# MONITORING AND EVALUATION SYSTEMS AND PERFORMANCE OF WATER AND SANITATION PROJECTS IN KISUMU WEST WARD, KISUMU COUNTY, KENYA

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**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTERS OF ARTS IN PROJECT PLANNING AND MANAGEMENT SCHOOL OF BUSINESS AND MANAGEMENT SCIENCE, UNIVERSITY OF NAIROBI**

**2023**

# DECLARATION

This research project report is my original work and has not been submitted to any other university for any award

Signature……. Date……November 15, 2023……..

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**L50/37903/2020**

This research project report has since been put forward for examination with my approval in my capacity as the assigned supervisor of the University of Nairobi.

Signature… Date: 16th Nov. 2023…….

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# DEDICATION

I give over this research project work to my lovely wife Debra Akinyi and my daughter Haylee Bree Odhiambo and my son King Trevor Odhiambo for their endurance and encouraging words they occasionally shared. Lastly, my late dad Barnabas Odalloh for his encouragement and prayers. May God's blessings be upon all of you.

# ACKNOWLEDGMENT

I would like to pass my heartfelt appreciation to the management of the University of Nairobi for providing me with the chance to undertake this masters' programme and availing conducive environment learning and needed resources. Further, I am taking this privilege to communicate my heartfelt gratitude to my assigned research supervisor, Dr. Lydia Wambugu who remained resourceful all through by offering a continued guidance and relevant directions during the research project both in proposal and report writing until logical finalization.

In addition, I equally thank Dr. Mary Mwenda and Dr. Reuben Kikwatha for their commitment and guidance throughout the course work. Lastly, I'm indebted to my class members during fruitful engagement and team spirit.

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# LIST OF ABBRIVIATION AND ACRONYMS

| | |
|---|---|
| **UNWWD** | **:** United Nations World Water Development |
| **M&E** | **:** Monitoring and Evaluation |
| **UN** | **:** United Nations |
| **UNHR** | **:** United Nations Human Rights |
| **USA** | **:** United States of America |
| **HDI** | **:** Human Development Index |
| **CLEAR** | **:** Center for Learning & Evaluation Results |
| **USD** | : United States Dollar |
| **NIMES** | **:** National Integrated Monitoring and Evaluation Systems |
| **GoK** | **:** Government of Kenya |
| **WASH** | **:** Water, Sanitation and Hygiene |
| **WASREB** | **:** Water Services Regulatory Board |
| **CDF** | **:** Constituencies Development Fund |
| **ICT** | **:** Information and Communications Technology |
| **SDG** | **:** Sustainable Development Goals |
| **KIWASCO** | **:** Kisumu Water and Sanitation Company |
| **NACOSTI** | **:** National Commission for Science, Technology and Innovation |
| **SPSS** | **:** Statistical Package for the Social Sciences |
| **WBS** | **:** Work Breakdown Structure |
| **ANOVA** | **:** Analysis of Variance |

# ABSTRACT

Water and sanitation projects have been greatly extensively supported in the region with the intention of providing clean and safe water to the community. Unfortunately, the performance of these projects are questionable. It was for that reason that this study examined how monitoring and evaluation systems influences the performance of water and sanitation projects within Kisumu West ward, Kisumu County, Kenya. The study was grounded on objects: To ascertain the effect of planning systems on water and sanitation projects in Kisumu West Ward; To evaluate the baseline assessment on performance water and sanitation projects in Kisumu West Ward; To analyze how stakeholder participation influence the performance of water and sanitation projects in Kisumu West Ward, Kisumu County; and finally to ascertain how progress reporting affect water and sanitation projects performance within Kisumu West Ward, Kenya. The research was anchored on program theory as the main theory, supplemented by stakeholder theory. Descriptive survey design as employed with a targeted population of 13,235 comprising of 13,200 project beneficiaries, 25 project committee, 5 project managers and sponsors each. Yamane (1967) formulae was applied to arrive at 388 sample size from beneficiaries and purposively sampled one (1) respondent each for project committee, project manager and project sponsor, whereas, the techniques entailed stratified simple random and purposive sampling. Research instruments utilized were structured questionnaire and Key Informant Interview guide. The study was piloted in the nearby Kisumu North West Ward with 10 respondents. The research tools were validated and reliability tested. The Questionnaires were administered through digital platforms and a high return rate of 97.7% was realized, descriptive statistics and inferential statistics used for analysis assisted by Statistical Package for the Social Sciences Software and the analysis outcome conveyed via tables. Findings disclosed an existing positive statistical significant correlation between all the four monitoring and evaluation systems constructs (planning systems, baseline assessment, stakeholder participation, progress reporting) and the performance of water and sanitation projects in Kisumu west ward, Kisumu County. Moreover, the study found that 69.1% of the variability in the performance of water and sanitation projects could be accounted for through planning systems, baseline assessment, stakeholder participation and progress reporting put together. Moreover, all the four study variables (planning systems, baseline assessment, stakeholder participation, progress reporting) produced a positive and significant interrelation with water and sanitation projects performance within Kisumu West Ward, Kisumu County. The research findings indicated that monitoring and evaluation systems interventions under the study were important in the performance of performance of water and sanitation projects Kisumu West Ward, Kenya. Recommendations raised included establishment of effective policy framework on planning systems, more emphasis of baseline surveys with measurable specific objectives, holistic stakeholder engagement and streamlining progress reporting in the implementation of water and sanitation initiatives within Kisumu West Ward. A suggestion for further studies surrounding other wards as well as extended to Constituency and County.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background to the Study

Lately, water and sanitation projects worldwide have overstretched their prominence in rural and urban areas, with significant proportion failing in their lifecycle either by design or by default due to low monitoring and evaluation (M&E) of their performance. M&E systems provides a multi-dimensional assessment that enhances better outcomes and therefore the reverse could be true in its absence. According to United Nations World Water Development (UNWWD) Report, the value of water infrastructure plays a critical role in delivering substantial social economic benefits (UNWWD, 2023). However, these benefits do not adequately account for the value of the intended projects and therefore chances of catastrophic public health crisis is highly likely with the surging population as asserted by (Gleick, 2000).

According to UNWWD report of 2023, 1.4% (approximately 1.2 million) of mortality worldwide occurred because of inadequate water and sanitation services; with 775,000 death caused by contaminated water sources (UNWWD, 2023). Supply of purified, safe drinking water and sanitation services have been identified as an important factor in human rights advancement by United Nations (UN) Special Rapporteur on Human Rights to Safe Drinking Water and Sanitation Report of 2022, even though 2.2 billion persons had no access to safer drinking water and 4.2 billion lack basic sanitation services (UNHR, 2022).

Globally, United States of America (USA) had been reported to have had the safest drinking water supplies in the world, however approximately 7.2 million people had infections related to water and sanitation challenges (CDC, 2020), despite an elaborate system for M&E for tracking incremental changes in performance of projects water and sanitation projects at the focal point (Katharine & John, 2011). In Latin American countries like Brazil and Chile have taken an active participation and interventions in providing technical assistance and financial support for M&E systems. Led by their heads of state, they have promoted an enhanced adherence to the standard practice as required for project performance (World Bank, 2013; Schneider et al., 2016). In China, the state

designed elaborate institutional framework that coordinate implementation of state projects. Accordingly, (Angus & Mohammed, 2014) observed the framework is designed with an elaborate M&E systems to improve accountability and learning, thus better performance (Holvoet & Inberg, 2014).

The developing countries, especially in Africa region are characterized by weak M&E systems especially in public projects. According to (Lamhauge et al., 2012) this is due to failures or lack of elaborate M&E system to track the performance of most of the WASH projects. There is need for developing countries to adoption country-led M&E systems to streamline and enhance the critical elements in project implementation for relevance, efficiency and effectiveness (Segone, 2009). (Kukhareva et al., 2022) noted that the reconfiguration of African governance systems has led countries namely Benin, Ghana, Kenya and South Africa to adopt M&E Systems not only as a tool for reflection but also as a requirement by the donor agencies (Centre for Learning and Evaluation Results, 2023).

### 1.1.1 Concept of Monitoring and Evaluation Systems

Incorporation of M&E systems in projects seems to face challenges due to different reasons such as, lack of capacity, culture and attitude, misaligned interests based on the project in Africa. Low Human Development Index (HDI) has also contributed to a long history of ineffective M&E systems in setting up guidelines for tracking project performance (World Bank, 2013). Empirical evidence have reported that completion and cost effectiveness of projects have become a challenge to many developing countries as a result of failed or lack of monitoring and evaluation systems (Muindi, 2018). For instance, in South Africa collation of data and presentation of project information by governments are done annually or semiannually affecting completion and quality of the output.

Goldman et al. (2022) noted that monitoring and evaluation systems lack adequate funding or are in variedly funded causing discrepancies in performance and realization of projects. For example, survey by Center for Learning & Evaluation Results (CLEAR) revealed in Benin a project had a budgetary allocation of USD 422,000 with human

capacity of 20 staff, Uganda USD 2M against a staff of 40; in Kenya USD 3.8M against a staff of 19 and in Ghana 3.6M USD with a parity of 20 staff (Centre for Learning And Evaluation Results, 2023).

M&E System in developing nations has low emphasis focus on evidence based monitoring of the national priority outcomes as well as quality of management of national projects which are done without prior announcement (Goldman et al., 2022). For instance in Benin, basic principles of accountability and quality are poor, it tracked in M&E systems similarly to Uganda which has a weak accountability systems with bureaucratic red tapes that hindered project progress according (Goldman et al., 2022). Kenya has equally suffered the same fate in her formative Monitoring and Evaluation systems developmental stages, however, it progressively built on the challenged that preceded by strategically integrating projects under National Integrated M&E Systems (NIMES) as well as operationalization of the M&E Systems in devolution.

