

**INFLUENCE OF MONITORING AND EVALUATION PRACTICE ON
PERFORMANCE OF WATER AND SANITATION PROJECTS: A CASE OF
KISMAYO-BAIDOA URBAN WATER SUPPLY AND SANITATION PROJECT,
SOMALIA**

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DECLARATION

This research project report is my original work and has not been presented for a degree in any other University Institutions.

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May God bless you All

DEDICATION

I dedicate this work to all monitoring and evaluation professionals especially those working on Community Development Projects and to those looking to join this profession. That the findings of this research may impact their careers in the most favorable ways.

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ABBREVIATIONS AND ACRONYMS

M&E	Monitoring and evaluation
NGOs	Non-Governmental Organizations
SDGs	Sustainable Development Goals
SEM	Structural Equation Modeling
UN	United Nations
WBG	World Bank Group
KBUWS&SP	Kismayo-Baidoa Urban Water Supply and Sanitation Project

ABSTRACT

Somalia is one of the lowest countries in the world with access to clean and improved water supply projected at 32% while access to improved sanitation is about 24%. Because of limited regulation of private water suppliers in Somalia, most of them do charge high prices that are not sustainable to most of the poor people. The outcome of this is that majority of the families are forced to fetch water in open waters that are highly prone to health challenges occasioned by open defecation due to poor sanitation facilities in the country. The inquiry aimed at establishing the influence of M&E on performance of water supply and sanitation projects using a case of KBUWS&SP. More specifically, the study examined the influence of M&E planning, M&E tools, M&E reporting and M&E results utilization on performance of KBUWS&SP. The theory of change and realistic evaluation theory were used to underpin this study. Descriptive survey and correlational research designs were adopted targeting 47 project staff of KBUWS&SP working in the M&E department and census was used. Primary data was gathered using questionnaire that had undergone pilot testing to determine reliability. Validity was ensured through the review of the questionnaire by the supervisor and the experts. The collected data was analyzed through SPSS version 24 using means and percentages as well as regression analysis and presented through tables. The study established that M&E planning ($M=3.81$, $\beta=.021$, $p<0.05$), M&E tools ($M=3.79$, $\beta=.051$, $p<0.05$), M&E reporting ($M=3.83$, $\beta=.099$, $p<0.05$) as well as M&E results utilization ($M=3.78$, $\beta=.123$, $p<0.05$) were significant predictors of performance of Water Supply and Sanitation Project. The study concludes that M&E is a significant predictor of sanitation and water projects in Somalia. The study recommends that the M&E officers and managers working with KBUWS&SP should come up with clear plans to guide the M&E. The project managers of KBUWS&SP should adopt modern tools for collection and analysis of data.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Performance of water supply and sanitation projects has attracted attention around the world including the United Nations (UN) through goal number six of the Sustainable Development Goals (SDGs) (United Nations, (2022)). Development partners like the World Bank Group (WBG) have demonstrated their commitment towards enhancing performance of the water supply and sanitation projects, although concerns and challenge still remain evident. Around the world, it is estimated that 673 million individuals have no toilet facilities in their homes while over half of the world population (4.3 billion) people use sanitation services releasing untreated human wastes into environment resulting into contaminated water sources (UNICEF & WHO, 2020).

Worse still, an estimated 2.1 billion people around the world have no access to clean and safe drinking water from the available sources including rain, wells and public tap systems (WHO & UNICEF, 2017). The health implications of these concerns include infections from water borne diseases like typhoid and diarrhea claim about 700 children of less than 5 years in a year (SebertKuhlmann et al., 2020). It is worthwhile to point out that many of these health related diseases can be prevented if efforts are in place to enhance performance of the water supply and sanitation projects where beneficiaries are in position to access clean, safe and improved water and sanitation facilities.

The WBG has demonstrated its commitment towards the current state of water and sanitation projects in different countries in the world. In Indonesia, the WBG implemented the Water Supply and Sanitation for Low Income Communities Project in 2016 that has improved access to water to over 5 million individuals. In Nepal, a project was implemented in 2012 that contributed to an improvement in access to drinking water to over a 1 million people. Other countries in the world where WBG has played an instrumental role in strengthening performance of water and sanitation projects include India and Uruguay (Mapulanga & Naito, 2019).

Apart from UN related organizations like the World Bank, international NGOs have also demonstrated their commitments towards improving the worse situation of water and sanitation

especially in developing and sub-Saharan countries. In Niger for instance, the World Vision (WV) worked in close cooperation with the government in 2019 to provide clean drinking water and improved sanitation to 101,100 and 98,000 people and households respectively. In Papua New Guinea, an estimated 63.4% of the population lack access to basic water services. However, the WV has been instrumental in improving access to water especially in the rural areas. Other developing countries that WV has played a role as far as improvement of water and sanitation are concerned include Chad where an estimated 57.5% of the people lack access to basic water, Democratic Republic of Congo (DRC), Angola, Ethiopia, Mozambique and Uganda.

In Somalia, an estimated 60% of the country population lack basic access to water services (WHO/UNICEF, 2021). Inadequate water and sanitation coupled with poor hygiene have contributed towards an increase in water borne diseases mostly affecting women and children in Somalia (UNICEF/WHO, 2019). There is limited regulation for the private water suppliers in Somalia which has contributed to a hike in prices forcing most families to access water from far yet unsafe open wells. With an estimated 28% of the population in Somalia having open defecation, most of the open wells where majority of the population fetch their water are highly infected (UNICEF/WHO, 2019). This has contributed to an increase in water borne diseases including cholera that kill over 900 people mostly children of less than 5 years (WHO, 2019).

The government of Somalia together with development partners like World Bank has been cooperating to implement water supply and sanitation projects so as to address the above stated issues affecting the country population. One of such interventions is the Kismayo-Baidoa Urban Water Supply and Sanitation Project (KBUWS&SP), whose main focus is on increasing accessibility to safe water and improved sanitation as well as increased capacity for delivering services related to water and sanitation. With an estimated cost of UA 9.589 million, the completion period of the project is estimated at September, 2023. The beneficiaries of this project are estimated at 200,000 that include communities living in urban and peri-urban areas in Baidoa and Kismayo respectively.

Monitoring and evaluation (M&E) is an important practice that is critical for enhanced performance of the project. Various projects are designed and initiated with the major goal of positively changing the economic and social status of the beneficiaries and the progress made in

achieving the same can only be established through M&E (Estrella, 2017). Monitoring is a continuous process done to determine if the ongoing project has adhered to the existing plan with identification of deviations and corrective actions done in timely way (ADRA, 2017). Evaluation is objective and systematic assessment that is conducted on a completed or ongoing project, the design and the results guided by impact, effectiveness, efficiency and relevance of the interventions (Yusuf, Otonde&Achayo, 2017).

