percentages</p> <p>Regression analysis</p>
	Dependent	Performance of community water borehole projects in Kibra sub-county, Nairobi	<ul style="list-style-type: none"> <li>• Water quality</li> <li>• Number of households connected</li> <li>• Volume of water flow</li> <li>• Beneficiary Satisfact</li> </ul>	Interval	<p>Descriptive statistics</p> <p>Inferential statistics</p>	<p>Arithmetic mean score</p> <p>Standard deviation</p> <p>Frequencies</p> <p>Percentages</p> <p>Regression analysis</p>

		county, Kenya	ion			
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## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

#### 4.1 Introduction

This chapter focuses on the data analysis, presentation and interpretation of the findings. The purpose of the study was to investigate how stakeholder's participation influences the performance of community water borehole projects in Kibra sub-county, Nairobi County. The data analysis is presented in tables.

#### 4.2 Response Rate

Questionnaires were issued to 106 respondents out of which 88 questionnaires were completed and submitted back. This represents a response rate of 81.97% as shown in Table 4.1. This implies that the response rate obtained was good and enabled generalization of the findings as it is in line with McBurney and White (2014) who argued that a response rate above 50% is good for data analysis to be done.

**Table 4. 1: Response Rate**

	Questionnaire	
Response	88	81.97
Non-response	18	18.03
<b>Total</b>	<b>106</b>	<b>100.0</b>

#### 4.3 Reliability Analysis

A pilot study was carried out to determine how reliable the questionnaires were. Reliability analysis was subsequently done using Cronbach's Alpha which measures the internal consistency by establishing if certain items within a scale measure the same construct. The reliability results were as presented in Table 4.2.

**Table 4. 2: Reliability Statistics**

	<b>Cronbach's Alpha</b>	
Stakeholder participation in resource mobilization	.882	Reliable
Stakeholder participation in monitoring and evaluation	.903	Reliable
Stakeholder participation in planning programs	.879	Reliable
Performance of community water borehole projects	.866	Reliable

Cronbach Alpha was established for every objective which formed a scale. All variables had reliability values that were above 0.86. This illustrates that all the four variables were reliable as their reliability values exceeded the prescribed threshold of 0.7 as stated by Creswell and Creswell (2017). Hence this indicates that the research instrument was reliable and therefore required no amendments.

#### **4.4 Socio-Demographic Characteristics**

The study sought to establish the respondents' background information including: gender, age bracket, and level of education. Their responses were as presented in the subsequent subsections.

##### **4.4.1 Gender of the Respondents**

The researcher sought to know the respondents' gender. The respondents were hence asked to indicate their gender. The results were as shown on Table 4.3.

**Table 4. 3: Gender of the Respondents**

	<b>Frequency</b>	<b>Percent</b>
Male	32	36.3
Female	56	63.7
<b>Total</b>	<b>88</b>	<b>100.0</b>

From the findings, 63.7% of the respondents indicated that they were female while the rest indicated that they were male as shown by 36.3%. This implies that the researcher collected data from both genders and therefore obtained the required and reliable information for the study.

#### 4.4.2 Age Bracket of the Respondents

The study further sought to establish the respondents' age bracket. Hence the respondents were required to indicate their age brackets. The findings are recorded in Table 4.4.

**Table 4. 4: Age Bracket of the Respondents**

	<b>Frequency</b>	<b>Percent</b>
Below 30 years	25	28.9
31-40 years	33	37.8
41-50 years	13	14.8
51 years above	16	18.5
<b>Total</b>	<b>88</b>	<b>100.0</b>

The findings revealed that 37.8% of the respondents were aged between 31-40 years, 28.9% were aged below 30 years, 18.5% were aged above 51 years, 14.8% were aged between 41-50 years. The findings demonstrate that community water borehole projects in Kibra Sub-County are mainly run by mature citizens. It also implies that the respondents could responsibly respond to the questions on the research problem.

#### 4.4.3 Level of Education of the Respondents

The study further sought to establish the highest level of education of the respondents who had taken part in the study. Hence the respondents were required in the questionnaire to indicate their highest level of education. The findings are presented on Table 4.5.

**Table 4. 5: Level of Education of the Respondents**

	Frequency	Percent
Primary	3	3.7
Secondary	3	3.0
Tertiary	45	51.1
University	37	42.2
<b>Total</b>	<b>88</b>	<b>100.0</b>

The analysis shows that 51.1% of the respondents had reached the tertiary school level, 42.2% had reached the University level, 3.7% had reached the primary level, and 3.0% had reached the secondary school level. This implies that all the respondents had adequate academic qualifications and therefore literate enough to participate in data collection of the study. Also having adequate and high academic qualifications made the respondents to be in a position to give accurate information about the performance of community water borehole projects in Kibra sub-county.

#### 4.5 Stakeholder Resource Mobilization

The study sought to establish the influence of stakeholder participation in resource mobilization on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya. The respondents were asked to indicate the extent to which they agreed with statements for the mobilizing resources for the community water borehole projects. The responses were as shown on Table 4.6.