### 1.1.2 Monitoring and Evaluation System and Performance of Water and Sanitation Projects

Water and sanitation projects plays a pivotal role in sustainability and growth of human and some economic functions across the sectors. Quite often, these projects are undertaken for beneficial reasons; however, some fails to deliver the expected results and rendered them a waste of time and money (Jackson et al., 2020). In financial year 2019/2020 Kenya's Ministry of finance budgeted for Ksh.43.4 billion to seek strategy on enhancing resource mobilization for sustainable development programs, this was meant to spur economic activities through implementation of comprehensive economic stimulus (GoK, 2019). Water and sanitation development projects were allocated Kshs. 617 million for disbursement to counties. However, it was never disbursed to the counties due to failure of adhere to specific requirements, which included a M&E systems according to Guidelines for the Management of Intergovernmental Fiscal Transfer 2017 (GoK, 2017).

Culture of accountability and transparency in projects provides a platform for stakeholders' audit of project performance. In order to address project poor performance, M&E Systems need to be embraced. Besides, the Inadequacy of funding, mismanagement of funds, misaligned priorities, lack of stakeholder's involvement, and

lack of M&E expertise should be taken into consideration for effective and efficient delivery of projects.

### 1.2 Research Problem Statement

The 2010 Constitution and Sustainable Development Goal (SDG) number six envisaged provision of clean water and Sanitation for all, thereby placing emphasis on performance and sustainability of WASH projects. However, on the contrary, level of implementation and delivery water and sanitation project have failed or stalled (Ongalo, 2019). The Auditor General Report shows from 2015 to 2019 Kisumu County had 89 water projects commissioned in various sub counties. In Kisumu West ward all the project that were commissioned had failed as either incomplete, abandoned or completed beyond scheduled time and cost overruns. Moreover, some of the existing water and sanitation projects cannot mirror the project's intended expectations of performance, denying the locals the right to clean water and sanitation services. Kisumu County Assembly Oversight report of 2018 points poor performance of water projects in Kisumu West Ward with 54 projects still on implementation status and 12 operational with their status worsening. All these challenges points to ineffective monitoring and evaluation system that failed to capture and report the challenges on time. Despite various studies done on monitoring and evaluations systems and performance of water and sanitation projects, mixed results have been reported and insignificant research have been done in Kisumu West Ward. Therefore, the study seeks to assess effect of M&E planning systems, baseline assessment, stakeholders influence and progress reporting on the performance of WASH projects in Kisumu West Ward, Kisumu County.

### 1.3 Objectives of the Study

i. To ascertain the influence of planning systems on water and sanitation projects in Kisumu West Ward, Kisumu County.
ii. To evaluate the influence of baseline assessment on performance of water and sanitation projects in Kisumu West Ward, Kisumu County.
iii. To analyze the influence of stakeholder participation on performance of water and sanitation projects in Kisumu West Ward, Kisumu County.
iv. To ascertain how progress reporting influences performance of water and sanitation projects in Kisumu West Ward, Kisumu County.

## 1.4 Value of the Study

The research aimed to enhance delivery of Water and Sanitation projects undertaken at the constituencies in Kenya in particular, Kisumu West Ward, Kisumu County as well as integrating performance to M&E systems in meeting expectations of the beneficiaries. It also provided valuable information on accountability and transparency to beneficiaries and the donor agencies since they play a critical role on the performance of water and sanitation initiatives by ensuring that the overall deliverables are achieved with minimal interruptions as well as eliminating project derailment. Other than ensuring that there is an efficient utilization of resources, monitoring and evaluation systems will enable learning from mistakes and failures from previous Water and Sanitation projects. Equally, this paper endeared to provide relevance to the body of knowledge as well as providing room for future investigations within the M&E arena.

# CHAPTER TWO: LITERATURE REVIEW

## 2.1 Introduction

This segment profiled theories underpinnings and reviewing previous research work related to M&E systems impact on performance of water and sanitation projects. It is structured starting with review of theories, then empirical literature review, followed by the conceptual model and lastly summarizes knowledge gaps.

## 2.2 Theory Review

The research was guided by stakeholder management theory and program theory.

### 2.2.1 Program Theory

The theory as proposed by Huey Chen in 1995 (Chen, 2005), placed a lot of attention on how to effect change and who is accountable for it. It frequently uses logical models to support its ideas by illustrating the application of the overarching logic within an intervention. The theory assumes that in tracking program performance, predefined goals and objectives must be aligned to the activities with share insights. This will enhance project performance in the input output model. When properly used, monitoring and evaluation systems are the fundamental input that results in processing subsequent observable output. The system's theory explains what happens when processes and inputs are changed to increase performance, which leads to beneficial results. In this scenario, management involvement, stakeholder involvement, technological knowledge, and the preparation stage are the factors affecting the result, which is performance, and these are considered as inputs to the mechanism.

(Msila & Setlhako, 2013) study is a key proponent of this theory suggested that the theory blends well when path diagrams are incorporated to model the key steps of a program where the intended objectives are expected. However, (Maden et al., 2017) had a varied opinion of program theory on its inconsistency in complex situations and therefore difficult to understand “what works for whom under what situation”

### 2.2.2 Stakeholder Theory

Stakeholder theory as advanced by Freeman in the year 1984 (Freeman & McVea, 2001). The theory posits that anyone or any group with the ability to affect or be affected with

the achievement of an organizations' objects is categorized as a stakeholder. Companies are known to create externalities that have an impact on many stakeholders. Due to these externalities, stakeholders frequently put more pressure on businesses to boost positive benefits while reducing negative ones.

According to the theory, a company should adopt strategies that take into account the parties involved while attempting to increase benefits or reduce harm to the representative groups (Freeman & McVea, 2001). Therefore, governments are urged to consider factors other than financial success, such as their duties to society. Assessment and Monitoring in this interaction extend beyond the usual fiduciary responsibility to shareholders and include nearby communities, suppliers, workers, and consumers (Gutterman, 2023).

According to (Clarkson, 1995) the company is a system of stakeholders viewed as a legal body that functions for the good of communities. According to his theory, the company's goal is to generate value or money for its stakeholders and shareholders. Particularly when development initiatives are launched, monitoring and evaluation must take into account the various demands of stakeholders (De Brito et al., 2008). (Zollo et al., 2022) stated that political communities jointly own public projects, and as a result, there is pressure to balance the interests of all parties involved. Environmental regulators are typically established by governments as governmental organizations with the power to create project requirements and oversee the projects' adherence to those requirements. Projects that do not comply run the risk of having their operations shut down, having their operating permits revoked, or paying non-compliance fines (Henriques & Sadorsky, 1996). Overall, the arguments presented above suggest that stakeholder demands and M&E efficacy correlate in a positive way. According to the stated concept, stakeholders should be included in the monitoring and assessment of water project performance.

### 2.3 Performance of Water and Sanitation Projects

(Ghalem et al., 2016) defined performance as a multi-dimensional concept of efficiency and effectiveness. Water Services Regulatory Board (WASREB) acknowledges that poor performance by water and sanitation projects are more relates to governance crisis as

oppose to water crisis despite several initiatives undertaken to deal with this challenge (WASREB, 2022). Similarly, (Van den Berg & Danilenko, 2017) pointed out that Water and Sanitation utilities in Africa are generally weak as occasioned by limitations of resources.

In community water supply projects, (Rutto, 2017) examined the influence of sustainability and performance parameters; key focus was on CDF funded projects. The author noted that despite huge financial investments on 10 projects, many ended up collapsing midway or after completion. The study found out that adoption of ICT in digitization of water project activities, project staff training, and social cultural and managerial impacts have greatly influenced the performance of water projects. Thus, the research concludes that evaluation and monitoring system could be the key determinant of project accomplishment and it should be explicitly established in the overall project.

(Eliab & Kisimbii, 2020) examined factors influencing the effectiveness of water and sanitation projects in urban areas. The study reported a considerable influence on performance of water initiatives when relevant technological skills are deployed in water projects, additionally, it suggested that members of the community need not be given the responsibility to oversee water project facilities since it may lead to mismanagement and unwarranted system breakdowns.

## 2.4 Empirical Literature

Empirical literature was reviewed in respect to M&E planning system, baseline assessment, stakeholder participation and progress reporting under this section.

### 2.4.1 Planning Systems and Performance of Water and Sanitation Projects

Planning for M&E enhances tracking of the achievements of the expected results as well as identification of areas that requires improvement early enough before uncertainty creeps. In Tharaka Nithi County, (Kiruja & Nyawira, 2022) recommended that planning for project resources is key, and outlined project planning to encompass, communication plan, change management plan and stakeholders' management plan. According to (Kanyamuna, 2021) resource planning plays a critical function in monitoring and evaluation system, and starts with establishing the project's metrics and scope. To

achieve the project's goals and generate its deliverables, the project manager and the team should carry out the tasks outlined in the application form. Efficient project progress and expense monitoring as well as a well-structured project team that will guarantees project success.

(Roba & Odollo, 2022) indicated that one of the primary tools used by stakeholders to assure the success of initiatives is monitoring planning. Therefore, the importance of monitoring planning cannot be understated, according to (Atwa & Mudi, 2019) it as an essential game-plan of adventure resources along the optimum path to achieving extended goals. According to the latter study, a strong correlation linking water and sanitation initiatives performance and the planning for M&E. Further, the study suggested that both government levels should provide guidelines, clear policies and dedicated M&E planning establishments for approvals in all water and sanitation projects. In other words, harmonization of all government M&E planning frameworks should work in consonance in order to maximize project efficiency.

Evaluation and tracking preparation are equally essential, according to a research conducted by (Mackay, 2007) in the United States, the government initiatives in project planning phase takes the greatest percentage of time and done to details to conform with the 80/20 rule .This has been the rule of thumb for most of the projects which therefore explains the success stories of project performance . The research aimed to ascertain how project M&E may lead to better governance and optimization of project efficiencies.

### 2.4.2 Baseline Assessment and Performance of Water and Sanitation Projects

In contrast to a target, which is a defined level of result to be attained within a specific period, baseline information can be defined as the value of a performance indicator before the execution of activities or projects (Shafique & Naz, 2023; Gunday et al., 2011). Estimating changes and Setting future project goals as a project progresses in monitoring are both challenging without baseline data. It is also challenging to compare changes of the project and control groups and the original circumstances in an impact review.