Ballard (2016) shared that M&E planning, tools, reporting and results utilization are critical to any ongoing or completed project. M&E helps to establish indicators and goals of the M&E exercise in a project. M&E tools help the project team to effectively monitor and evaluate the projects. M&E reporting is about generation of suitable progress and status reports needed to make sound decisions (Beluhu, 2021). M&E results utilization is the utilization of the findings from M&E undertaking in practice by the stakeholders of the project to inform policy and decision (Mbithi, 2020). The present study will focus on M&E (planning, tools, reporting and results utilization) and their implication on performance of water supply and sanitation project in Somalia.

1.2 Problem Statement

Somalia is one the lowest countries in the world with access to clean and improved water supply projected at 32% while access to improved sanitation is about 24% (World Water Council, 2022). Because of limited regulation of private water suppliers in Somalia, most of them do charge high prices that are not sustainable to most of the poor people. The outcome of this is that majority of the families are forced to fetch water in open waters that are highly prone to health challenges occasioned by open defecation due to poor sanitation facilities in the country. Women and school going children are forced to walk for long distance and spent long hours in search of water for drinking. All these issue provide an indication that performance of the existing water and sanitation projects in Somalia has remained a challenge creating the need to investigate this further. One of the far reaching goals and objectives of these projects like for the case of KBUWS&SPis to improve access to safe drinking water and sanitation, which have surprisingly remained poor in Somalia. It is hoped that by undertaking regular monitoring and evaluation of such projects would identify the constraints affecting their performance so that relevant actions are undertaken.

The available studies include Maendo, James and Kamau (2018) who focused on road infrastructure projects to provide the nexus between M&E and their performance. It was noted from findings that M&E is a significant predictor of project performance. The study by Kissi et al. (2019) on construction projects in Ghana was an impact analysis of M&E practices and project success. With the adoption of Structural Equation Modeling (SEM), it was shown that M&E play an instrumental role towards success of the project. In the context of Ethiopia, Endale (2021) did an appraisal of M&E system and the implication on success of the project where a significant nexus was established. The study by Omunga and Gitau (2019) covered construction projects to find out the interplay between M&E and performance. It was noted that M&E planning and utilization of M&E results are critical when it comes to project performance. The study conducted by Gaibo and Mbugua (2019) focused on infrastructure development projects in Marasabit County to provide the link between M&E and project implementation. It was shown that M&E baseline surveys and M&E planning are not correlated with implementation of projects.

Although there is plenty of literature on M&E and project performance, there exist gaps in that Kissi et al. (2019) focused on Ghana which contextually differs from Kenya. Other studies create empirical gaps by indicating inconsistent findings of non-significant (Gaibo&Mbugua, 2019) and significant (Omunga&Gitau2019) nexus between M&E and project success. Such inconsistencies in literature require further empirical studies creating the gap for this proposed study. Furthermore, other studies like Gaibo and Mbugua (2019) focused on project implementation which is conceptually different from project performance. Thus, in light of the above stated gaps the motivation of this inquiry was evident.

1.3 Purpose of the Study

The purpose of the study was to establish the influence of monitoring and evaluation on performance of water supply and sanitation projects using a case of KBUWS&SP

1.4 Research Objectives

- i. To establish the influence of monitoring and evaluation planning on performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project
- ii. To determine the influence of monitoring and evaluation tools on performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project
- iii. To investigate the influence of monitoring and evaluation reporting on performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project
- iv. To determine the influence of monitoring and evaluation results utilization on performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project

1.5 Research Questions

- i. What is the influence of monitoring and evaluation planning on performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project?
- ii. How does monitoring and evaluation tools influence performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project?
- iii. Does monitoring and evaluation reporting influence performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project?
- iv. To what extent does monitoring and evaluation results utilization influence the performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project?

1.6 Research Hypotheses

The study tested the following null hypotheses:

H₀1: monitoring and evaluation planning has no statistically significant influence on performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project

H₀2: monitoring and evaluation tools have no statistically significant influence on performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project

H₀3: monitoring and evaluation reporting has no statistically significant influence on performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project

H₀4: monitoring and evaluation results utilization has no statistically significant influence on performance of Kismayo-Baidoa Urban Water Supply and Sanitation Project

1.7 Significance of the Study

Through M&E lens established by this study, it is anticipated that the project managers would be in position to understand and adopt sound practices of enhancing project performance. It is expected that the study would contribute to an increase in proper planning for M&E activities, improved reporting framework and an increase in the utilization of M&E results. The ripple effect of these is expected to include the possibility of improving decision making.

The different stakeholders of KBUWS&SPare expected to have an understanding and appreciation of M&E activities and their contribution to performance of the projects. The study is expected to create more awareness on the need to use the M&E results to make evidence based decisions. The study is expected to have a significant contribution towards the available literature on M&E and project performance. This will support further scholars conducting similar related studies in future.

1.7 Delimitation

The specific aspects of M&E that were covered include planning, tools, reporting and results utilization all examined in relation to project performance. The types of projects that were covered were the water supply and sanitation projects. More specifically, the study used a case of Kismayo-Baidoa Urban Water Supply and Sanitation Project. The study was conducted in Somalia using information that was obtained from first hand sources in the month of November, 2022.

1.8 Limitations of the Study

Some of the participants were so busy with their daily schedule. As such, the data collection exercise is likely to be treated as a waste of time and reduction in productivity which is likely to lower the ultimate response rate. However, to counter this limitation, the questionnaire was administered to participants then they were given a period of a week so that they can give their responses at their own free and flexible time without any kind of pressure. The contact information of the participants was recorded and regular follow ups were done through their respective contact details as one of the ways of increasing the response rate. This also presented an opportunity where participants in the field facing issues in clarity of the questionnaire raised the said issues so that they could be addressed by the researcher for clarity.

1.9 Assumptions of the Study

The inquiry premised that participants would give honest and truthful information in regard to the M&E and performance of the KBUWS&SP. It was further assumed that M&E activities at KBUWS&SP entail planning, tools, reporting and utilization of the results among other activities and that respondents are well versed with these activities. It was also assumed that every respondent who participated in the study has a clear understanding of the goals and objectives of the KBUWS&SP and was aware of whether the same have been achieved or not.

1.10 Definition of Terms

Monitoring and evaluation planning: In this study, it refers to goals and objectives, the indicators and budget as well as the roles and responsibilities of staff carrying M&E activities of the KBUWS&SP

Monitoring and evaluation reporting: includes the baseline survey reports, progress reports, variance analysis reports and the timeliness of generating these reports in the KBUWS&SP

Monitoring and evaluation results utilization: In this study, this term refers to the use of M&E results to create new knowledge, support decision making by both project staff and external stakeholders of KBUWS&SP

Monitoring and evaluation tools: they include the framework guiding M&E as well as the tools relevant for gathering of evidence, storage and analysis of data of the KBUWS&SP

Monitoring and evaluation: It is used in this study to cover such activities as planning for M&E exercise, the available tools for conducting M&E, reporting of the M&E results and the use of M&E results by different stakeholders of the water supply and sanitation projects.