**Table 4. 6: Mobilizing Resources for the Community Water Borehole Projects**

	Mean	Std. Dev.
The water borehole management committee mobilizes resources for community water borehole projects	3.882	0.666
The Nairobi county water and sewerage company officials mobilizes resources for community water borehole projects	3.356	0.509
Community leaders mobilize resources for community water borehole projects	4.289	0.632



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NGOs and development partners officials mobilize for resources community 2.719 0.656  
water borehole projects

---

From the findings, the respondents agreed that community leaders mobilize resources for community water borehole projects as shown by a mean of 4.289, and the water borehole management committee mobilizes resources for community water borehole projects as shown by a mean of 3.882. The respondents were neutral on whether the Nairobi County Water and Sewerage Company officials mobilize resources for community water borehole projects as shown by a mean of 3.356. NGOs and development partners' officials mobilize resources for water borehole projects with a mean of 2.719.

The study also sought to determine how often the respondents were involved in the resource mobilization for the community water borehole projects in Kibra Sub-County. The findings are as presented in Table 4.7.

**Table 4.7: Involvement in the Resource Mobilization for the Community Water Borehole Projects in Kibra Sub-County**

	Frequency	Percent
Always involved (all projects)	19	21.1
Occasionally Involved (20-33 projects)	26	29.7
Rarely Involved (1-19 projects)	39	44.6
Never Involved (no projects)	4	4.6
<b>Total</b>	<b>88</b>	<b>100.0</b>

As per the findings, 44.6% of the respondents indicated that they were rarely involved (1-19 projects) in the resource mobilization for the community water borehole projects in Kibra Sub-County, 29.7% indicated that they were occasionally involved (20-33 projects), 21.1% indicated that they were always involved (all projects) while 4.6% indicated that they were never involved (no projects). This shows that majority of the respondents were not involved much in the resource mobilization for the community water borehole projects in Kibra Sub-County.

The respondents were also requested to indicate the extent to which they agreed with statements on the stakeholder resource mobilization. The outcomes are as shown on Table 4.8.

**Table 4. 8: Influence of Stakeholder Resource Mobilization**

	<b>Mean</b>	<b>Std. Dev.</b>
The community water borehole projects has adequate funding	2.733	0.680
The community water borehole projects has enough technical personnel that assist in maintaining the projects	3.289	0.535
The community water borehole projects always employs manpower with right skills	4.126	0.718
The community water borehole projects has enough material and equipment to keep it going	3.393	0.825
The community water borehole projects receives in kind donations from various stakeholders	4.163	0.634

According to the findings, the respondents agreed that the community water borehole projects receives in kind donations from various stakeholders as illustrated by a mean of 4.163 and the community water borehole projects always employs manpower with right skills as illustrated by a mean of 4.126. The respondents were neutral on whether the community water borehole projects has enough material and equipment to keep it going as illustrated by a mean of 3.393, the community water borehole projects has enough technical personnel that assist in maintaining the projects as illustrated by a mean of 3.289 and the community water borehole projects has adequate funding as illustrated by a mean of 2.733.

The respondents were also asked to give their own opinion on other aspects of stakeholder resource mobilization that the community water borehole projects in Kibra Sub-County should adopt to improve on project performance. They indicated that stakeholders training and capacity building on proposal development will be beneficial to their resource mobilization initiatives. These projects should also come up with income generating activities to enable them generate passive income to fund some of their project activities.

#### **4.5.1 Testing Hypothesis One**

Linear regression analysis was conducted to assess how stakeholder resource mobilization influences the performance of community water borehole projects in Kibra sub-county. In

testing the hypothesis, data was collected from the respondents on stakeholder resource mobilization and then the composite index for stakeholder resource mobilization was computed and used in the analysis. The following hypothesis that was in line with objective one was formulated and tested.

**H<sub>01</sub>:** There is no significant relationship between stakeholder resource mobilization and performance of community water borehole projects in Kibra sub-county

**Table 4. 9: Results for Testing Hypothesis One**

<b>Model Summary</b>						
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>		<b>Std. Error</b>	
1	0.810	0.656	0.652		0.562	
<b>ANOVA<sup>a</sup></b>						
<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	51.838	1	51.838	163.942	1.26E-21
	Residual	27.193	86	0.316		
	<b>Total</b>	<b>79.031</b>	<b>87</b>			
<b>Coefficients<sup>a</sup></b>						
		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
<b>Model</b>		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
1	(Constant)	2.652	0.714		3.714	0.000
	Stakeholder resource mobilization	0.876	0.315	0.810	2.781	0.006

The findings in Table 4.9 shows that  $r=0.810$ . In addition,  $R^2$  was 0.656 which implied that stakeholder resource mobilization explained 65.6% of the variations in the performance of community water borehole projects in Kibra sub-county. The results on test of significance also indicate that stakeholder resource mobilization ( $\beta=0.876$ ,  $p=0.006$ ) was significant at  $p<0.05$  and 95% confidence level)

The overall F statistics, ( $F =163.942$ ,  $p=1.26E-21<0.05$ ), indicated that stakeholder resource mobilization is significant in community water borehole projects in Kibra sub-county. The alternative hypothesis was therefore accepted and it was concluded that there is a

significant relationship between stakeholder resource mobilization and performance of community water borehole projects in Kibra sub-county.

#### 4.6 Stakeholder Monitoring and Evaluation

The study aimed to determine the influence of stakeholder participation in monitoring and evaluation on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya. The respondents were asked to indicate how often they were involved in the monitoring and evaluation for the community water borehole projects in Kibra Sub-County. The findings were as shown in Table 4.10.