(Slepkov et al., 2021) explained the baseline survey report on comprehensive approach to provision of water and sanitation determined the values of baseline information for comparison of data collected during and final evaluation in order to determine the level of change on impact and outcome indicators. In furtherance of improving accessibility to water and sanitation, the report relied on key indicators for informed decisions. For example, the percentage of households accessing clean and safe drinking water, percentage of reported diarrheal diseases, percentage of households targeted by WASH programs amongst others. The report adopted mixed study approach and found out that 1.9% of households reported that they access water from primary sources such as lakes, wells, rivers and springs. It also noted their suffering due to the ever-changing climatic conditions and hence recommended a long-lasting intervention.

Sanitation has equally been a concern, from a sample size of 896 households, 21.1% had knowledge of hand washing and challenges of open defecation. This has resulted to illnesses related to lack of it thereof especially to children under five years. (Pedroso et al., 2022) noted that baseline information enables deeper understanding of the current condition to improve on the existing and the future Water and sanitation projects. In addition to that, baseline information will enable determine the requirements for adequate planning for technical and user perspective to guarantee acceptance and support from the local community.

### 2.4.3 Stakeholders Participation and Performance of Water and Sanitation Projects

World Water Forum 2022 held in Dakar, Senegal dubbed 'The Forum of Response' focused on outcomes with solutions for the communities who were the majority stakeholders in water and Sanitation projects in conformance to Sustainable Development Goals (SDG) goal number six. The forum narrowed down to four key priorities that includes; water security and sanitation, collaborative efforts, water for rural development, and methods and resources. All these were encapsulated on financing, governance, knowledge management and innovation. (Omondi et al., 2019) examined how community involvement affects the achievement of Kisumu Water and Sanitation Company (KIWASCO) projects and found out that performance of these projects entailed effective communication as well as collaboration with all the interested parties. Although

the involvement of stakeholders in M&E is essential, too much participation may have an unintended negative impact on the process. Their participation will result in unanimity of support for the process. Working with people who require monitoring and evaluation information is therefore crucial to ensuring its applicability. (Titomet, 2017) found out that Project committee members influences water projects performance, nonetheless, the research omitted the consideration of the effect of partnerships vis-a-vie stakeholder participation on the performance of community water initiatives.

In addition, management engagement in monitoring and evaluation system operations reduces the system's functionality (Ssekamatte & Okello, 2016). It generally happens in situations where management engagement is either minimal or oppressive. The demand from stakeholders without sufficient involvement and participation might make it difficult for M&E systems to achieve their goals (Ndegwa, 2020). One cannot ignore the importance of stakeholder involvement in project performance. Project success and Stakeholder involvement are positively associated. The negative correlation between participation in planning by stakeholders and project performance could yield both results. Empirically, some stakeholders must be included in the early phases of project planning cycle in order to help the project progress or kick off, but on the contrary, there are stakeholders by nature of conflicting interest might derail the intentions and therefore must be avoided.

### 2.4.4 Progress Reporting and Performance of Water and Sanitation Projects

Performance evaluation and Reporting of water and sanitation utilities forms a critical component in making informed decisions for realization of their objectives by updating project’s key findings, results, and impacts as well as conclusions and recommendation. This is done to guarantee that the project is executed in alignment with the established plan. The primary goal of continuous monitoring creates a control system, which serves as an internal efficiency driver for the organization's project implementation procedures (Ssekamatte & Okello, 2016). Hence requires clear, methodical strategy to evaluate a project by making sure it achieves its aims or objectives as well as giving early warnings (Ndegwa, 2020). Since those not involved in the program or project can carry out

evaluation, internal monitoring provides a clear insight on where changes and improvements are needed.

The efficiency and methodical delivery of crucial information for reporting serves as the foundation for decisions at the management levels. It plays a crucial role in monitoring process as a result, neither the government nor non-governmental institutions can substantively modify an evaluation report owing to the structural design of reporting, (Ssekamatte & Okello, 2016). WASREB collects and analyses data to gauge the performance of water utilities in order to make sector policy that ensures sustainability as well as fulfilment of SDG goal number six. By doing such, the reporting cycle helps cement the monitoring and evaluation systems. (Simplilearn, 2022) has integrated all the components of progress reporting to incorporate works scheduled, status of risks, summary of change approved in the reporting period, analysis of past performance, as well as forecasted plan. In researcher's intuition, poor project reporting could deliberately hinder performance since time and resources schedule could trigger scope creep. Besides, it informs the project team as well as stakeholders on the required improvements.

## 2.5 Conceptual Framework

This theoretical scheme showed the interrelation between other variables and the predictor

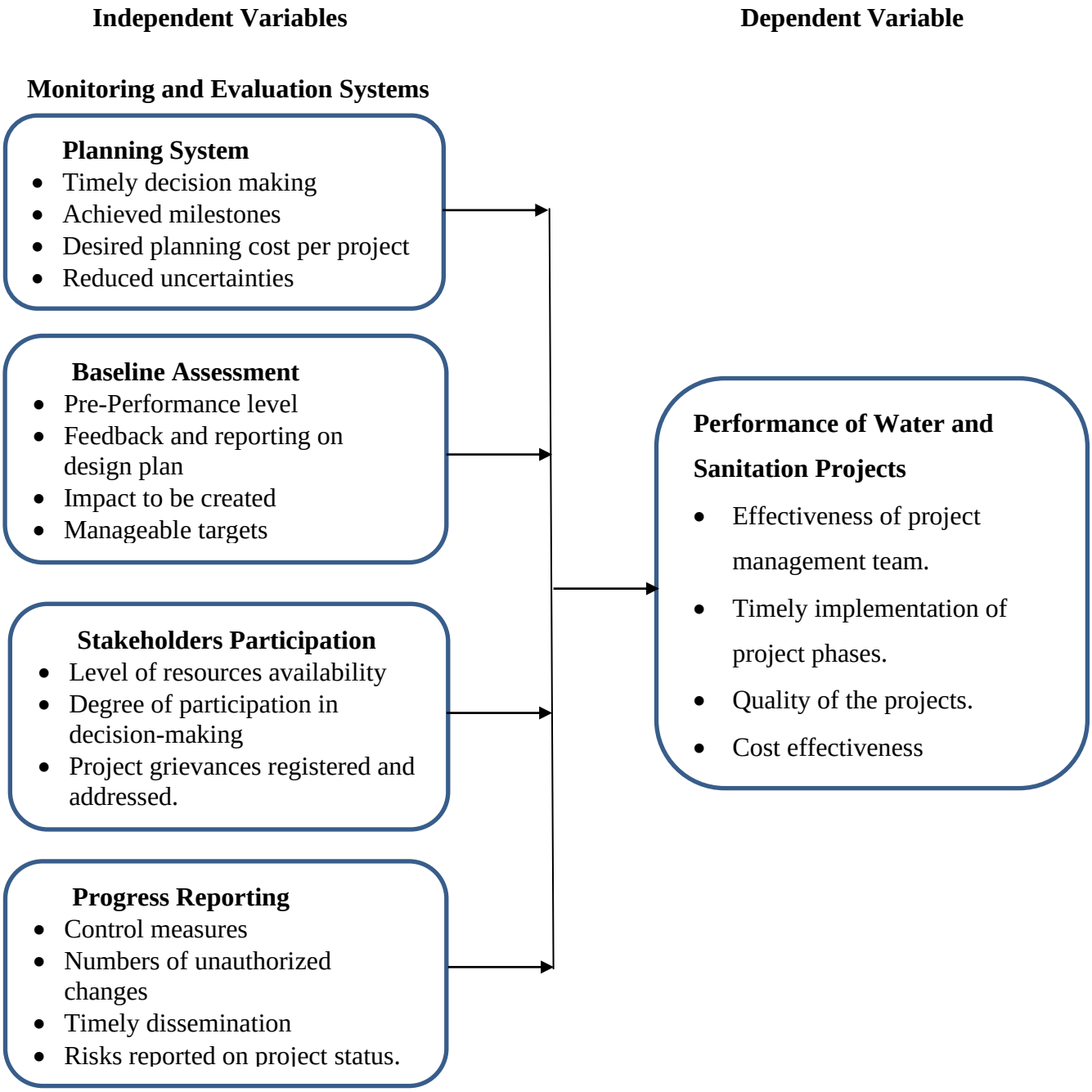


***Figure 2.1: Conceptual Framework***

## 2.6 Research Hypothesis

The following null hypothesis were tested:

$H_{01}$: There exist no significant relationship between planning systems and Performance of Water and Sanitation Projects in Kisumu West Ward, Kisumu County

$H_{02}$: There exist no significant relationship between baseline survey and Performance of Water and Sanitation Projects in Kisumu West Ward, Kisumu County

$H_{o03}$: There exist no significant relationship between stakeholder participation and Performance of Water and Sanitation Projects in Kisumu West Ward, Kisumu County

$H_{04}$: There exist no significant relationship between progress reporting and Performance of Water and Sanitation Projects in Kisumu West Ward, Kisumu County