Performance of water supply and sanitation projects: In this study, this term include access to clean water, cost of water, availability of water and access to improved sanitation facilities by the beneficiaries of KBUWS&SP

1.11 Organization of the Study

The study is structured into five chapters. The first chapter outlines the background information, statement of problem, purpose, objectives, questions and hypotheses. The significance, delimitations as well as limitations, assumptions and defining of the terms in the inquiry is also detailed in the first chapter. In the second chapter, the focus is on review of literature revolving around performance of water supply and sanitation project, M&E planning, M&E tools, M&E reporting as well as M&E results utilization all in relation to water supply and sanitation project. The theories, conceptual framework and gaps in reviewed literature are also pointed out. The methodologies are outlined in chapter. Besides, it also covers the means of analyzing information, ethical concerns and the operationalization of the variables of the inquiry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Performance of water supply and sanitation project, M&E planning, M&E tools, M&E reporting as well as M&E results utilization all in relation to water supply and sanitation project are examined.

2.2 Performance of Water Supply and Sanitation Projects

Water supply and sanitation projects are normally projects that are initiated to meet some specific needs of the society (Weststrate, Dijkstra, Eshuis, Gianoli&Rusca, 2018). Conventionally, time, quality, budget and the satisfaction of the beneficiaries have been widely recognized and embraced as the measures of project performance. Performance of the project can be reflected in the overall quality that covers the impact and value created by the project to its beneficiaries who are also stakeholders, sustainability, effectiveness as well as efficiency. In a nutshell, project performance includes the efforts by the project managers to prevent failure and it is reflected in the ability of the final project to meet the goals specified at the design and initiation phase (Tong'I, Oteino&Osoro, 2019).

One of the overreaching goals of the water supply and sanitation projects is to ensure a steady supply and availability of clean water for the use of beneficiaries while facilitating access to clean and improved sanitation facilities (WHO&UNICEF, 2017). This is a noble goal as it contributes towards improved health outcomes since utilization of polluted and contaminated water is a major cause of water borne related diseases that account for a significant proportion of deaths among children. In fragile countries like Somalia that are aiming to recover from decades of civil war, access to clean water and improved sanitation is a critical enabler of national productivity. It is against this background that State and non-state actors including NGOs and UN-related agencies like the WBG have been implementing water and sanitation projects in Somalia (UNICEF&WHO, 2020). One of such projects is KBUWS&SP.

2.3 M&E Planning and Performance of Water Supply and Sanitation Projects

M&E planning is an important part of the project managers and its guides in determination of the progress and performance of the projects. Through M&E planning, project managers in position to establish the goals and objectives of the M&E exercise, the acceptable key performance indicators, and the funds determined through budget as well as the skills that will be needed for the exercise. The indicators for results of the M&E undertaking established in the M&E plan should be SMART. M&E planning also determines the type of review that will be conducted whether mid-term or terminal reviews. The operational procedures are also clearly set out during M&E planning in a project organization.

Kadel, Ahmad and Bhattarai (2021) did a study whose focus was on bringing out the approaches that should be embraced to enhance the effectiveness in planning, M&E. Through the adoption of desk review methodology, the study observed that M&E heavily relies on effective and efficient planning and clarity on what should be monitored. During M&E planning, it was observed that the main focus is on preparation of indicator reference sheet and the development of monitoring and evaluation activity plan. Odhiambo, Wakibia and Sakwa (2020) focused on projects linked with alleviation of poverty in Kenyan coast to provide the interplay between M&E planning and project implementation. The design adopted in this study was cross sectional survey. The M&E planning aspects that were covered include timeliness, tracking of progress, periodic reporting, mid and end term evaluations. The analytical approaches adopted to generate evidence include factor, correlation as well as factor analysis. From factor analysis, timeliness and tracking of progress were the key measures of M&E planning; effectiveness was a good measure of implementation. It was further observed from regression that timeliness and tracking of progress were significant predictors of effectiveness in projects.

The study conducted in Rwanda by Hubert and Mulyungi (2018) noted that all NGOs that took part in the inquiry had prior knowledge and information on M&E plans that had been developed. A strong and direct nexus was reported by M&E planning and performance of the projects. Another study conducted by Reynolds and Sutherland (2013) placed emphasis on systematic approaches that can be embraced when planning and implementing M&E of integrated health care related services. The key emphasis of the inquiry was on bringing out systematic approaches to M&E or

integration at country point of view. It was observed that logic models are important components of M&E planning.

2.4 M&E Tools and Performance of Water Supply and Sanitation Projects

Monitoring and evaluation tools include the equipment and frameworks that project managers should have in place in order to effectively conducted M&E activities. A M&E framework as a tool is a critical guide to the activity and lays steps that are required to meet the anticipated result. There are two principal frameworks that are instrumental in any M&E undertaking; logical (log frame) and result framework. The log frame is a widely documented technique and tool for monitoring of projects both in NGOs and governmental organizations. Log frame is a matrix that leverages the indicators of M&E at every stage of the project besides identification of likely risks. The log frame has advantages of efficiency and simplicity when it comes to gathering, recording and reporting of data. The result framework was designed to provide definition of the project structure and the interaction between the set of components. Besides log frame and result framework, effective M&E also require project managers to have in place relevant data collection, storage and analysis tools which should be able to handle huge volume of information.

The available empirical studies include Mwangi, Mbugua and Rambo (2021) who did an assessment of the performance contracting as a moderator in the nexus between usage of M&E tools and performance research projects in Coastal region Universities in Kenyan context. The paradigm embraced by the study was pragmatic and information was sought from primary sources. It emerged that budgets are important M&E tools that any project organization should have in place to increase chances of success. Gichaiya and Njeru (2016) did an appraisal of M&E tools and their effect on implementation of wireless network projects in Kenyan Universities with specific reference to Jomo Kenyatta University. The adopted design was descriptive and information gathered was in its quantitative as well as qualitative form. Sampling of the participants was done randomly and systematically. It was shown that wireless network project availed internet and network connectivity to Universities in a way that was positive.

The study conducted by Barasa (2014) was an assessment of M&E tools and completion of projects by government in Kakamega. The specific M&E tools that were covered in this study include the budget, log frame and strategic plan. Sampling was conducted on the basis of the 12 constituencies

that made up Kakamega County. The analysis documented that M&E tools significantly influenced completion of projects. In an inquiry by Khatiala (2013), the specific projects covered by the study were those related with HIV/AIDs within Nairobi. The specific M&E tools and techniques that were covered include variance analysis, project management software, performance reviews and earned value management. Cross sectional survey design was the one that was embraced in this study. The analyzed results were that M&E tools and techniques have direct and significant implication on project delivery capability.