**Table 4.10: Monitoring and Evaluation for the Community Water Borehole Projects in Kibra Sub-County**

	Frequency	Percent
Always involved (all projects)	13	14.6
Occasionally Involved(20-33 projects)	43	49.4
Rarely Involved (1-19 projects)	17	19.1
Never Involved(no projects)	15	16.9
<b>Total</b>	<b>88</b>	<b>100.0</b>

Table 4.10 revealed that majority of the respondents indicated they were occasionally involved (20-33 projects) as illustrated by 49.4%. Other respondents indicated that they were rarely involved (1-19 projects) as illustrated by 19.1%, Never involved (no projects) as illustrated by 16.9% and Always involved (all projects) as illustrated by 14.6%. This implied that majority of the stakeholders were somewhat involved in the monitoring and evaluation for the community water borehole projects in Kibra Sub-County.

The respondents were further asked to state whether there were site visits (inspections) in community water borehole projects in Kibra sub-county. Table 4.11 displays the findings.

**Table 4. 11: Site Visits (Inspections) Conducted**

	Frequency	Percent
Yes	59	66.9
No	29	33.1

<b>Total</b>	<b>88</b>	<b>100.0</b>
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The results revealed that most of the respondents (66.9%) indicated that site visits (inspections) were conducted and 33.1% indicated they were not. This implied that site visits (inspections) were conducted in most of the community water borehole projects in Kibra Sub-County.

Moreover, the respondents were asked to indicate the frequencies that the site visits (inspections) were done. The results were recorded on Table 4.12.

**Table 4. 12: Frequency of Site Visits (Inspections) Done**

	<b>Frequency</b>	<b>Percent</b>
Weekly	19	21.3
Bi-weekly	39	44.3
Monthly	30	34.4
<b>Total</b>	<b>88</b>	<b>100.0</b>

From the findings, most of the respondents (44.3%) indicated that the community water borehole projects in Kibra Sub-County were conducted bi-weekly, 34.4% indicated monthly while 21.3% indicated weekly. This shows that the community water borehole projects in Kibra Sub-County were inspected.

The respondents were also asked to indicate the extent to which they agreed with statements on the stakeholder monitoring and evaluation on community water borehole projects in Kibra Sub-County. Table 4.13 presents their responses.

**Table 4. 13: Influence of Stakeholder Monitoring and Evaluation on Community Water Borehole Projects in Kibra Sub-County**

	<b>Mean</b>	<b>Std. Dev.</b>
The community water borehole projects involve stakeholders in performance reviews	4.252	0.563
The community water borehole projects encourage stakeholder participation by including some of them to the M &E project team	3.741	0.545

The stakeholders are involved in the community water borehole projects' procedure review	3.215	0.571
The stakeholders are allowed to take part in site inspections	3.259	0.555
The performance reviews are issued to stakeholders in frequent reports	4.519	0.999

From the findings, the respondents strongly agreed that the performance reviews are issued to stakeholders in frequent reports as illustrated by a mean of 4.519. The respondents agreed that the community water borehole projects involve stakeholders in performance reviews as illustrated by a mean of 4.252 and the community water borehole projects encourage stakeholder participation by including some of them to the M &E project team as illustrated by a mean of 3.741. Further, the respondents were neutral on whether the stakeholders are allowed to take part in site inspections as illustrated by a mean of 3.259, and the stakeholders are involved in the community water borehole projects' procedure review as illustrated by a mean of 3.215.

The respondents were also asked to give their own opinion on other aspects of stakeholder monitoring and evaluation that community water borehole projects in Kibra Sub-County should adopt to improve on project performance. They indicated that stakeholders have the right and the responsibility to know what is happening in the programme or project, which aspects need corrective action, what the results are, and which lessons can be learned and shared with one another, but they should not simply be recipients of monitoring and evaluation reports. This will therefore improve the project performance.

#### **4.6.1 Testing Hypothesis Two**

Linear regression analysis was conducted to assess how stakeholder participation in monitoring and evaluation influence the performance of community water borehole projects in Kibra sub-county. In testing its hypothesis, likewise data was collected from the respondents on stakeholder participation in monitoring and evaluation and then the composite index for stakeholder participation in monitoring and evaluation was computed and used in the analysis. The following hypothesis that was in line with objective two was formulated and tested.

**H<sub>02</sub>:** There is no significant relationship between stakeholder participation in monitoring and evaluation and performance of community water borehole projects in Kibra sub-county

**Table 4. 14: Results for Testing Hypothesis Two**

<b>Model Summary</b>						
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>		<b>Std. Error</b>	
1	0.778	0.606	0.601		1.143	
<b>ANOVA<sup>a</sup></b>						
<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	172.496	1	172.496	132.028	4.64E-19
	Residual	112.36	86	1.307		
	<b>Total</b>	<b>284.856</b>	<b>87</b>			
<b>Coefficients<sup>a</sup></b>						
<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
1	(Constant)	1.435	0.599		2.396	0.018
	Stakeholder participation in monitoring and evaluation	0.843	0.265	0.778	3.181	0.002

Table 4.14 revealed that  $r=0.778$ . In addition,  $R^2$  was 0.606 which implies that stakeholder participation in monitoring and evaluation explains 60.6% of the variations in the performance of community water borehole projects in Kibra sub-county. The results on test of significance also indicate that stakeholder participation in monitoring and evaluation ( $\beta=0.843$ ,  $p=0.002$ ) was significant at  $p<0.05$  and 95% confidence level.