## 2.7 Summary of Literature Review and Gap

### Table 2.1: Knowledge Gap Matrix

| Variable | Author (Year) | Title of the Study | Study Findings | Knowledge Gaps |
|---|---|---|---|---|
| **Project Performance, monitoring, and evaluation.** | (Titomet, 2017) | Kenyan Water Project Performance and Monitoring and Evaluation Effects: The Mwala Water Project in Machakos County. | -To ensure success, funding for monitoring and evaluation programs is required.<br>-Members of project committees have an impact on how well water projects work.<br>-The effectiveness of water projects is influenced by the project team's monitoring and assessment capabilities. | The study only focused on types of monitoring, financing and human skills and left the critical aspects of project progress reports, baseline information as well a stakeholder's participation. |
| **Stakeholders' participation** | (Rutto, 2017) | Projects for supplying water to the local population in Kenya's Kipkelion East Constituency | -Financial resources influences performance and sustainability of water projects.<br>-Effective stakeholders' engagement Organizational structure influences performance and sustainability of water projects. | The study overlooked overall stakeholders' participation and singled out the female gender involvement in performance and sustainability of water projects. |
| | (Mwashuma and Kisimbi, 2020) | Factors Influencing the Effectiveness of Water Projects in Urban Centers in Kenya; A Case of Mji Wa Kale Sub-County | -There is a notable correlation exists between the presence of natural water sources, consumer price preferences, stakeholder engagement, managerial proficiency, and the effectiveness of water projects | The study does not address the impact of the community in managing water projects. |
| **Baseline Assessment** | (Ndegwa, 2020) | Kenyan water, sanitation, and hygiene programs' implementation and how they are influenced by the M&E process; a case of UNICEF program in Kajiado County. | More funding should be allocated to projects and independence budgetary allocation for the project and M&E activities.<br>- The involvement of stakeholders has a beneficial impact on project execution | The study does not however give any relationship between the progress reports and implementation process. |
| | (Ssekamatte and Okello, 2016) | Monitoring and Evaluation Based on Baseline Studies. | Baseline data is a requirement before commencement of any evaluation is undertaken.<br>- If Baseline studies are well conducted and effectively utilized, are very handy and useful in M&E process. | The study only relies on secondary data ignoring primary data which could be more appropriate and complementary in addressing the impacts to the programs |
| **Progress Reporting** | (Roba & Odollo, 2022). | Practices for M&E and Water Projects Performance in Marsabit County, Kenya | Effective M&E, progress reports practices promote water projects success. | The research centered on water initiatives within in Marsabit County, Kenya. The geographical difference could bring the contract |

# CHAPTER THREE: RESEARCH METHODOLOGY

## 3.1 Introduction

Chapter three here entailed design employed in the study, its target population, obtained sample size as well as sampling procedures as utilized in the study. In addition to that it also dissected into details the data collection process and the analysis, and finally the ethical considerations that guided the research.

## 3.2 Research Design

The research design serves as the overarching framework guiding the execution of research, providing a structured plan for gathering, measuring, and analyzing data (Kothari & Garg, 2019). Descriptive research design will be adopted in this study. According to Kothari and Garg (2019), descriptive research focuses on particular predictions, containing explanations on facts and characteristics regarding individuals, groups, or situation. Further, Schindler (2019) argued that descriptive research allows for discovery of existing relationship among variables of interest. Therefore, descriptive research design enabled the descriptions of the existing situation of WASH projects performance and determination of the existing interrelationship between M&E systems and performance of WASH initiatives within Kisumu West Ward.

The advantages of descriptive research design include ability to gather data from wide range participants, and it found to be cheaper, easier and quicker to undertake than other methods of research. Its weaknesses consist of not able to explain the cause of the phenomenon and its findings can change over a period of time.

## 3.3 Target Population

This study investigated Water and Sanitation Projects in Kisumu West Ward as a target population unit of observation and drew unit of analysis from project Managers, Project committee members, project sponsors and project community beneficiaries. There were five water and sanitation projects in Kisumu West Ward. Data obtained from Kisumu West ward manager's office indicated the target population of the unit of analysis of 13,235 distributed per every category as expressed within Table 3.1.

**Table 3.1: Study Target Population**

| Category | Mawembe Kodero primary | Ulalo Primary | Kawino | Wandega | Gombe Kokulo | Population |
|---|---|---|---|---|---|---|
| Project beneficiaries | 2700 | 3000 | 2500 | 2000 | 3000 | 13,200 |
| Project committee | 5 | 5 | 5 | 5 | 5 | 25 |
| Project Managers | 1 | 1 | 1 | 1 | 1 | 5 |
| Project Sponsors | 1 | 1 | 1 | 1 | 1 | 5 |
| Totals | 2,707 | 3,007 | 2,507 | 2,007 | 3,007 | 13,235 |

Source: Kisumu West Ward Manager (2022)

### 3.4 Sample Size and Sampling Procedure

The highlighted part addresses how the study sample size was arrived at and the criteria that were employed to select the sample size from the population targeted.

#### 3.4.1 Sample Size

This study utilized (Yamane, 1967) formula, as recommended by (Adam, 2020) that its ideal for calculating the ideal sample size for both continuous and categorical variables across all confidence levels as well as it's precision to sample estimates.

$$n = \frac{N}{1 + Ne^2}$$

Where: n = Minimum returned sample size;

N= the Population Size;

e =Adjusted Margin of error expressed as the degree of accuracy.

Taking N =13,200 and e = 0.05, the computed sample size is 388 as follow:

n = 13,200 / (1+13,200 $(0.05)^2$ = 388

#### 3.4.2 Sampling Procedure

This research employed stratified random sampling method which involves dividing the study population into strata, followed by the application of a simple random sampling technique within each stratum to arrive at the individual respondents. According to (Adam, 2020) and (Manjunatha, 2019) stratified sampling is a probabilistic sampling method that allows for categorization of population according to their distinct characteristics from a heterogeneous group. The sample for each stratum to be computed

based on its population as weighted on the total population. Table 3.2 presented the study's sample frame.

**Table 3.2: Sample Frame of the Beneficiaries**

| Category (n) | Stratum Population (N) | Weight (w) $(w = \frac{n}{N})_*$ | Respondents $(r = w * s)$ |
|---|---|---|---|
| Mawembe Kodero primary | 2,700 | 0.205 | 79 |
| Ulalo Primary | 3,000 | 0.227 | 89 |
| Kawino | 2,500 | 0.189 | 73 |
| Wandega | 2,000 | 0.152 | 59 |
| Gombe Kokulo | 3,000 | 0.227 | 88 |
| **Totals** | **13,235** | **1.000** | **388** |

* w = stratum weight; n = stratum population; N = Total population (i.e. 13,200); s = sample size (i.e. 388).

The study further purposively sampled committee chair of the project, project manager and the project sponsor from every stratum to participate in the study. These individuals sampled have deep understanding of the projects for they are at the center of implementation. Purposive sampling technique permitted the researcher to apply cases that possess broad information as regards study objectives (Mugenda O. and Mugenda A. G., 2012).

### 3.5 Data Collection Research Instrument

A questionnaire was utilized as the primary research instrument for the purpose of data collection and will be administered to the respondent through drop, wait and pick method. Structured questionnaire was adopted for collecting data from project community beneficiaries, and it was employed due to its suitability in structure, flexibility and accuracy in data collection, it is also cost effective and scalable by just a click of a generates online link (Kothari & Gang, 2019). The questionnaire was designed in three parts; part A focused on personal information of the respondents; Part B focused on M&E systems and Part C looked at performance of water and sanitation projects. Part B and C presented expressions by use of Likert scale of one (1) up to five (5) by which; 1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree and 5 - Strongly Agree.

Interview guide explores more in-depth understanding of the research in a structured way in form of questions. It was designed with four questions, each addressing a specific study

objective. The guide was presented to the project committee chair person, project manager and project sponsor from every category field agent in order to capture their opinion regarding performance of WASH projects within Kisumu West Ward.

### 3.5.1 Pilot Testing of Research Instruments

Pilot testing the research instrument is intended to detect errors in the design and improper control of extraneous of environment conditions (Schindler, 2019). The piloting was carried out by administering questionnaires to 39 respondents drawn from Maseno Kombewa Water and Sanitation project in Kisumu North West Ward due to its similarity and proximity to the study area. The respondent count was determined by computing 10% of the overall sample size for the main study (Mugenda & Mugenda, 2003). The extraneous identified from the results of the pilot study were used to adjust the questionnaire accordingly.

### 3.5.2 Validity of Research Instrument

(Kubai, 2019) noted that validity enhances believability and trustworthiness of the research findings if repeatedly done by a different researcher. This was achieved by designing the research instrument that accurately measures contrast subjected for investigation. The researcher adopted both theoretical and empirical evidences, whereas theoretical evidence was deduced from expert judgments and opinions from lecturers, and line experts, empirical evidence heavily relied on quantitative analysis. The study made use of content validity, which was the extent to which the research instrument was able to provide sufficient exposition on a given topic under this study.

### 3.5.3 Reliability of Research Instruments

The instruments reliability gauged the yielding consistency after repetitive test runs (Mugena & Mugenda, 2012; Orodho, 2003). The research employed Cronbach's Alpha to evaluate the internal reliability of the study variables and their correlations. This technique derived consistency and reliability between several items by measurements and ratings in order to enhance stability and psychometric characteristics of the research tools.

Internal consistency reliability was determined by use of the Cronbach's alpha test, with 0.7 (70%) as a minimum value. The results of Cronbach's alpha reliability were as shown in Table 3.3

**Table 3.3: Reliability Statistics**

| Variables | Cronbach's Alpha | No of Items |
|---|---|---|
| Planning Systems | .883 | 7 |
| Baseline Survey | .862 | 7 |
| Stakeholder Participation | .817 | 7 |
| Progress Reporting | .879 | 7 |
| Performance of projects | .808 | 7 |

Table 3.3 showed that Cronbach's alpha calculate for all the five variables were greater than 0.7, thus were acceptable.

### 3.6 Data Collection Procedures

This procedure involved a systematic consideration of collection of raw data that conforms to the context of the study, purpose of investigation in a standard approved technique (Kubai, 2019). Acquisition of statutory requirements for data collection from the National Commission for Science, Technology and Innovation (NACOSTI) and permission obtained from the learning institution prior to the actual study. All necessary approval protocols were observed.

### 3.7 Data Analysis Techniques

Data analysis techniques involved carrying out modeling and analyzing the extracted data to bring out the hidden meaning to aid in decision-making (Mugena & Mugenda, 2012). Cleaning and sorting of data was done using excel program while Statistical Package for the Social Sciences (SPSS) was deployed in data analysis. The research made use of both descriptive statistics including mean and standard deviations, whereas inferential analysis like Pearson correlation and utilized regression analysis to establish the interdependency and interrelationship respectively between M&E system and performance of WASH projects. The qualitative data acquired during interview were analyzed by the use of content analysis whereby it was categorized into various groups to facilitate its organization, summary, and tabulation. The data gathered was then displayed in the format of frequency tables.