2.5 M&E Reporting and Performance of Water Supply and Sanitation Projects

There are a number of reports that are generated from the M&E undertaking; these include the status reports, the progress reports, the variance reports and baseline reports (Wu, 2020). These reports are generated once adequate data has been gathered and effectively analyzed using the existing softwares (Okello, 2021). The quality of the data including concerns about validity and reliability are important indicators of the M&E reports that are generated in a project organization. The study conducted by Calis and Yildizel (2020) explored how progress reporting can be done in the construction projects taking the perspective of the client. By adopting desk review methodology, it was observed that during construction projects, the sites usually provide relevant information that help in measurement of the progress and status of the project activity.

Lin and Golparvar-Fard (2020) did a study to explore how technology can be adopted enhance progress monitoring reporting in construction projects. The specific technology that was covered was the cyber-physical systems. The study observed that the rise in technology has presented an opportunity to project managers to automate the project monitoring and tracking process to establish the status and the progress attained. This is aimed at facilitating timely reporting of the results. Hu and Panthi (2020) did a study whose focus was on status reporting system for the projects. The study observed that the project status reporting system in question had been designed in a manner that it was able to produce a one page summary report.

2.6 M&E Results Utilization and Performance of Water Supply and Sanitation Projects

Stakeholders can utilize the M&E results in a number of ways like for improvement and strengthening of the projects, increase the knowledge in the project organization and for practice.

The information needs of the stakeholders greatly determine how the M&E results in a project organization would be utilized. Furthermore, use of the M&E results allows the stakeholders to remain aware of the project progress to support decision making. The clarity of the M&E results also influences their utilization by the involved stakeholders. Amina and Ngugi (2022) shared utilization of evidence from M&E is significantly linked with better project performance.

The study by Winiko et al (2018) focused on dissemination of M&E results and the effect on performance of digital education related projects in Malawi. Descriptive survey correlational design was embraced and the project managers responsible for implementation and M&E were targeted. It was observed that disseminating M&E is moderately but positively connected with project performance. Mutekhele, Rambo, Omollo and Nyonje (2017) did an appraisal of data dissemination and the implication on performance infrastructure projects in schools in Bungoma. The adopted paradigm was pragmatism while descriptive survey design was adopted. The study observed that data dissemination is a significant predictor of project performance in an organization.

2.7 Theoretical Review

Theories provide a good opportunity for explanation prediction and understanding of a given phenomenon. The theory of change and realistic evaluation theory will be used to underpin this study.

2.7.1 Theory of Change

The proponent of this theory is Weiss(1995) and it provides a framework of how the project should work. Ideally, this theory provides a guideline on how and where the project is progressing. M&E comes in to test and refine this guideline and reporting is key to bringing change for better performance of the project (Msila&Setlhako, 2013). The argument of the theory is that by having an understanding of what the project is seeking to realize, M&E can help in monitoring and measurement of the desired against original theory of change. The theory however has been criticized for performance and thus success of the project is more complex than the way the theory anticipates (Jones, 2011). This theory will be used to underpin how proper planning for M&E, reporting and utilization of the M&E results can bring about the relevant change in a project for better performance. The theory will explain how M&E can be used to identify deviations and make

put in place relevant mechanisms for countering deviation so that the project achieves its goals and objectives.

2.7.2 Realistic Evaluation Theory

Pawson (1997) proposed it and it offer a model analyzing the outcomes that can be produced from a given project, the way which they are produced and the significant of changing conditions that a given intervention is produced. Through this theory, an evaluator of the project can have an understanding of the aspects of the intervention that enhances the effectiveness or ineffectiveness and the required contextual factors for replication of the intervention in other regions (Nalewaik, 2019). The theory aims at bringing out contextual factors that increase the effectiveness of an intervention. The theory is instrumental in determining how the deliverables of the project are generated. This theory provides the guideline of how to conduct an evaluation in a project organization (Powell, 2015). As such, the theory supported M&E planning and its contribution towards project performance.

2.8 Conceptual Framework

Figure 2.1 is the conceptual framework that will be used to guide the study:

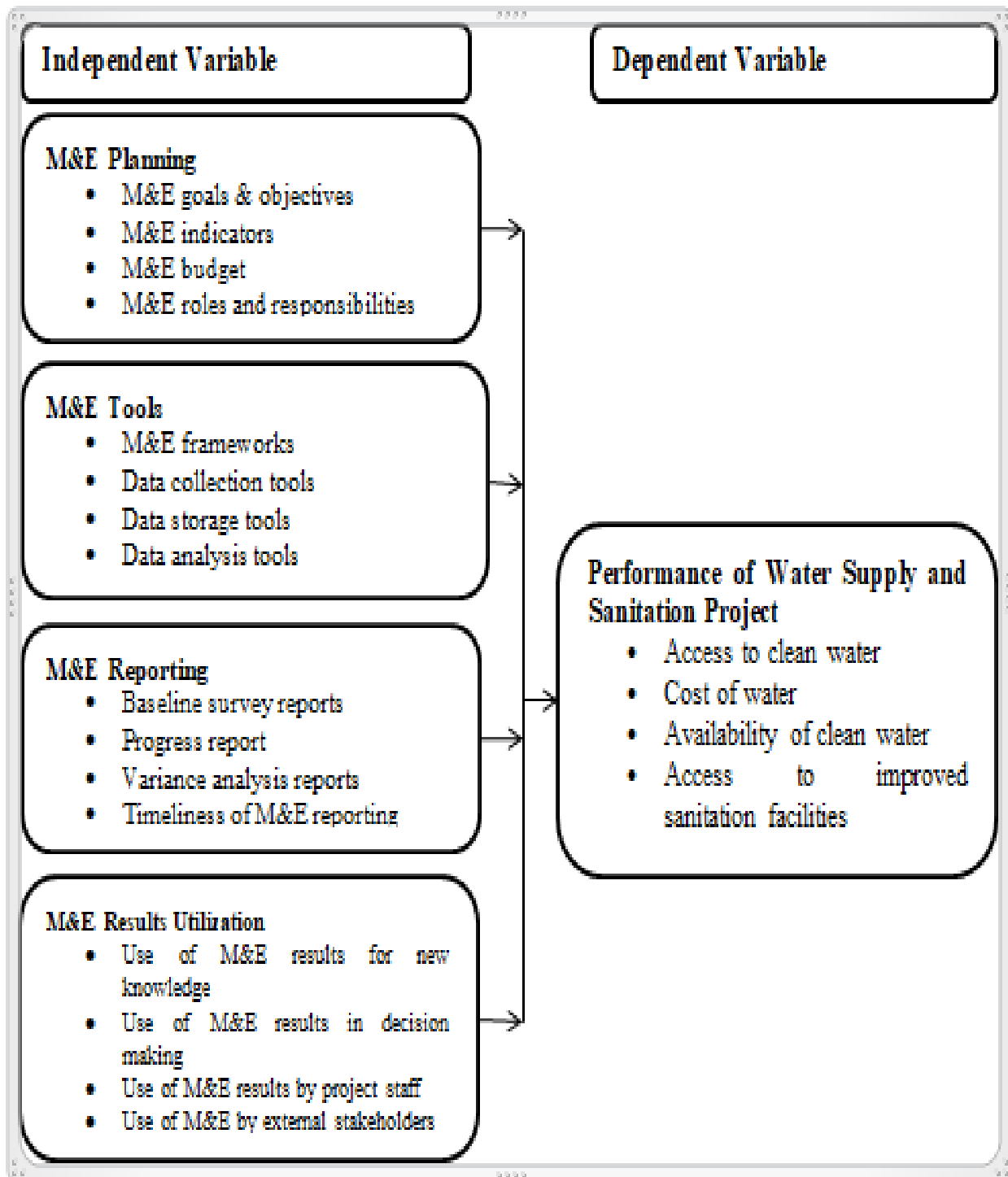


Figure 2.1: Conceptual Framework

2.9 Summary of Literature and Knowledge Gap Matrix

Table 2.1: Gaps

Variable	Author & year	Study	Key Finding	Knowledge Gap	Focus of present study
Monitoring and Evaluation Planning	Kadel, Ahmad and Bhattarai (2021)	approaches that should be embraced to enhance the effectiveness in planning, M&E	M&E heavily relies on effective and efficient planning and clarity on what should be monitored	desk review methodology	The present study combined desk review and field work
Monitoring and Evaluation Planning	Odhiambo, Wakibia and Sakwa (2020)	to provide the interplay between M&E planning and project implementation	timeliness and tracking of progress were the key measures of M&E planning; effectiveness was a good measure of implementation.	The study focused on project implementation	Project performance was the focus
Monitoring and Evaluation Tools	Mwaguni, Mbugua and Rambo (2021)	assessment of the performance contracting as a moderator in the nexus between usage of M&E tools and performance research projects in Coastal region Universities in Kenyan context	budgets are important M&E tools that any project organization should have in place to increase chances of success	The focus was on research projects	Water and sanitation projects were central in the present study
Monitoring and Evaluation Reporting	Calis and Yildizel (2020)	explored how progress reporting can be done in the construction projects taking the perspective of the client	during construction projects, the sites usually provide relevant information that help in measurement of the progress and status of the project activity	desk review methodology	The present study combined desk review and field work
Monitoring and	Lin and	How technology	the rise in	Technology in	Project progress

Evaluation Reporting	Golparvar-Fard (2020)	can be adopted enhance progress monitoring reporting in construction projects	technology has presented an opportunity to project managers to automate the project monitoring and tracking process to establish the status and the progress attained	progress reporting was the key issue	reporting as an aspect of M&E reporting were the key issues in proposed study
Monitoring and Evaluation Results Utilization	Amina and Ngugi (2022)	utilization of M&E results and the implication on performance of the project	utilizing the M&E is significantly linked with better project performance	Utilization of M&E was the only aspect of M&E that was covered	The present study focused on utilization of M&E results, planning, tools and reporting aspects of M&E
Monitoring and Evaluation Results Utilization	Wimiko, Mbugua and Kyalo (2018)	dissemination of M&E results and the effect on performance of digital education related projects in Malawi	Disseminating M&E is moderately but positively connected with project performance.	The study was conducted in Malawi	The present study was done in Somalia

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The methodologies covering the design and target population as well as the means of determination of the sample are detailed. The gathering of views of participants, concerns that are ethically established and operationalization of the variables in the inquiry are also outlined.

3.2 Research Design

This study adopted descriptive survey and correlational research designs. Most exploratory and preliminary studies are guided by descriptive survey designs so that researchers can gather information which is then summarized, presented and interpreted to clarify a given issue (Rinjit, 2020). The adoption of descriptive survey design will enable the researcher to have measurement of M&E using questionnaires and provide a relationship between it with performance of water and sanitation projects in Somalia. Through survey, it will be possible to gather information on M&E and project performance without manipulation of the variables. On the other hand, correlation design helped in testing the hypothesized link between variables (Cr, 2020).

3.3 Target Population

This comprises of a list of items that inform selection of the study sample. It is the overall collection of items, individuals and things that have attributes that are common to them (Zangirolami-Raimundo, Echeimberg& Leone, 2018). This study targeted 47 project staff of Kismayo-Baidoa Urban Water Supply and Sanitation Project working in the M&E department. The rationale of targeting the M&E staff was because they were believed to have full information regarding M&E activities that was so central to the present study.

3.4 Sample Size and Sampling Procedures

Sample is a small group of items that are selected from the entire population to support generalization of evidence of the inquiry. A sample is selected through relevant methods. This study used census. Bairagi and Munot (2019) argued that a census is ideal when population has few elements of less than 200 provided they are of homogenous features.

3.5 Data Collection Instrument

Information in this study was gathered through the use of questionnaire. According to Nayak and Singh (2021), a questionnaire is a written document containing a number of questions to which the participants respond to in written. The advantage of utilizing questionnaire in gathering of information is that it safeguards the anonymity of the respondents and thus has possibility of enhancing honesty and truthfulness of the information that respondents shared. Furthermore, an individual administering the questionnaire has the possibility of cultivating good rapport with respondents. The sections in the study tool covered general information (A), project performance (B) and monitoring and evaluation (C). A 5-point Likert scale was instrumental in design of the questionnaire to provide a standard way for respondents to give their responses.

3.5.1 Pilot Testing

This was meant to establish possible flaws on the questionnaire before the actual data gathering exercise in the field. The questionnaire was pilot tested among 5 respondents (being 10% of the study sample) of Urban Water Supply and Sanitation Project in Baidoa. Gupta and Gupta (2022) argue that a pilot study can be conducted using 1-10% as a proportion of the inquiry sample.

3.5.2 Validity of the Research Instrument

This is a measure done to determine if the study tool is relevant and correct. Its essence is to check and determine if the study tool provide accurate measurement of what it is designed to measure (Kumar, 2018). The researcher engaged the supervisor and two M&E specialists in reviewing the contents of the questionnaire to make their own suggestions for improvement. Any issue raised was addressed accordingly.

3.5.3 Validity of the Research Instrument

It is the extent which a given tool provides results that are consistent even when the same has been repeated on different accounts. It is how stable, dependable and consistent the instrument of the inquiry is (Thomas, 2021). The study utilized the dully filled questionnaires from the pilot study to determine reliability by computing the values of Cronbach Alpha coefficients. Basias and Pollalis (2018) recommend that 0.7 and above value as the benchmark.

3.6 Data Collection Procedures

A University transmittal write-up was sought followed by research permit from the Ministry of Education in Somalia will also be sought. The researcher wrote to the management team of KBUWS&SP informing them of the study in advance. During gathering of information from the field, the researcher administered the questionnaire in person to the respondents as a way of increasing the response rate.