The overall F statistics, ( $F =132.028$ ,  $p=4.64E-19<0.05$ ), indicated that stakeholder participation in monitoring and evaluation is significant in community water borehole projects in Kibra sub-county. The alternative hypothesis was hence accepted and it was concluded that there is a significant relationship between stakeholder participation in monitoring and evaluation and performance of community water borehole projects in Kibra sub-county.

#### **4.7 Stakeholder Planning Programs**

The research sought to examine the influence of stakeholder participation in planning programs on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya. The respondents were asked to indicate how often they were involved in the planning programs for the community water borehole projects in Kibra Sub-County. Table 4.15 exhibits the outcomes.

**Table 4. 15: Planning Programs for the Community Water Borehole Projects in Kibra Sub-County**

	<b>Frequency</b>	<b>Percent</b>
Always involved (all projects)	13	14.8
Occasionally Involved(20-33 projects)	21	23.9
Rarely Involved (1-19 projects)	48	54.5
Never Involved(no projects)	6	6.8
<b>Total</b>	<b>88</b>	<b>100.0</b>

The findings revealed that majority of the respondents indicated that they were rarely involved (1-19 projects) in the planning programs for the community water borehole projects in Kibra Sub-County as shown by 54.5%, 23.9% indicated that they were occasionally involved, 14.8% indicated that they were Always involved (all projects)and 6.8% indicated that they were never involved. This implied that majority of the stakeholders were not involved much in the planning programs for the community water borehole projects in Kibra Sub-County.

The respondents were also asked to indicate how the community water borehole committee was formed. The findings were as shown on Table 4.16.

**Table 4. 16: Formation of Water Borehole Committee**

	<b>Frequency</b>	<b>Percent</b>
Elected	12	13.6
Self-appointed	32	36.4
Appointed by donor agent	26	29.5
Appointed by government agent	18	20.5
<b>Total</b>	<b>88</b>	<b>100.0</b>



Table 4.16 revealed that 36.4% of the respondents indicated that the community water borehole committee was self-appointed, 29.5% indicated they appointed by donor agent, 20.5% indicated they were appointed by government agent, while 13.6% indicated they were elected. This implied that community water borehole committee were mainly appointed.

The researcher required respondents to indicate the extent to which they agreed with statements on stakeholder planning programs influencing community water borehole projects in Kibra Sub-County. The results are displayed on Table 4.17.

**Table 4. 17: Influence of Stakeholder Planning Programs and Performance of Community Water Borehole Projects in Kibra Sub-County**

	<b>Mean</b>	<b>Std. Dev.</b>
The community water borehole projects involves stakeholders in identifying deliverables	4.274	0.518
The community water borehole projects does an objective analysis report annually	3.926	0.974
The project planning team comprises of stakeholders	2.904	0.714
The project has a clear plan on project sustainability	2.400	0.720
The project has a clear human capital development program	4.170	0.643

The findings revealed that the respondents agreed that the community water borehole projects involves stakeholders in identifying deliverables as shown by a mean of 4.274, the project has a clear human capital development program as shown by a mean of 4.170, and the community water borehole projects does an objective analysis report annually as shown by a mean of 3.926. The respondents were neutral on whether the project planning team comprises of stakeholders as shown by a mean of 2.904. The respondents also indicated that they disagreed that the project has a clear plan on project sustainability as shown by a mean of 2.400.

The respondents were also asked to give their own opinion on other aspects of stakeholder planning programs that community water borehole projects in Kibra Sub-County should adopt to improve on project performance. They indicated that stakeholders brought into any decision or

project development from the get-go are able to help provide ideas and help create potential solutions. Often, stakeholders come from varying backgrounds, and so they look at issues from differing perspectives. This enables opposing viewpoints to get expressed and discussed.

#### 4.7.1 Testing Hypothesis Three

Linear regression analysis was further conducted to assess how stakeholder planning programs influence the performance of community water borehole projects in Kibra sub-county. In testing its hypothesis, likewise data was collected from the respondents on stakeholder planning programs and then the composite index for the stakeholder planning programs was computed and used in the analysis. The following hypothesis that was in line with objective three was formulated and tested.

**H<sub>03</sub>:** There is no significant relationship between stakeholder planning programs and performance of community water borehole projects in Kibra sub-county

**Table 4. 18: Results for Testing Hypothesis Three**

<b>Model Summary</b>						
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error</b>		
1	0.830	0.689	0.685	1.358		
<b>ANOVA<sup>a</sup></b>						
<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	350.542	1	350.542	190.213	1.67E-23
	Residual	158.489	86	1.843		
	<b>Total</b>	<b>509.031</b>	<b>87</b>			
<b>Coefficients<sup>a</sup></b>						
<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized</b>	<b>t</b>	<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
1	(Constant)	2.604	1.162		2.241	0.027
	Stakeholder planning programs	0.882	0.338	0.830	2.609	0.010

Table 4.18 shows that  $r=0.830$ . In addition,  $R^2$  was 0.689 which indicate that stakeholder planning programs explain 68.9% of the variations in the performance of community water

borehole projects in Kibra sub-county. The results on test of significance also indicate that stakeholder planning programs ( $\beta=0.882$ ,  $p=0.010$ ) was significant at  $p<0.05$  and 95% confidence level.