### 3.8 Ethical Considerations

The researcher obtained an introduction letter from the University of Nairobi, which was then presented to the NACOSTI though an online system in order to acquire research permit. On acquiring the permit, the researcher proceeded to the project manager to present research permit in order to obtain authorization to undertake the intended study. Copies of the self-administered data collection instruments were handed over to the respondents with letters to acquire informed consent and assure them of their confidentiality.

# CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

## 4.1 Introduction

Chapter four contained reporting on response rate, data analysis in regards to personal information, descriptive statistics, inferential statistics, and lastly discussion of the findings

## 4.2 Questionnaire Return Rate

A total of 388 survey questionnaires was distributed to the participants, out of which, 380 were dully filled in and submitted thus realizing a high return rate of a 97.9%. A 50% return rate is appropriate for analysis and reporting; a 60% return level is good and a 70 percent response rate and over is excellent, hence 97.9% obtained in the current study was regarded fit for study (Mugenda and Mugenda, 2003). This high rate of return was as a result applying technology in data collection and engaging skilled research assistants, who could grasp the instrument with ease.

## 4.3 Personal Information of the Respondents

The personal details of the responders included their gender, age bracket, highest level of education attained, as well as the period over which the respondents have benefited from water and sanitation project.

### 4.3.1 Gender of the Respondent

Respondents' gender was obtained, analyzed by use of frequencies and percentages. The finding expressed in Table 4.1.

**Table 4.1: Respondents' Gender**

| Gender | Frequency | Percentage |
|---|---|---|
| Female | 77 | 20.3 |
| Male | 303 | 79.7 |
| **Total** | **380** | **100.0** |

According to Table 4.1, respondents 303(79.7%) were male, and 77(20.3%) were female. This indicates that the majority of the respondents were men, implying that there were

more men than women involved in water and sanitation projects within Kisumu West Ward in Kisumu County.

### 4.3.2 Age Bracket of the Respondent

The project beneficiaries who took part in the study were requested to specify their respective age groups. Data obtained were analyzed and the results shown in Table 4.2

**Table 4.2: Respondents' Age Bracket**

| Age Bracket | Frequency | Percentage |
|---|---|---|
| 18 - 30 Years | 83 | 21.8 |
| 31 - 40 Years | 26 | 6.8 |
| 41 - 50 Years | 33 | 8.7 |
| 51 - 60 Years | 94 | 24.7 |
| Above 60 Years | 144 | 37.9 |
| **Total** | **380** | **100.0** |

Table 4.2 showed that 83(21.8%) fell in the age bracket of 18 – 30 years, 26(6.8%) in the 31 – 40 years' age bracket, 33(8.7%) within the 41 – 50 years range, 94(24.7%) were located within the range of 41 – 50 years, and lastly, 144(37.9%) of the research respondents were above 60 years of age. This results indicates that most of the responders were above 50 years of age, implying that most of the study responders were relatively old, thus capable of giving useful information concerning performance of water and sanitation projects.

### 4.3.3 Highest Level of Education of the Respondent

The research aimed to determine the education attained by the beneficiaries participating in the study. Data obtained were analyzed and the results presented vide Table 4.3.

**Table 4.3: Respondents' Highest Level of Education**

| Education Level | Frequency | Percent |
|---|---|---|
| Bachelor Degree | 51 | 13.4 |
| College Diploma/Certificate | 65 | 17.1 |
| Postgraduate Degree | 50 | 13.2 |
| Secondary | 214 | 56.3 |
| **Total** | **380** | **100.0** |

Table 4.3 indicates that 51(13.4%) of the respondents had achieved bachelor degree, 65(17.1%) had college diploma/certificate level, 50(13.2%) possessed postgraduate degree level, while 214(56.3%) which was the highest had secondary education level. Most of the respondents had obtained at least secondary level of education, thus revealing that the beneficiaries of water and sanitation projects in Kisumu West Ward, Kisumu County were literate hence able to make formed decision on the uptake.

### 4.3.4 Duration as a Beneficiary of WASH Projects

Study respondents were asked to state the period they had taken while benefiting from water and sanitation projects in Kisumu West Ward. Data provided was synthesized and Table 4.4 communicates the outcome.

**Table 4.4: Duration as a Beneficiary of Water and Sanitation Projects**

| Duration Range | Frequency | Percentage |
|---|---|---|
| 11 - 14 years | 45 | 11.8 |
| 15 years and above | 15 | 3.9 |
| 3 - 6 years | 223 | 58.7 |
| 7 - 10 years | 29 | 7.6 |
| Less than 3 years | 68 | 17.9 |
| **Total** | **380** | **100.0** |

Table 4.4 showed that 68(17.9%) respondents had benefited for a period less than 3 years, 223(58.7%) reported a period of 3 - 6 years, 29(7.6%) taken a duration of 7 – 10 years, 45(11.8%) recorded a period of 11 – 14 years, whereas 15(3.9%) respondents had

taken a time frame of 15 years and above. This indicates that majority of the beneficiaries interviewed had benefited from water and sanitation projects for a relatively longer time thus could offer applicable information in regards to the performance of the modernized market project in Kisumu County.

### 4.4 Descriptive Statistics

Descriptive analysis was carried out using mean and standard deviation on data obtained on study variables and findings presented in table format.

#### 4.4.1 Performance of Water and Sanitation Projects

Participants were tasked to state their level of concurrence or disagreement with pronouncement relating to realization of water and sanitation projects within Kisumu West Ward. Data obtained were analyzed and Table 4.5 presents the findings.

**Table 4.5: Performance of Water and Sanitation Projects**

| Statement | Mean | Std. Deviation |
|---|---|---|
| Project beneficiary expectations are clearly captured during planning and implementation of WASH projects by my organization. | 4.03 | .655 |
| WASH project have been delivered to meet the beneficiary and other stakeholders expectations. | 3.31 | 1.213 |
| Project delivery schedule is clearly determined during planning and implementation of WASH projects. | 3.87 | .745 |
| WASH project have been delivered within the planned schedule. | 3.50 | .926 |
| Project quality specifications are clearly determined during planning and implementation of WASH projects. | 3.95 | .656 |
| Project budget is clearly determined during planning and implementation of WASH projects. | 3.75 | .782 |
| WASH project have been delivered within the planned budget. | 3.38 | .998 |
| **Composite Score** | **3.68** | **.854** |

Table 4.5 findings showed a composite score of mean (3.68) and 0.854 standard deviation, meaning that responders did agree with most of the questions as presented. In the individual statements, respondents largely agreed that project beneficiary expectations are clearly captured during planning and implementation of projects by my organization

as shown with mean (4.03) and standard deviation (0.655); participants moderately concurred that WASH project have been delivered to meet the beneficiary and other stakeholders' expectations with 3.31 and 1.213 for mean and standard deviation respectively. Additionally, a Mean (3.87) and standard deviation (0.745) showed that responders concurred that project delivery schedule is clearly determined during planning and implementation of WASH projects, further, respondents were in agreement that WASH project have been delivered within the planned schedule as shown with a 3.50 for mean and 0.926 for standard deviation respectively. Similarly, respondents agreed to the fact that project quality specifications are clearly determined during planning and implementation of WASH projects with mean (3.95) and standard deviation (0.656), as well as agreed that project budget is clearly determined during planning and execution of WASH projects with mean (3.75) and 0.782 for standard deviation. Lastly, study respondents moderately agreed that WASH project have been delivered within the planned budget with a mean=3.38 and standard deviation=0.998.

### 4.4.2 Planning Systems and Performance of Water and Sanitation Projects

This research first objective investigated how M&E planning systems influences WASH projects performance within Kisumu West Ward. The respondents were asked to provide their reactions to various statements relating to planning systems and the data collected were analyzed and the finding presented via Table 4.6.

**Table 4.6: Descriptive Analysis on Planning Systems**

| Statement | Mean | Std. Deviation |
|---|---|---|
| M&E planning are done on a timely basis | 3.48 | 1.079 |
| Milestones to be achieved are well defined in the plan design of water and sanitation projects. | 3.87 | .612 |
| Milestone means of verification are clearly expressed | 3.99 | .631 |
| Water and sanitation project activities are well cost estimated with clear WBS | 3.85 | .782 |
| WBS activity cost are aggregated to make realistic project baseline budget for water and sanitation projects in our organization. | 3.83 | .637 |
| Project risk and vulnerabilities are well defined alongside their corresponding management measures. | 3.83 | .821 |

| | | |
|---|---|---|
| Risk management measures are geared towards reducing uncertainties in project implementation. | 3.90 | .574 |
| **Composite Score** | **3.82** | **0.734** |

Table 4.6 shows a composite mean 3.82 and standard deviation 0.734, implying that study responders did agree with majority of the expressions. Further, respondents moderately agreed that M&E planning were done on a timely basis with a mean = 3.48 and standard deviation = 1.079; they also agreed that milestones to be achieved were well defined in the plan design of water and sanitation projects as shown with a mean 3.87 and 0.612 standard deviation. Moreover, respondents agreed that milestone means of verification are clearly expressed with mean = 3.99 and standard deviation = 0.631, as well as agreed that water and sanitation project activities are well cost estimated with clear Work Breakdown Structure (WBS) (mean 3.85 and standard deviation 0.782). Additionally, respondents agreed that WBS activity cost were aggregated to make realistic project baseline budget for water and sanitation projects in our organization with 3.83 mean and 0.637 standard deviation, similarly, respondents were in concurrence that project risk and vulnerabilities are well defined alongside their corresponding management measures (mean = 3.83 and standard deviation = 0.821). Finally, respondents equally agreed that risk management measures are geared towards reducing uncertainties in project implementation as shown with mean (3.90) and standard deviation (0.574).

Key informants were tasked to express how planning systems influences WASH projects performance within Kisumu West Ward, Kisumu, Kenya. The project manager was in agreement with the committee chairperson that M&E planning systems are carried out.

> *We engage in a holistic M&E planning systems from the design phase of the project until the point of handing over the project to the community beneficiaries. It creates a more logical flow and order in organizing the critical components that defines project deliverables that are time bound*

### 4.4.3 Baseline Assessment and Performance of Water and Sanitation Projects

Baseline assessment and performance of WASH projects was analyzed descriptively and the Table 4.7 presents the findings.