3.7 Data Analysis Techniques

The completely edited responses were then keyed into excel from which they were exported to SPSS tool version 24. This was followed by the analysis that was done through means and percentages as descriptive statistics. The hypothesized link was tested regressionally with the following as the model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where Y= performance of Water Supply and Sanitation Project

β_0 = Constant

$\beta_1, \beta_2, \beta_3$ and β_4 are Coefficients

E = error term

X_1 = Monitoring and evaluation planning

X_2 = Monitoring and evaluation tools

X_3 = Monitoring and evaluation reporting

X_4 = Monitoring and evaluation results utilization

3.8 Ethical Considerations

American Psychological Association (2003) list five key ethical concerns that need to be adhered to in conducting a research study. These issues are in respect to intellectually established property, being conscious when there are multiple roles, informed consent to those taking part in the inquiry, privacy and confidentiality as well as tapping resources that are ethical. In this regard, patents and copyrights were acknowledged and the informed consent of the participants was also sought. No rewards were available to the respondents for taking part in the study. All information shared was held with confidentiality and no respondent will be required to disclose his/her name.

3.9 Operationalization of Variables

Table 3.1: Operationalizing inquiry variables

Variable	Indicators	Scale of measurement	Level of measurement	Data collection tool	Data analysis tools
Performance of Water Supply and Sanitation Project	Access to clean water Cost of water Availability of clean water Access to improved sanitation facilities	Ordinal scale	Discrete	Questionnaire section B	Frequencies & Means
Monitoring and Evaluation Planning	M&E goals & objectives M&E indicators M&E budget M&E roles and responsibilities	Ordinal scale	Discrete	Questionnaire section C	Frequencies & Means Regression analysis
Monitoring and Evaluation Tools	M&E frameworks Data collection tools Data storage tools Data analysis tools	Ordinal scale	Discrete	Questionnaire section C	Frequencies & Means Regression analysis
Monitoring and Evaluation Reporting	Baseline survey reports Progress report Variance analysis reports Timeliness of M&E reporting	Ordinal scale	Discrete	Questionnaire section C	Frequencies & Means Regression analysis
Monitoring and Evaluation Results Utilization	Use of M&E results for new knowledge Use of M&E results in decision making Use of M&E results by project staff Use of M&E by external stakeholders	Ordinal scale	Discrete	Questionnaire section C	Frequencies & Means Regression analysis

CHAPTER FOUR

RESULTS AND INTERPRETATION

4.1 Introduction

This steps adhered to in processing evidence are highlighted.

4.2 Questionnaire Return Rate

In total, 47 information gathering tools were issued to project staff of KBUWS&SP, 35 were returned hence 74.5% rate of return which was adequate.

4.3 General Information

4.3.1 Distribution of Respondents by their Gender

Table 4.1: Gender

	Frequency	Percentage
Male	25	71.4%
Female	10	28.6%
Total	35	100.0

Source: Field Fata (2022)

The findings in Table 4.1 indicate that while 71.4% of the respondents were male, 28.6% were female. This means that the findings that were obtained on M&E in this study were representative and probably not biased.

4.3.2 Highest Level of Education

Table 4.2: Education

Diploma	5	14.3%
Degree	23	65.7%
Masters	7	20.0%
Total	35	100.0

Source: Field Fata (2022)

While 65.7% had degrees, 14.3% had diplomas.

4.3.3 Years of Experience

Table 4.3: Years of Experience

	Frequency	Percentage
Less than 3 years	2	5.7%
4-7 years	13	37.1%
8-10 years	15	42.9%
Over 11 years	5	14.3%
Total	35	100.0

Source: Field Fata (2022)

While 42.9% had worked for 8-10 years, 5.7% had worked for less than 3 years. Thus, participants in the inquiry were more knowledgeable on M&E issues which were central in the present study.

4.4 Descriptive Statistics

4.4.1 Performance of KBUWS&SP

Table 4.4: Performance of KBUWS&SP

Statement	SD	D	U	A	SA	Mean	Std. Dev
This project has allowed beneficiaries to access clean water	0	2.9	34.3	48.6	14.3	3.76	.711
Accessing clean water from this project has reduced water borne diseases among beneficiaries	0	2.5	34.7	48.2	14.7	3.68	.786
Beneficiaries enjoy affordable water services from this project	0	14.3	14.3	62.9	8.6	3.66	.826
Our water services are accessible to beneficiaries	0	0	25.7	45.7	28.6	4.09	.708
The project provides improved sanitation facilities to beneficiaries	0	14.3	20.7	65.7	0	3.86	.851
Average	0	6.8	8	54.2	13.2	3.81	0.776

Source: Field Fata (2022)

It came clear that 74.3% of the participants in the study agreed (M=4.09, SD=0.708) that the water services were accessible to beneficiaries. Besides, 65.7% of the respondents agreed (M=3.86, SD=0.851) that the project provided improved sanitation facilities to beneficiaries. The documentation was that 62.9% (M=3.76, SD=0.711) shared that the project had allowed beneficiaries to access clean water. 62.9% (M=3.68, SD=0.786) noted that accessing clean water from the project had reduced water borne diseases among beneficiaries. 71.5% (M=3.66, SD=0.826) observed that beneficiaries enjoyed affordable water services from the project. On overall, 67.7% (M=3.81, SD=0.776) were in agreement on the statements that had been provided on Performance of KBUWS&SP.

4.4.2 M&E Planning

Table 4.5: M&E Planning

Statement	SD	D	U	A	SA	Mean	Std. Dev
There are clear M&E goals in this project	0	8.6	11. 4	80	0	3.90	.678
This project has well established M&E objectives	0	2.9	17. 1	74. 3	5.7	3.87	.582
The M&E indicators of this project are regularly reviewed	2.9	1	17. 3	14. 40	25.7	3.68	.799
The is a M&E budget	0	11. 4	17. 1	60	11.4	3.76	.840
There are clear M&E roles in this project	0	0	31. 4	57. 1	11.4	3.83	.649
Average	0.6	8.0	18. 3	62. 3	10.8	3.81	0.710

Source: Field Fata (2022)

The findings show that 80% (M=3.90, SD=0.678) noted that there were clear M&E goals in this project. 80%(M=3.87, SD=0.582) shared that the project had well established M&E objectives. 68.5% (M=3.83, SD=0.649) observed that there were clear M&E roles in the project.71.4% of (M=3.76, SD=0.840) noted that there was M&E budget in the studied project. 65.7% (M=3.68, SD=0.799)said thatM&E indicators of the project were regularly reviewed. On average, 73.1% (M=3.81, SD=0.710) agreed on the statements that had been provided under M&E planning.