The overall F statistics, ( $F =190.213$ ,  $p=1.67E-23<0.05$ ), indicated that stakeholder planning programs is significant in the community water borehole projects in Kibra sub-county. The alternative hypothesis was hence accepted and it was concluded that there is a significant relationship between stakeholder planning programs and performance of community water borehole projects in Kibra sub-county.

#### 4.8 Performance of Community Water Borehole Projects

The respondents were asked to give appropriate answers to questions on the aspects of performance of community water borehole projects in Kibra Sub-County. The results were as presented on Table 4.19.

**Table 4. 19: Performance of Community Water Borehole Projects in Kibra Sub-County**

	SD	D	N	A	SA	Mean	Std. Dev.
	%	%	%	%	%		
The community have ease of access of water due to the borehole	7.4	6.1	3.7	38.7	44.2	4.074	0.779
The officials have improved the flow of water in the community due to the borehole	10.3	12.3	9.9	32.8	34.8	3.637	0.938
The officials have improved on the volume of water in our area	62.0	5.5	6.1	1.8	24.5	2.541	0.633
The water borehole has improved the quality of water	3.1	0.6	1.8	3.1	91.4	4.882	0.574
The service delivery of water has improved due to the borehole	17.8	12.9	12.9	42.3	14.1	3.304	0.585

From the findings, the respondents (91.4%) strongly agreed that the water borehole has improved the quality of water as shown by a mean of 4.882. The respondents (82.9%) also agreed that

their community have ease of access of water due to the borehole as shown by a mean of 4.074 and 67.6% indicated that they have improved the flow of water in the community due to the borehole as shown by a mean of 3.637. The respondents also were neutral on whether the service delivery of water has improved due to the borehole as shown by a mean of 3.304 and they have improved on the volume of water in the area as shown by a mean of 2.541.

#### 4.8.1 Influence of Stakeholder’s Participation and Performance of Community Water Borehole Projects

Regression analysis was performed in this study to check the combined influence of stakeholder participation in resource mobilization, stakeholder participation in monitoring and evaluation and stakeholder participation in planning programs and performance of community water borehole projects in Kibra sub-county.

**Table 4. 20: Influence of Stakeholder Participation on Performance of Community Water Borehole Projects in Kibra sub-county**

<b>Model Summary</b>						
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error</b>		
1	0.852	0.726	0.716	1.412		
<b>ANOVA<sup>a</sup></b>						
<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	453.542	3	151.181	74.052	1.62E-23
	Residual	171.489	84	2.042		
	<b>Total</b>	<b>625.031</b>	<b>87</b>			
<b>Coefficients<sup>a</sup></b>						
<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
1	(Constant)	2.604	1.162		2.241	0.027
	Stakeholder resource mobilization	0.876	0.315	0.810	2.781	0.006

Stakeholder participation in monitoring and evaluation	0.843	0.265	0.778	3.181	0.002
Stakeholder participation in planning programs	0.882	0.338	0.830	2.609	0.010

The findings in Table 4.20 shows that  $r=0.852$ . In addition,  $R^2$  was 0.726 which implied that stakeholder participation (stakeholder participation in resource mobilization, stakeholder participation in monitoring and evaluation and stakeholder participation in planning programs) explained 72.6% of the variations in the performance of community water borehole projects in Kibra sub-county. The overall F statistics, ( $F = 74.052$ ,  $p=1.62E-23 < 0.05$ ), indicated that stakeholder participation in resource mobilization, stakeholder participation in monitoring and evaluation and stakeholder participation in planning programs were significant in predicting the performance of community water water borehole projects in Kibra sub-county.

As per findings, by taking all the factors constant at zero, performance of community water borehole projects in Kibra sub-county will be 1.432. The findings presented also show that stakeholder participation in resource mobilization positively influences performance of community water borehole projects in Kibra sub-county as shown by  $r=0.876$ . This variable was significant since  $p=0.006$  is less than 0.05, hence the null hypothesis that stated that there is no significant relationship between stakeholder participation in resource mobilization and performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya, was rejected.

The study further revealed that stakeholder participation in monitoring and evaluation positively influences performance of community water borehole projects in Kibra sub-county as shown by  $r=0.843$ . This variable was significant since  $p=0.002$  which is less than 0.05, hence the null hypothesis that stated that there is no significant relationship between stakeholder participation in monitoring and evaluation and performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya, was rejected.

Moreover, the study showed that stakeholder participation in planning programs positively influences performance of community water borehole projects in Kibra sub-county as shown

by  $r=0.882$ . This variable was significant since  $p=0.010$  was less than 0.05, hence the null hypothesis that stated that there is no significant relationship between stakeholder participation in planning programs and performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya, was rejected.

Overall, stakeholder planning programs had the greatest influence on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya, followed by stakeholder monitoring and evaluation, and then stakeholder resource mobilization had the least influence on performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya. All the variables were significant since p-values were less than 0.05. This therefore implied that stakeholder's participation significantly influenced the performance of community water borehole projects in Kibra sub-county, Nairobi County.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter gives a summary of the findings, discussion of the findings, conclusion drawn from the findings highlighted and recommendation made there-to.