**Table 4.7: Descriptive Analysis on Baseline Assessment and Performance of Water and Sanitation Projects**

| Statement | Mean | Std. Deviation |
|---|---|---|
| The baseline study clearly presents a more realistic pre-project intervention beneficiary status. | 3.95 | .670 |
| Baseline study report on all dimensions of beneficiary needs | 3.72 | .909 |
| Baseline assessment inform feedback on water and sanitation project designs in my project. | 3.92 | .594 |
| Baseline assessment reports influences redesigning of water and sanitation projects for relevancy. | 3.93 | .705 |
| Baseline assessment clearly indicate gaps in performance to be addressed. | 3.74 | .644 |
| Gaps identified clearly indicate the impacts to be created if project is successful. | 3.80 | .595 |
| Manageable targets are realistic and relevant to project interventions in water and sanitations. | 3.63 | .762 |
| **Composite Score** | **3.81** | **.797** |

Table 4.7 presents a composite mean 3.81 and standard deviation 0.797, revealing that responding beneficiaries were in unison with most of the statements on baseline assessment. Further, respondents' reactions on specific statements showed that they were in agreement that the baseline study clearly presents a more realistic pre-project intervention beneficiary status with mean 3.95 and 0.670 standard deviation; in addition, participants agreed that baseline study report on all dimensions of beneficiary needs as shown mean (3.72) and standard deviation (0.909).

Respondents also agreed that baseline assessment inform feedback on water and sanitation project designs in my project with a mean=3.92 and standard deviation=0.594; and on whether baseline assessment reports influences redesigning of water and sanitation projects for relevancy, responders agreed with mean score 3.93 and standard deviation 0.705. Additionally, responders agreed that baseline assessment clearly indicated gaps in performance to be addressed as shown by mean (3.74) and standard deviation (0.644), and also agreed that gaps identified clearly indicated the impacts to be

created if project is successful with 3.80 for mean and 0.595 for standard deviation. Finally, with 3.63 mean and 0.762 standard deviation, respondents did agree that manageable targets were realistic and relevant to project interventions in water and sanitations.

Key informant affirmed M&E baseline assessment were undertaken and their influence on performance within Kisumu West Ward, Kenya.

> *Management of water and sanitation projects in Kisumu West Ward have been able to facilitate baseline assessment activities before launching a project. The assessments have since provided a clear picture on what to expect and the mitigation measures therein*.

Another key informant, project sponsor further confirmed utilization of baseline assessment reports in guiding funding

> *Baseline studies informs the projects situational analysis by providing in-depth information on what to expect and therefore provides a window for sound decision on the projects' feasibility*

### 4.4.4 Stakeholder Participation and Performance of Water and Sanitation Projects

Respondents views on stakeholder involvement and water and sanitation projects performance within Kisumu west ward were collected, analyzed and Table 4.8 conveys the finding.

**Table 4.8: Descriptive Analysis on Stakeholder Participation**

| Statement | Mean | Std. Deviation |
|---|---|---|
| There is adequate resources for implementation of water and sanitation projects in my project. | 3.41 | 1.020 |
| Adequate resources have been allocated to M&E of WASH initiatives by the organization. | 3.41 | 1.104 |
| Stakeholders roles and responsibilities in M&E of WASH initiatives are well defined by the organization. | 3.82 | .645 |
| Stakeholders exercise their responsibilities and roles in decision making towards M&E of WASH projects by the organization. | 3.99 | .641 |
| The organization has a robust tool(s) for tracking or registering stakeholders grievances during M&E of WASH projects | 3.63 | .716 |
| The organization has a well and elaborate strategies for addressing stakeholder's grievances. | 3.81 | .764 |
| There is a goodwill and commitment on the stakeholders to support the project delivery. | 4.04 | .734 |
| **Composite Scores** | **3.73** | **0.803** |

Table 4.8 presentation shows a composite score of 3.73 mean and 0.803 standard deviation. This implies that study participants were in agreement with the statements relating to stakeholder participation and performance of WASH within Kisumu West ward. Moreover, respondents response on individual statements were; there was adequate resources for implementation of water and sanitation projects in my project (mean = 3.41 and standard deviation = 1.020), adequate resources had been allocated to M&E of WASH projects by the organization had a mean 3.41 and standard deviation 1.104, stakeholders' roles and responsibilities in M&E of WASH initiatives are well defined by the organization had mean = 3.82 and a standard deviation = 0.645, stakeholders exercise their responsibilities and roles in decision making towards M&E of WASH projects by the organization had a mean (3.99) and standard deviation (0.641), the organization has a robust tool(s) for tracking or registering stakeholders grievances during M&E of WASH projects had a mean score of 3.63 and 0.716 for standard deviation, the mean for organization has a well and elaborate strategies for addressing stakeholder's grievances was 3.81 and 0.764 for standard deviation, and finally, goodwill and commitment on the

stakeholders to support the project delivery attracted the highest mean (4.04) and standard deviation (0.734).

Key informants were in agreement in affirming stakeholder involvement in the execution of WASH projects within Kisumu West Ward. They reported;

> *Stakeholder participation was a critical component in determining performance of the project hence all project stakeholders were identified at the early stages of the project and since the project would affect them either directly or indirectly, they may be compelled by various circumstances to actively participate sometimes depending on the stages of the project*

### 4.4.5 Progress Reporting and Performance of Water and Sanitation Projects

Responding beneficiaries expressed their level of agreement or disagreement on statements in relation to progress reporting and performance of WASH projects within Kisumu west Ward. Descriptive analysis was undertaken on the data gathered, analyzed and findings communicated via Table 4.9.

**Table 4.9: Descriptive Analysis on Progress Reporting**

| Statement | Mean | Std. Deviation |
|---|---|---|
| Progress reporting promotes clarity on the achieved milestones on WASH Projects. | 3.87 | .701 |
| Progress reporting clearly outline deviations from planned achievement thus informing control measures in the delivery of WASH projects. | 3.80 | .590 |
| Progress reporting clearly outline changes made during implementation of WASH projects. | 3.57 | .753 |
| Progress reporting easily identify unauthorized changes from those authorized for investigations. | 3.68 | .770 |
| There is elaborate medium for disseminating M&E progress reports on WASH projects implementation to diverse stakeholder users. | 3.52 | .683 |
| M&E progress reports on WASH projects implementation reaches the intended users on timely basis for informed decision-making. | 3.69 | .824 |
| Risks reporting on project status enables project team to timely address and manage their effects and impacts. | 3.85 | .705 |
| **Composite Scores** | **3.71** | **.718** |

Table 4.9 presents a composite score of mean 3.71 and 0.718 standard deviation, implying that responders concurred with majority of the pronouncements presented on progress reporting and performance of WASH projects in Kisumu West Ward. Respondents reactions on specific statements were; progress reporting promotes clarity on the achieved milestones on WASH Projects (mean =3.87 and standard deviation 0.701), progress reporting plainly outline deviations from planned achievement thus informing control measures in the delivery of WASH projects had 3.80 mean and 0.590 standard deviation, progress reporting clearly outline changes made during implementation of WASH projects (mean 3.57 and standard deviation 0.753), progress reporting easily identify unauthorized changes from those authorized for investigations had mean (3.68) and standard deviation (0.770), there was elaborate medium for disseminating M&E progress reports on WASH projects' implementation to diverse stakeholder users had mean (3.52) and standard deviation (0.683), M&E progress reports on WASH projects' implementation reaches the intended users on timely basis for informed decision-making had a mean of 3.69 and 0.824 for standard deviation, and lastly risks reporting on project status enables project team to timely address and manage their effects and impacts had mean 3.85 and standard deviation 0.705.

On the progress reporting and performance of water and sanitation projects in Kisumu West ward, project sponsors confirmed to be in receipt of progress report as follows

> *We do receive periodic progress reports on time, showing clearly milestones attained, project deviations as well as unauthorized actions incurred. The report is key for us in making formed decisions*

Project managers on their side, acknowledged the value of the progress report and how serious the process is undertaken

> *Project reporting is a pillar to the success of the water and sanitation project thus compiled and relayed to the relevant parties including sponsors in a timely manner*

### 4.6 Inferential Statistics

Inferential statistics was carried out in form of correlation and regression analysis.

#### 4.6.1 Pearson Correlation Analysis

Pearson correlation analysis was utilized in determining the existing relationship between M&E systems and WASH projects performance, and establish the strength and direction. The findings were as shown in Table 4.10.

**Table 4.10: Pearson Correlation Analysis**

| | | Planning Systems | Baseline Assessment | Stakeholder Participation | Progress Reporting | Performance |
|---|---|---|---|---|---|---|
| Planning Systems | Pearson Correlation | 1 | .783** | .786** | .741** | .789** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 |
| | N | 380 | 380 | 380 | 380 | 380 |
| Baseline Assessment | Pearson Correlation | .783** | 1 | .608** | .710** | .724** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 |
| | N | 380 | 380 | 380 | 380 | 380 |
| Stakeholder Participation | Pearson Correlation | .786** | .608** | 1 | .740** | .709** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 |
| | N | 380 | 380 | 380 | 380 | 380 |
| Progress Reporting | Pearson Correlation | .741** | .710** | .740** | 1 | .736** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .000 |
| | N | 380 | 380 | 380 | 380 | 380 |
| Performance | Pearson Correlation | .789** | .724** | .709** | .736** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | |
| | N | 380 | 380 | 380 | 380 | 380 |

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

Table 4.10 finding shows that planning systems (r= .789, p=0.000), baseline assessment (.724, p=0.000), stakeholder participation (r= .709, p=0.000), and progress reporting (r= .736, p=0.000), thus revealing an existing positive statistically significant interrelation between planning systems, baseline assessment, stakeholder participation, progress reporting and WASH projects' performance in Kisumu west ward, Kisumu County. This analysis results conforms with the disclosure of various studies (Okafor, 2021, Ndegwa, 2020 and Phiri, 2015) of an existing positive and significant connection between M&E processes and project performance.