4.4.3 M&E Tools

Table 4.6: M&E Tools

Statement	SD	D	U	A	SA	Mean	Std. Dev
The project has a log frame to guide M&E activities	0	17. 1	8.6	65. 7	8.6	3.65	.827
Result framework government the M&E activities in this organization	0	11. 4	11. 4	60	17.1	3.78	.879
There are state of the art data collection tools in this project	0	5.7	11. 4	57. 1	25.7	3.99	.728
The project has invested in modern data storage tools	0	17. 1	8.6	57. 1	17.1	3.81	.869
There are modern data collection tools in this project	0	0	17. 1	77. 1	0	3.70	.587
Average	0	10. 3	11. 4	63	13.7	3.79	0.778

Source: Field Fata (2022)

The findings show that 82.8% M=3.99, SD=0.728) noted that there were state of the art data collection tools in the project. 74.2% (M=3.81, SD=0.869) shared that project had invested in

modern data storage tools.77.1% (M=3.78, SD=0.979) argued that result framework government the M&E activities in this organization. 77.1% (M=3.70, SD=0.587) argued that there were modern data collection tools in this project. 74.3% (M=3.65, SD=0.827) shared that the project had a log frame to guide M&E activities. Thus, on overall, 76.7% (M=3.79, SD=0.778) agreed on the fact their project had M&E tools.

4.4.4 M&E Reporting

Table 4.7: M&E Reporting

Statement	SD	D	U	A	SA	Mean	Std. Dev
Baseline survey reports are generated in this project	2.9	11.4	5.7	65.7	14.3	3.80	.931
Progress reports are generated to keep the project on track	2.9	11.4	4	57.1	17.1	3.72	.961
Variance analysis reports as control mechanisms in this project	0	5.7	2.9	80	11.4	4.02	.566
Progress reports are generated on time in this project	0	20	8.6	68.6	2.9	3.61	.825
Baseline reports are availed on time in this project	0	0	28.6	45.7	25.7	3.98	.737
Average	1.2	9.7	4	63.4	14.3	3.83	0.804

Source: Field Fata (2022)

Table 4.7 show that 91.4% (M=4.02, SD=0.566)shared that variance analysis reports were generated as control mechanisms in this project. 71.4% (M=3.98, SD=0.737) observed that baseline reports were availed on time in the project. 80% (M=3.80, SD=0.931) noted that baseline survey reports were generated in this project.74.2% (M=3.72, SD=0.931) shared that progress reports were generated to keep the project on track. 71.5% (M=3.61, SD=0.825) held that progress reports were generated on time in the project. From Table 4.7, it can be inferred that 77.7 (M=3.83, SD=0.804) were in agreement on the set of statements that had been provided to them on M&E reporting.

4.4.5 M&E Results Utilization

Table 4.8: M&E Results Utilization

Statement	SD	D	U	A	SA	Mean	Std. Dev
M&E results are utilized to create new knowledge in this project	0	2.9	34. 3	60	2.9	3.78	.661
The new knowledge created through M&E guides decisions in this project	0	5.7	17. 1	71. 4	5.7	3.99	.902
M&E results are utilized in decision making in this project	0	20	14. 3	60	5.7	4.06	.539
M&E results are utilized by project staff	0	0	11. 4	71. 4	17.1	3.80	.872
M&E are utilized by external stakeholders	0	8.6	22. 9	48. 6	20	3.76	.469
Average	0.0	7.4	20. 0	62. 3	10.3	3.78	0.689

Source: Field Fata (2022)

The findings in Table 4.8 indicate that 62.9% (M=3.78, SD=0.661) noted that M&E results were utilized to create new knowledge in this project. 77.1% (M=3.99, SD=0.902) shared that the new knowledge created through M&E guided decisions in the project. 65.7% argued (M=4.06, SD=0.538) that M&E results were utilized in decision making in the project. 88.5% shared that M&E results were utilized by project staff. 68.6% (M=3.76, SD=0.469) argued that M&E were utilized by external stakeholders. Table 4.8 implies that on overall, 72.6% (M=3.78, SD=0.689) agreed on a set of the statements provided under M&E results utilization. This means that there was utilization of the results that had been generated through M&E.

4.5 Regression Results

The researcher conducted regression analysis to predict M&E on performance of water and sanitation projects.

Table 4.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.716 ^a	.513	.448	.03574

Source: Field Fata (2022)

On average, 51.3% variation in performance of KBUWS&SPis explained by variation in M&E. This means that aside from M&E, there are still other factors with an effect on performance of these water and sanitation projects and this should be the main focus of future studies. Table 4.10 is a breakdown of the ANOVA results.

Table 4.10: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.040	4	.010	7.902	.000 ^b
Residual	.038	30	.001		
Total	.079	34			

Source: Field Fata (2022)

From the results in Table 4.10, the inquiry model was good for use (F=7.902, p<0.05)

Table 4.11: Regression Beta Coefficients and Significance

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
(Constant)	2.071	.626		3.308	.018
M&E Planning	.021	.007	.310	3.000	.025
M&E Tools	.051	.022	.086	2.318	.011
M&E Reporting	.099	.012	1.074	3.500	.001
M&E Results Utilization	.123	.015	.536	8.200	.014

Source: Field Fata (2022)

$$Y = 2.071 + 0.021X_1 + 0.051X_2 + 0.099X_3 + 0.123X_4$$

Where Y= performance of Water Supply and Sanitation Project

X₁= Monitoring and evaluation planning

X₂= Monitoring and evaluation tools

X₃= Monitoring and evaluation reporting

X₄= Monitoring and evaluation results utilization

From Table 4.11, it can be inferred that increasing M&E planning a unit would to 0.021 unit increase in performance of Water Supply and Sanitation Project. The study observed increasing M&E tools by a unit would results into 0.051unit increase inperformance of Water Supply and Sanitation Project. It was shown increasing the intensity of M&E reporting by a unit would lead to0.099 unit increase in performance of Water Supply and Sanitation Project. The study observed that a unit increase in M&E results utilization would result into an increase in performance of Water Supply and Sanitation Project by 0.123.M&E planning (p<0.05), M&E tools (p<0.05), M&E reporting (p<0.05) as well M&E results utilization (p<0.05) were significant.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

A recap of the views, concluding as well as recommending remarks are pointed out. The areas that require further research are further pointed out in this chapter.

5.2 Summary

5.2.1 M&E Planning and Performance of KBUWS&SP

On average, the findings imply that 73.1% (M=3.81, SD=0.710) agreed on the statements that had been provided under M&E planning. 80% (M=3.90, SD=0.678) shared that there were clear M&E goals in this project. 80% (M=3.87, SD=0.582) noted that the project had well established M&E objectives. 68.5% (M=3.83, SD=0.649) noted that there were clear M&E roles in the project. 71.4% (M=3.76, SD=0.840) noted that there was M&E budget in the studied project. 65.7% (M=3.68, SD=0.799) noted that M&E indicators of the project were regularly reviewed. M&E planning ($p < 0.05$), was significant.