#### **5.2 Summary of the Findings**

In regards to stakeholder participation in resource mobilization, the study found that community leaders mobilize resources for community water borehole projects, and the water borehole management committee mobilizes resources for community water borehole projects. The research found that it was not certain whether the Nairobi county water and sewerage company officials mobilizes resources for community water borehole projects and NGOs and development partners' officials mobilize for resources community water borehole projects. The study also found that that majority of the stakeholders were not involved much in the resource mobilization for the community water borehole projects in Kibra Sub-County. Moreover, the research found that the community water borehole projects receives in kind donations from various stakeholders and the community water borehole projects always employs manpower with right skills. The research found that it was uncertain whether the community water borehole projects has enough material and equipment to keep it going, the community water borehole projects has enough technical personnel that assist in maintaining the projects and the community water borehole projects has adequate funding. From the inferential statistics, the study found that there is a significant relationship between stakeholder resource mobilization in terms of provision of manpower, provision of funds and contribution in kind (materials & equipment), and performance of community water borehole projects in Kibra sub-county ( $\beta=0.876$ ,  $p=0.006<0.05$ ).

On stakeholder participation in monitoring and evaluation, the study found that majority of the stakeholders were somewhat involved in the monitoring and evaluation for the community water borehole projects in Kibra Sub-County. The research also established that site visits (inspections) were conducted in most of the community water borehole projects in Kibra Sub-

County. Moreover, the study found that the community water borehole projects in Kibra Sub-County were inspected frequently. The research established that the performance reviews are issued to stakeholders in frequent reports. The study also found that the community water borehole projects involves stakeholders in performance reviews and the community water borehole projects encourage stakeholder participation by including some of them to the M & E project team. Further, the study found that it was uncertain whether the stakeholders are allowed to take part in site inspections, and the stakeholders are involved in the community water borehole projects' procedure review. From the inferential statistics, the study found that there is a significant relationship between stakeholder participation in monitoring and evaluation in terms of role in performance review, procedures review, M & E team composition and site meetings, and performance of community water borehole projects in Kibra sub-county ( $\beta=0.843$ ,  $p=0.002<0.05$ ).

On stakeholder participation in planning programs, the research established that majority of the stakeholders were not involved much in the planning programs for the community water borehole projects in Kibra Sub-County. The study also found that community water borehole committee were mainly appointed. The study found that the community water borehole projects involve stakeholders in identifying deliverables, the project has a clear human capital development program, and the community water borehole projects do an objective analysis report annually. The study established that it was uncertain whether the project planning team comprises of stakeholders. The study also found that the project has no clear plan on project sustainability. From the inferential statistics, the study found that there is a significant relationship between stakeholder participation in planning programs in terms of participation in identifying deliverables, objective analysis report, alternative analysis and project planning team composition, and performance of community water borehole projects in Kibra sub-county ( $\beta=0.882$ ,  $p=0.010<0.05$ ).

The study found that the water borehole has improved the quality of water. The study also established that their community had ease of access of water due to the borehole and they have improved the flow of water in the community due to the borehole. The study also found that it was uncertain whether the service delivery of water has improved due to the borehole and they improved on the volume of water in the area.



### **5.3 Discussion of the Findings**

This section presents the discussions of the findings in relation to the literature review.

#### **5.3.1 Stakeholder Resource Mobilization**

The study found that community leaders mobilize resources for community water borehole projects, and the water borehole management committee mobilizes resources for community water borehole projects. The findings are in accordance with Msuku (2020) who stated that there is a clear correlation between the contributions of the local population and the success of the project. Some local communities already had water-saving accounts set up where they put local funds for upkeep and operation, but others did not. According to the survey, more than 85% of projects in which local contributions were used as deposits for water projects had communities that consistently maintained and repaired their water infrastructure.

The research found that it was not certain whether the Nairobi county water and sewerage company officials mobilizes resources for community water borehole projects and NGOs and development partners' officials mobilize for resources community water borehole projects. The study also found that that majority of the stakeholders were not involved much in the resource mobilization for the community water borehole projects in Kibra Sub-County. The results differ with Adams et al. (2020) who argued that it is crucial that local communities work toward managing the resources and investing in water services because water is a shared resource. As a result, communities might get active in civic organizations, and donors could support current incentives for cooperation or service co-production.

Moreover, the research found that the community water borehole projects receives in kind donations from various stakeholders and the community water borehole projects always employs manpower with right skills. The findings are in line with Ikejemba et al. (2017) who noted that it would be critical to provide labor, time, financial aid, and resources in order to address concerns about inactivity.

The research found that it was uncertain whether the community water borehole projects has enough material and equipment to keep it going, the community water borehole projects has enough technical personnel that assist in maintaining the projects and the community water

borehole projects has adequate funding. Kilasim (2016) refutes this assertion, suggesting that community resource mobilization is a sign of a demand-responsive project and may be used to distinguish it from a project in which people merely participate. The quantity of money, goods, or labor that people contribute to the community in exchange for services should be correlated with the relative costs of delivering various levels of service

### **5.3.2 Stakeholder Monitoring and Evaluation**

The study found that the community water borehole projects involves stakeholders in performance reviews and the community water borehole projects encourage stakeholder participation by including some of them to the M &E project team. The findings were supported by Adams, Zulu, and Ouellette-Kray (2020) who stated that stakeholder control management enables transparency and accountability of the resources to the stakeholders, including donors, project beneficiaries, and the larger community in which the project is executed.