### 4.6.2 Regression Analysis of M&E Systems and Performance of Water and Sanitation Projects

Multiple linear regression analysis was employed at a confidence level of 95% so as to test the nature as well as the strength of an existing inter-relation between M&E systems and WASH projects performance within Kisumu West Ward.

The study attempted to establish the variation in the performance of WASH projects that could be predicted by M&E systems. The findings were as shown in Table 4.11.

**Table 4.11: Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .831[a] | .691 | .688 | 2.32990 |

a. Predictors: (Constant), Progress Reporting, Baseline Assessment, Stakeholder Participation, Planning Systems

Table 4.11 shows that $R^2$ for the interrelationship linking M&E systems and performance of water and sanitation projects was 0.691, implying that M&E systems can explain 69.1% of the performance of WASH projects within Kisumu West Ward. Meaning, 30.9% of the variations in the performance was caused by different variables not studied in this study.

Analysis of variance (ANOVA) utilized to establish whether the model was a good fit for the data in determining how M&E systems influence the performance of WASH projects in Kisumu West Ward. The finding was as shown in Table 4.12.

**Table 4.12: ANOVA**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 4553.774 | 4 | 1138.444 | 209.719 | .000[b] |
| | Residual | 2035.657 | 375 | 5.428 | | |
| | **Total** | **6589.432** | **379** | | | |

Table 4.12 shows a p-value=0.000, less than 0.05 significance level, implying that the regression model could be applied in predicting the M&E systems influence on the WASH project performance in Kisumu West Ward, Kisumu County.

Regression of coefficients for M&E systems influence on the performance of water and sanitation project was as communicated via Table 4.13.

**Table 4.13: Regression of Coefficients**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.393 | .949 | | -.414 | .679 |
| | Planning Systems | .364 | .062 | .352 | 5.895 | .000 |
| | Baseline Assessment | .230 | .056 | .201 | 4.083 | .000 |
| | Stakeholder Participation | .150 | .053 | .142 | 2.803 | .005 |
| | Progress Reporting | .246 | .054 | .227 | 4.605 | .000 |

a. Dependent Variable: Performance

From Table 4.13 finding, the regression equation in the study was as follows:

$Y = -0.393 + 0.364X_1 + 0.230X_2 + 0.150X_3 + 0.246X_4 + \varepsilon$

Where:

Y = Performance of Water and Sanitation Projects

$\beta 0$ is the constant

$X_1$ = Planning Systems

$X_2$ = Baseline Assessment

$X_3$ = Stakeholder Participation

$X_4$ = Progress reporting

$\varepsilon$ is the error term

Finding shows coefficient (0.364) and p-value (0.000) for planning systems, implying that planning systems positively and significantly influences performance of WASH projects within Kisumu West Ward. Thus, rejected null Hypothesis ($H_{01}$) and alternative

accepted; There exists a significant interrelationship between planning systems and performance of water and sanitation projects in Kisumu West Ward, Kisumu County.

Further, baseline assessment gave coefficient (0.230) and p-value (0.000), revealing positive and significant influence on WASH projects performance within Kisumu West Ward. The null Hypothesis ($H_{02}$) rejected and the alternative accepted; There exists a significant relationship between baseline assessment and performance of water and sanitation projects in Kisumu West Ward, Kisumu County.

Finding on stakeholder participation showed (r=0.150 & p=0.005), implying stakeholder participation impacts positively and significant om performance of water and sanitation projects within Kisumu West Ward. Null Hypothesis ($H_{03}$) rejected and the alternative accepted; There exists a significant relationship between stakeholder participation and performance of water and sanitation projects in Kisumu West Ward, Kisumu County.

Finally, finding showed (r=0.246 & p=0.000) for progress reporting. This shows that progress reporting positively, as well as significantly influences performance of water and sanitation initiatives within Kisumu West Ward. The null Hypothesis ($H_{04}$) was rejected and the alternative accepted; There exists a significant relationship between progress reporting and performance of water and sanitation projects in Kisumu West Ward, Kisumu County.

### 4.8 Discussions of the Finding

The current research meant to establish how M&E systems influence on performance of water and sanitation projects in Kisumu West Ward, Kisumu County Kenya. Data analysis on respondents' personal information discovered that the male gender was the highest 303(79.7%) beneficiary of the projects, and the majority 144 (37.9%) were over 60-year-old. Additionally, most of the beneficiaries involved in the research had achieved at least secondary level of education, whereas a larger percentage 223(58.7%) had a time period between 3 to 6 years as beneficiaries of water and sanitation projects.

Further, descriptive analysis results disclosed that respondents were largely in agreement with the declarations on M&E systems variables and all the study variables recorded at least mean 3.71 and 0.718 for standard deviation. Pearson correlation was undertaken to reveal the set objective of the research, and the result of analysis expressed that planning

system (r = .789, p = 0.000), baseline assessment (r = .724, p = 0.000), stakeholder participation (r = .709, p = 0.000) and progress reporting (r =.736, p = 0.000) had a significant and positive impact on water and sanitation projects, performance within Kisumu west ward, Kisumu-Kenya. This finding validates studies (Omondi, Odek and Siringi, 2022 and Roba & Odollo, 2022) who observed that M&E practices significantly and positively correlate with performance of water projects in different context. Additionally, (Ndombi, Kyalo, & Mulwa (2020) equally unearth positive inter-correlation but a moderate one linking M&E and sustainability of and sustainability of donor funded livelihood project.

Regression analysis results of planning systems on performance of WASH Projects dispensed B=0.364 and p=0.000<0.05, implying that planning systems positively and significantly impacted on performance of WASH projects. This result exposes that practicing planning systems enhances the performance of Water and Sanitation Projects. This outcome resonates with (Hubert & Mulyungi, 2018 and Okafor, 2021) who communicated a perfect positive as well as statistically significant interrelation between M&E planning systems and project achievement, and contradicts (Galgallo, 2019) revelation of no significant connection linking M&E planning procedures and the execution of infrastructure projects.

Analysis of baseline assessment on water and sanitation projects' performance produced a positive B value = 0.230, and a p=0.000, notably less than significance level 0.05, revealing that baseline assessment influences water and sanitation projects performance positively and significantly. This outcome contradicts (Galgallo, 2019) who uncovered non correlation linking M&E baseline surveys and water projects success within Marsabit County. Similarly, the outcome doesn't agree with (Phiri, 2015) who reported insignificant relationship between baseline survey and project performance.

Similarly, analysis on stakeholder participation and performance of WASH initiatives reported a positive and significant interrelation, with a B=0.150 and p value = 0.000. This therefore uncover that stakeholder participation aspect equally possess a positive and significant impact towards performance of WASH projects. This revelation conforms with (Omondi, Odek and Siringi, 2022) who reported a noteworthy positive correlation

exists between stakeholder's involvement and efficiency of KIWASCO programsms within Kisumu County Kenya, as well as Roba & Odollo (2022) who equally unveiled a strong significant interrelationship between stakeholder involvement and performance of water projects

Finally, study finding progress reports and performance of WASH initiatives equally revealed a positive B value (0.246) and 0.000 p-value found to be smaller than 0.05 level of significance, signifying a positive and statistic significant connection between progress reporting activities and performance of WASH projects within Kisumu West Ward, Kisumu County. This research output substantiates (Ndegwa, 2020) positive and significant interconnection finding on progress reporting as an M&E practice and WASH projects implementation in Kenya.

# CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

The chapter presented the research findings, outlined the conclusions as derived from the research results, provided recommendations, discussed the study's limitations, and suggested potential directions for further research in related areas.

## 5.2 Summary of Study Findings

This piece provided a concise overview of the primary findings of the study with respect to each research objective.

### 5.2.1 Planning Systems and Performance of Water and Sanitation Projects

The goal of the research was to ascertain how planning systems effects performance of WASH Projects within Kisumu West ward, Kisumu-Kenya. Various measures applied including timely decision making, achieved milestones, desired planning cost per project and reduced uncertainties. Descriptive statistics carried out showed that responders strongly concurred with variable statements, composite mean 3.82 and standard deviation 0.734. Pearson Correlation of 0.789 and p=0.000 revealed a positively strong connection between planning systems and performance of WASH projects. The coefficient analysis finding (B=0.364 and p=0.000) showed a statistically significant interrelation existing between planning systems and performance of WASH projects within Kisumu West Ward, Kenya.

### 5.2.2 Baseline Assessment and Performance of Water and Sanitation Projects

The second object sought to evaluate the influence of baseline assessment practices on the performance of WASH projects within Kisumu West Ward, Kisumu Kenya. Analysis on descriptive statistics found composite mean (3.81) and standard deviation (0.797) showing that responders did agree with most of the statements on the baseline assessment. Pearson correlation finding of r=0.724 and p-value (0.000) showed a perfect positive correlation existing between baseline assessment and WASH projects performance within Kisumu West Ward. Further, coefficient of determination indicated a positive and statistically significant connection of the variables, thus indicating that

baseline assessments influences performance of WASH projects within Kisumu West Ward, Kisumu County, Kenya.

### 5.2.3 Stakeholder Participation and Performance of Water and Sanitation Projects

The third study objective intended to analyze the influence of stakeholder participation on the performance of water and sanitation projects in Kisumu West Ward. Descriptive statistics analysis found a composite mean (3.73) and standard deviation (0.803), implying that responders did agree with most of the expressions presented on stakeholder participation. Pearson correlation analysis finding ($r=0.709$ and $p=0.000$) revealed a strong and positive association linking stakeholder participation and performance of water and sanitation projects in Kisumu West Ward. Regression analysis further showed a positive and statistical significant interrelation joining stakeholder participation and performance of WASH projects within Kisumu West Ward, Kisumu County.

### 5.2.4 Progress Reporting and Performance of Water and Sanitation Projects

The forth objective of the research investigated how progress reporting influenced performance of WASH projects in Kisumu West Ward, Kenya. Responders did agree with majority of the expressions relating to the progress reporting and an existing positive interrelation linking progress reporting and WASH projects performance within Kisumu West Ward, Kenya was found through Pearson correlation analysis. Besides, a statistically significant and positive relationship was found between progress reporting and the performance of WASH projects within Kisumu West Ward, Kenya.