Further, the study found that it was uncertain whether the stakeholders are allowed to take part in site inspections, and the stakeholders are involved in the community water borehole projects' procedure review. The results were not in line with Etongo, Fagan, Kabonesa, and Asaba (2018) who stated that involving stakeholders in projects through monitoring and reporting helps by spotting performance-related issues. Senior executives in organizations can use stakeholder engagement as a way to persuade other organizations and bring about alignment with structures and procedures that will support the project's vision and mission

### **5.3.3 Stakeholder Planning Programs**

The research established that majority of the stakeholders were not involved much in the planning programs for the community water borehole projects in Kibra Sub-County. According to Rivett (2018), projects that lack adequate planning are virtually certainly going to perform poorly. Planning is a highly involved approach that considers the stakeholders' opinions and emotions in light of the desired situation. They outline how it should appear as well as how to achieve the intended state (Turere, 2020).

The study found that the community water borehole projects involve stakeholders in identifying deliverables, the project has a clear human capital development program, and the community water borehole projects do an objective analysis report annually. In participatory planning, a community looks to achieve its goals by identifying the methods to meet its needs and by understanding its needs. Plans created by outside specialists may be technically competent, but they may not include the necessary public input in their implementation (Etongo et al., 2018).

The study established that it was uncertain whether the project planning team comprises of stakeholders. The study also found that the project has no clear plan on project sustainability. The results disagreed with Marks et al. (2018) who argued that involving communities in planning and budgeting will enable stakeholders to identify resources that may be used in programs, initiatives, and activities, thereby minimizing the reliance of the community on donors.

#### **5.4 Conclusions**

The study concluded that there is a significant relationship between stakeholder participation in resource mobilization and performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya. The study concluded that empowered stakeholders may get actively involved in the activities of the projects, may be more willing to support decisions that may support the goals and objectives and are more likely to provide creative and innovative solutions to community water borehole projects implementation challenges.

The study concluded that there is a significant relationship between stakeholder participation in monitoring and evaluation and performance of community water borehole projects in Kibra sub-county, Nairobi County, Kenya. The study concluded that monitoring of project progress helps in keeping the priorities in check and make sure that the stakeholders are fully involved and not overlooked. The involvement of stakeholders in monitoring helps in the promotion of transparency and satisfaction of stakeholders. Involvement of stakeholders in the project monitoring results in an increase in the projects' performance.

The study concluded that there is a significant relationship between stakeholder participation in planning programs and performance of community water borehole projects in

Kibra sub-county, Nairobi County, Kenya. The research deduced that the management plan lays down the measures that will support positive impact and minimize the negative effects of stakeholders throughout the project life cycle. Different stakeholders have different demands and interests in a project. Developing a robust stakeholder engagement plan is crucial in order to combat these different demands and expectations and improve the efficiency and effectiveness of the project.

## **5.5 Recommendations**

From the conclusion that empowered stakeholders may be more willing to support decisions that may support the goals and objectives, the study recommends that the local community should be mobilized so as to build an interest in participating during project activities. Mobilization should start at the initial stage of project conceptualization. Frequent facilitation, support and monitoring from relevant institutions at different levels of project development are important and highly recommended so as to guarantee project performance.

The study concluded that developing a robust stakeholder engagement plan is crucial in order to combat these different demands and expectations and improve the efficiency and effectiveness of the project. This study therefore recommends that communities should be given the chance to participate in planning as they are better placed in identifying the urgency in the deliverables in the project especially during the implementation stage. The researcher recommends that communities considered as project beneficiaries should have a regular training in order to increase their understanding about the project and gaining skills and knowledge about the project maintenance.

The study concluded that monitoring of project progress helps in keeping the priorities in check and make sure that the stakeholders are fully involved and not overlooked. The study therefore recommends that there is need for the community to be involved in monitoring and evaluation of the projects. This can be by ensuring that the community members are included in project progress briefs and maintaining feedback lines (reports, social audits). Participatory monitoring and evaluation process will therefore lead to both the stakeholder empowerment and their ownership of projects.

On the conclusion that the involvement of stakeholders in monitoring helps in the promotion of transparency and satisfaction of stakeholders, the study recommends that the project leaders should also be transparent in their dealings with the members of the community and call for regular meetings where the people are briefed on the sustainability efforts and challenges ahead. Therefore, the suitability of community water borehole projects depends crucially on an enabling institutional environment which requires government commitment and accountability of the implementing agencies to the local communities.

### **5.6 Recommendation for Further Research**

The study was limited to community water borehole projects. The research recommends the study of other types of projects in other sectors such health, government or NGOs should be considered. Further, this study focused on stakeholder resource mobilization, stakeholder monitoring and evaluation, and stakeholder planning programs as the stakeholder's participation factors influencing the performance of community water borehole projects in Kibra sub-county. Therefore, future researchers should explore other factors like project planning and communication.

Also, study should be done on the factors influencing the performance of community water borehole projects in Kibra sub-county since this study was limited to only the stakeholder's participation factors that influence the performance of community water borehole projects in Kibra sub-county. Other studies should consider other locations other than Kibra sub-county.

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## APPENDICES

### Appendix I: Letter of Transmittal

Denis Ombiro Nyambati  
P.O Box 7544-00300  
Nairobi.  
Email: [dnyambati@gmail.com](mailto:dnyambati@gmail.com)  
Phone: 0720 377 699

April 26, 2022

Dear Sir/ Madam,

I am a Degree in Master of Arts student at University of Nairobi; I am carrying out a research study on **STAKEHOLDER PARTICIPATION AND PERFORMANCE OF COMMUNITY WATER BOREHOLE PROJECTS IN KIBRA SUB-COUNTY IN NAIROBI COUNTY, KENYA.**

You have been selected as one of the respondents for this study, so I am requesting that you take part in it. In essence, you would have to answer a quiz. Your replies will be treated with the strictest discretion and you will be treated anonymously. Your information will only be utilized for academic purposes.

Please fill out the questionnaire as accurately as you can and omit writing your name because it is solely for academic purposes and will be kept in the strictest confidence. I appreciate you..

Yours faithfully,

DENIS NYAMBATI  
L50/29126/2019  
University of Nairobi, Faculty of Business

**Appendix II: Questionnaire for Water Borehole Management Committee Officials, Nairobi County Water and Sewerage Company officials, Community Leaders, NGOs and development partners officials**

This questionnaire is to collect data for purely academic purposes. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire.

*Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

**Section A: Socio –demographic characteristics (Please tick (√) appropriate answer)**

1) Please indicate your gender:

Female [ ]      Male [ ]      Bisexual [ ]

2) State your highest level of education

Primary [ ]

Secondary [ ]

Tertiary [ ]

University [ ]

3) Please indicate your age bracket

20-30 yrs. [ ]

31-40 yrs. [ ]

41-50 yrs. [ ]

51-60 yrs. [ ]

61 yrs and above [ ]

**Section B: Stakeholder resource mobilization**

4) Please indicate the extent to which you agree with these statements for the mobilizing resources for the community water borehole projects in Kibra Sub-County?

Use the 5-point scale where: 5 is strongly agree, 4 is agree, 3 is neutral, 2 is disagree and 1 is strongly disagree.

		1	2	3	4	5
a.	The water borehole management committee mobilizes resources for community water borehole projects					

b.	The Nairobi county water and sewerage company officials mobilizes resources for community water borehole projects					
c.	Community leaders mobilize resources for community water borehole projects					
d.	NGOs and development partners officials mobilize for resources community water borehole projects					

5) How often are you involved in the resource mobilization for the community water borehole projects in Kibra Sub-County?

Always involved (all projects)

Occasionally involved (20-32 projects)

Rarely involved (1-19 projects)

Never involved (no projects)

6) Please indicate the extent to which you agree with these statements on the stakeholder resource mobilization influencing community water borehole projects in Kibra Sub-County?

Use the 5-point scale where: 5 is strongly agree, 4 is agree, 3 is neutral, 2 is disagree and 1 is strongly disagree.

		1	2	3	4	5
a.	The community water borehole projects has adequate funding					
b.	The community water borehole projects has enough technical personnel that assist in maintaining the projects					
c.	The community water borehole projects always employs manpower with right skills					
d.	The community water borehole projects has enough material and equipment to keep it going					
e.	The community water borehole projects receives in kind donations from various stakeholders					

7) In your opinion, what other aspects of stakeholder resource mobilization should community water borehole projects in Kibra Sub-County adopt to improve on project performance?

.....



**Section C: Stakeholder monitoring and evaluation**

8) How often are you involved in the monitoring and evaluation for the community water borehole projects in Kibra Sub-County?

Always involved (all projects)

Occasionally involved (20-32 projects)

Rarely involved (1-19 projects)

Never involved (no projects)

9) (a) Were there site visits (inspections) conducted?

Yes  No  Not Sure

(b) How often were the site visits (inspections) done?

Weekly  Bi-weekly  Monthly

(c) Please indicate the extent to which you agree with these statements on the stakeholder monitoring and evaluation on community water borehole projects in Kibra Sub-County?

		1	2	3	4	5
a.	The community water borehole projects involves stakeholders in performance reviews					
b.	The community water borehole projects encourage stakeholder participation by including some of them to the M &E project team					
c.	The stakeholders are involved in the community water borehole projects' procedure review					
d.	The stakeholders are allowed to take part in site inspections					
e.	The performance reviews are issued to stakeholders in frequent reports					

(d) In your opinion, what other aspects of stakeholder monitoring and evaluation should community water borehole projects in Kibra Sub-County adopt?

.....

.....

**Section D: Stakeholder planning programs**

(e) How often are you involved in the planning programs for the community water borehole projects in Kibra Sub-County?

- Always involved (all projects)
- Occasionally involved (20-33 projects)
- Rarely involved (1-19 projects)
- Never involved (no projects)

(f) How was the community water borehole committee formed? (Tick appropriately)

- Elected
- Self-appointed
- Appointed by donor agent
- Appointed by government agent

(g) Please indicate the extent to which you agree with these statements on stakeholder planning programs influencing community water borehole projects in Kibra Sub-County?

		1	2	3	4	5
a.	The community water borehole projects involves stakeholders in identifying deliverables					
b.	The community water borehole projects does an objective analysis report annually					
c.	The project planning team comprises of stakeholders					
d.	The project has a clear plan on project sustainability					
e.	The project has a clear human capital development program					

(h) In your opinion, what other aspects of stakeholder planning programs should community water borehole projects in Kibra Sub-County adopt?

.....

**Section E: Performance of Community water borehole projects**

(i) Please give an appropriate answer to questions on the aspects of performance of community water borehole projects in Kibra Sub-County.

		1	2	3	4	5
a.	Our community have ease of access of water due to the borehole					
b.	We have improved the flow of water in the community due to the borehole					
c.	We have improved on the volume of water in our area					
d.	Our water borehole has improved the quality of water					
e.	Our service delivery of water has improved due to the borehole					

**Thank you for participating**