## 5.3 Conclusions

Researcher made some conclusions grounded on key findings of the study as per every study objective. Overall, M&E systems interventions under the study were important in the performance of WASH projects. Planning systems positively and significantly influenced performance of WASH projects in Kisumu West Ward. Thus it was necessary for vigorous implementation of such planning systems with the view of enhancing further achievements of water projects within Kisumu West Ward, Kisumu County.

Secondly, baseline evaluations exert positive and significant impact on the performance of WASH projects. Thus, there was need for management focus on baseline evaluations

with the view of improving performance of WASH projects in Kisumu West Ward, Kenya.

Thirdly, stakeholder participation influences performance of water and sanitation projects positively and significantly. Therefore, stakeholders need to be actively incorporated throughout the project life cycle for realization of better performance of WASH projects in Kisumu West Ward, Kenya.

Lastly, study found that progress reporting greatly influenced performance of water and sanitation projects within Kisumu West Ward. Progress reporting needed more attention for the successes of WASH projects within Kisumu West Ward, Kisumu County.

### 5.4 Recommendations of the Study

Study recommendations raised were directed in enhancing the overall performance of water and sanitation projects in Kisumu West Ward, Kisumu County. In fulfilling the water and sanitation projects performance within Kisumu West Ward, Kisumu County, the current research recommended;

Management of water and sanitation projects to put in place effective policy framework on planning systems for considerably positive impacts towards water and sanitation projects' performance in Kisumu West Ward, Kenya.

The baseline assessments indicated the highest level of variation in the performance of WASH projects in Kisumu West Ward. It is for this reason that a recommendation for more emphasis on baseline assessments with measurable specific objectives in order to maximize on the success of WASH projects in Kisumu West Ward, Kenya.

All project stakeholders identified at the inception stage should be actively involved all through the implementation. Existing challenges within the community should be established and possible corrective measures put in place, in return, contribution of the intended water and sanitation projects will be felt highly in Kisumu West Ward, Kisumu County, Kenya.

Progress reporting should be streamlined in the overall implementation of water and sanitation projects within Kisumu West Ward, Kisumu County, with clear responsibilities

and timelines in order detect point of failures the earliest time possible and roll out corrective measures for

### 5.5 Limitations of the Study

The current research centered in investigating M&E systems and their influence on WASH projects performance within Kisumu West Ward, Kisumu County. It was specific on how variables; planning systems, baseline assessment, stakeholder participation, and progress reporting influences on WASH projects performance within Kisumu West Ward, Kenya. Besides, this study was limited to Kisumu West Ward, Kisumu County as the context. This context was slim and the finding result may differ in other wider context such as sub-county, County or countrywide.

### 5.6 Suggestions for further Research

Researcher looked at M&E systems and performance of WASH projects in Kisumu West Ward, Kisumu County, further research work be carried out on M&E systems and performance of WASH initiatives measured by use of variables other than planning systems, baseline assessment, stakeholder participation, and progress reporting.

The study also narrowed down to Kisumu West Ward, Kisumu County, Kenya. Current research posits that other related studies should be carried out to other wards, even escalated to other constituencies within the country on M&E Systems and performance to figure out any variation significant.

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# APPENDICES

## Appendix I: Questionnaire for the Beneficiaries

**Instructions**

Read each question carefully and provide relevant answers by ticking appropriately within the brackets ( ). Kindly do not write your name on the questionnaire. In case of any challenge do not hesitate to ask the research assistant for help.

**SECTION A: Personal Information**

1. Gender Male ( ) Female ( )
2. What is your age?

   18-30 years ( ) 31 - 40 years ( )

   41-50 years ( ) 51 -60 years ( )

   Above 60 years ( )
3. Please state your highest education level attained?

   Post Graduate Degree ( ) Bachelor's Degree ( )

   College Diploma ( ) Secondary Level ( )
4. Which project are you a beneficiary? (Optional) ……
5. For how long have you been a beneficiary of Water and Sanitation Projects?

   < 3 years ( ) 3 to 9 yrs ( )

   9 to 12 years ( ) 12 years and above ( )

**SECTION B: Planning System and performance of Water and Sanitation Projects.**

Using the provided scale of 1 to 5, kindly rate your agreement or disagreement with reverence to the WASH project in your area. (**Scale: Strongly Agree - 5, Agree – 4, Neutral - 3, Disagree – 2, Strongly disagree -1)**

| **Planning System item questions** | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM** | | **5** | **4** | **3** | **2** | **1** |
| PS-1 | M&E planning on water and sanitation projects are done on a timely basis in my project. | | | | | |
| PS-2 | Milestones to be achieved are well defined in the plan design of water and sanitation projects. | | | | | |
| PS-3 | Milestone's means of verification and delivery timeline lines are clearly expressed. | | | | | |
| PS-4 | Water and sanitation project activities are well cost estimated with clear WBS | | | | | |
| PS-5 | WBS activity cost are aggregated to make realistic project baseline budget for water and sanitation projects in our organization. | | | | | |
| PS-6 | Project risk and vulnerabilities are well defined alongside their corresponding management measures. | | | | | |
| PS-7 | Risk management measures are geared towards reducing uncertainties in project implementation. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Baseline assessment item questions** | | | | | | |
| BA-1 | The baseline study clearly presents a more realistic pre-project intervention beneficiary status. | | | | | |
| BA-2 | Baseline study report on all dimensions of beneficiary needs. | | | | | |
| BA-3 | Baseline assessment inform feedback on water and sanitation project designs in my project. | | | | | |
| BA-4 | Baseline assessment reports influences redesigning of water and sanitation projects for relevancy. | | | | | |
| BA-5 | Baseline assessment clearly indicate gaps in performance to be addressed. | | | | | |
| BA-6 | Gaps identified clearly indicate the impacts to be created if project if successful. | | | | | |
| BA-7 | Manageable targets are realistic and relevant to project interventions in water and sanitations. | | | | | |
| **Stakeholders Participation** | | | | | | |
| SP-1 | There is adequate resources for implementation of water and sanitation projects in my project. | | | | | |
| SP-2 | Adequate resources have been allocated to M&E of WASH projects by the organization. | | | | | |
| SP-3 | Stakeholders roles and responsibilities in M&E of WASH projects are well defined by the organization. | | | | | |
| SP-4 | Stakeholders exercise their responsibilities and roles in decision making towards M&E of WASH projects by the organization. | | | | | |
| SP-5 | The organization has a robust tool(s) for tracking or registering stakeholders grievances during M&E of WASH projects | | | | | |
| SP-6 | The organization has a well and elaborate strategies for addressing stakeholder's grievances. | | | | | |
| SP-7 | There is a goodwill and commitment on the stakeholders to support the project delivery. | | | | | |
| **Progress Reporting** | | | | | | |
| PR-1 | Progress reporting promotes clarity on the achieved milestones on WASH Projects. | | | | | |
| PR-2 | Progress reporting clearly outline deviations from planned achievement thus informing control measures in the delivery of WASH projects. | | | | | |
| PR-3 | Progress reporting clearly outline changes made during implementation of WASH projects. | | | | | |
| PR-4 | Progress reporting easily identify unauthorized changes from those authorized for investigations. | | | | | |
| PR-5 | There is elaborate medium for disseminating M&E progress reports on WASH projects implementation to diverse stakeholder users. | | | | | |
| PR-6 | M&E progress reports on WASH projects implementation reaches the intended users on timely basis for informed decision-making. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| PR-7 | Risks reporting on project status enables project team to timely address and manage their effects and impacts. | | | | | |

**SECTION C: Performance of Water and Sanitation Projects**

This section contains questions in relation to performance of WASH Projects. By use of the provided scale of 1 to 5, kindly rate your agreement or disagreement with reverence to your WASH project operation.

**Scale: Strongly Agree - 5, Agree - 4, Neutral - 3, Disagree – 2, Strongly Disagree -1**

| **Performance of Water and Sanitation Projects** | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM** | **Item questions** | **5** | **4** | **3** | **2** | **1** |
| PP-1 | Project beneficiary expectations are clearly captured during planning and implementation of WASH projects by my organization. | | | | | |
| PP-2 | WASH project have been delivered to meet the beneficiary and other stakeholders' expectations. | | | | | |
| PP-3 | Project delivery schedule is clearly determined during planning and implementation of WASH projects. | | | | | |
| PP-4 | WASH project have been delivered within the planned schedule. | | | | | |
| PP-5 | Project quality specifications are clearly determined during planning and implementation of WASH projects. | | | | | |
| PP-6 | Project budget is clearly determined during planning and implementation of WASH projects. | | | | | |
| PP-7 | WASH project have been delivered within the planned budget. | | | | | |

**Appendix III: Interview Guide**

**Introduction.**

I am pursuing a masters' degree in Project Planning and Management at the University of Nairobi, currently undertaking a research on Monitoring and Evaluation Systems and Performance of WASH Projects in Kisumu West Ward.

I would wish to have a brief discussion on M&E Systems and performance of WASH Projects within Kisumu West Ward. The data provided will remain confidential and solely utilized for the purposes of this academic research. The interview will take approximately 30 Mins of your time and you can respond by a **YES, NO** or by giving a brief explanation if need be. Hope you will grant me permission to record where necessary.

**Research Questions**

1. How does planning systems influence performance of water and sanitation projects in Kisumu West Ward, Kisumu County?

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2. How does baseline assessments influence the performance of water and sanitation initiatives within Kisumu West Ward in the County of Kisumu?

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3. How does stakeholder participation influence performance of water and sanitation projects in Kisumu West Ward, Kisumu County?

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4. How does progress reporting influence performance of water and sanitation project Kisumu West Ward, Kisumu County?

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Thank you so much

## Append dix IV: Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 993386

Date of Issue: 31/July/2023

**RESEARCH LICENSE**

This is to Certify that Mr.. JOHN ODHIAMBO ODALLOH of University of Nairobi, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kisumu on the topic: MONITORING AND EVALUATION SYSTEMS ON PERFORMANCE OF WATER AND SANITATION PROJECTS IN KISUMU WEST WARD ,KISUMU COUNTY,KENYA. for the period ending : 31/July/2024.

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