5.2.2 M&E Tools and Performance of KBUWS&SP

The findings show that 82.8% (M=3.99, SD=0.728) noted that there were state of the art data collection tools in the project. 74.2% (M=3.81, SD=0.869) shared that project had invested in modern data storage tools. 77.1% (M=3.78, SD=0.979) argued that result framework government the M&E activities in this organization. 77.1% (M=3.70, SD=0.587) noted that there were modern data collection tools in this project. 74.3% (M=3.65, SD=0.827) observed that the project had a log frame to guide M&E activities. Thus, on overall, 76.7% (M=3.79, SD=0.778) agreed on the fact their project had M&E tools. Regression results showed that M&E tools ($p < 0.05$) was significant.

5.4.3 M&E Reporting and Performance of KBUWS&SP

The results show that 91.4% (M=4.02, SD=0.566) noted that variance analysis reports were generated as control mechanisms in this project. 71.4% (M=3.98, SD=0.737) argued that baseline

reports were availed on time in the project. 80% (M=3.80, SD=0.931) shared that baseline survey reports were generated in this project. 74.2% (M=3.72, SD=0.931) noted that progress reports were generated to keep the project on track. 71.5% (M=3.61, SD=0.825) argued that progress reports were generated on time in the project. 77.7 (M=3.83, SD=0.804) agreed on the set of statements that had been provided to them on M&E reporting. The study noted that M&E reporting ($p<0.05$) was significant.

5.4.3 M&E Results Utilization and Performance of KBUWS&SP

The findings indicate that 62.9% (M=3.78, SD=0.661) said that M&E results were utilized to create new knowledge in this project. 77.1% (M=3.99, SD=0.902) argued that the new knowledge created through M&E guided decisions in the project. 65.7% (M=4.06, SD=0.538) noted that M&E results were utilized in decision making in the project. 88.5% held that M&E results were utilized by project staff. 68.6% (M=3.76, SD=0.469) argued that M&E were utilized by external stakeholders. On overall, 72.6% (M=3.78, SD=0.689) agreed on a set of the statements provided under M&E results utilization. This means that there was utilization of the results that had been generated through M&E. The findings of regression analysis showed that M&E results utilization ($p<0.05$) was significant.

5.3 Discussion

5.3.1 M&E Planning and Performance of KBUWS&SP

On average, 73.1 (M=3.81, SD=0.710) agreed on the statements that had been provided under M&E planning. At 5% level of significance, M&E planning ($p<0.05$) was significant. Odhiambo, Wakibia and Sakwa (2020) focused on projects linked with alleviation of poverty in Kenyan coast to provide the interplay between M&E planning and project implementation. From factor analysis, timeliness and tracking of progress were the key measures of M&E planning; effectiveness was a good measure of implementation. It was further observed from regression that timeliness and tracking of progress were significant predictors of effectiveness when executing projects. Hubert and Mulyungi (2018) noted that all NGOs that took part in the inquiry had prior knowledge and information on M&E plans that had been developed. A strong and direct nexus was reported by M&E planning and performance of the projects.

5.3.2 M&E Tools and Performance of KBUWS&SP

On overall, 76.7% (M=3.79, SD=0.778) agreed on the fact their project had M&E tools. Regression results showed that M&E tools ($p < 0.05$) was significant. The available empirical studies include Mwangi, Mbugua and Rambo (2021) who did an assessment of the performance contracting as a moderator in the nexus between usage of M&E tools and performance research projects in Coastal region Universities in Kenyan context. It emerged that budgets are important M&E tools that any project organization should have in place to increase chances of success. Gichaiya and Njeru (2016) did an appraisal of M&E tools and their effect on implementation of wireless network projects in Kenyan Universities with specific reference to Jomo Kenyatta University. The study conducted by Barasa (2014) was an assessment of M&E tools and completion of projects by government in Kakamega. The analysis documented that M&E tools significantly influenced completion of projects. The study by Khatiala (2013) noted that M&E tools and techniques have direct and significant implication on project delivery capability.

5.3.3 M&E Reporting and Performance of KBUWS&SP

It can be inferred that 77.7 (M=3.83, SD=0.804) were in agreement on the set of statements that had been provided to them on M&E reporting. At 5% level of significance, the study noted that M&E reporting ($p < 0.05$) was significant. The study conducted by Calis and Yildizel (2020) explored how progress reporting can be done in the construction projects taking the perspective of the client. It was observed that during construction projects, the sites usually provide relevant information that help in measurement of the progress and status of the project activity. Hu and Panthi (2020) observed that the project status reporting system in question had been designed in a manner that it was able to produce a one page summary report.

5.3.3 M&E Results Utilization and Performance of KBUWS&SP

On overall, 72.6% (M=3.78, SD=0.689) agreed on a set of the statements provided under M&E results utilization. This means that there was utilization of the results that had been generated through M&E. The findings of regression analysis showed that M&E results utilization ($p < 0.05$) was significant predictors. Amina and Ngugi (2022) did a study on utilization of M&E results and the implication on performance of the project. It emerged from the analyzing the utilizing the M&E

is significantly linked with better project performance. The study by Winiko et al (2018) focused on dissemination of M&E results and the effect on performance of digital education related projects in Malawi. It was observed that disseminating M&E is moderately but positively connected with project performance. Mutekhele et al. (2017) did an appraisal of data dissemination and the implication on performance infrastructure projects in schools in Bungoma. The study observed that data dissemination is a significant predictor of project performance in an organization.

5.4 Conclusion

The conclusion drawn from the key findings are provided in the subsequent sections:

5.4.1 M&E Planning and Performance of KBUWS&SP

M&E planning was practiced in most of the water supply and sanitation projects. The most practiced aspects of M&E practice include clarity of M&E goals and objectives. There was also clear M&E roles, budget and indicators. The study observed that M&E planning was a significant predictor of performance of Water Supply and Sanitation Project.

5.4.2 M&E Tools and Performance of KBUWS&SP

There were M&E tools were in place in the studied water and sanitation projects. The most practiced aspects include the adoption result framework, modern data collection and log frame. The M&E tools in the most of the sanitation and water projects in Somalia had significant contribution towards performance.

5.4.3 M&E Reporting and Performance of KBUWS&SP

It is evident that there is a robust M&E reporting system among majority of the sanitation and water projects in Somalia. The M&E reporting among the sanitation and water projects in Somalia entailed variance analysis reports, baseline reports and progress reports. M&E reporting in the sanitation and water projects in Somalia entailed timely availing of baseline survey report, and progress reports. M&E reporting was a significant predictor of performance of the sanitation and water projects.

5.4.3 M&E Results Utilization and Performance of KBUWS&SP

There is active utilization of M&E results among sanitation and water projects in Somalia. It became evident that there was utilization of M&E results in projects. There was utilization of M&ER results in decision both by project staff and external stakeholders. Utilization of the M&E results has contributed towards performance of sanitation and water projects in Somalia.

5.5 Recommendations of the Study

- i. The M&E officers and managers working with KBUWS&SP should come up with clear plans to guide the M&E
- ii. The project managers of KBUWS&SP should adopt modern tools for collection and analysis of data
- iii. The M&E officers working with KBUWS&SP should seek to enhance the reporting frameworks and systems in place
- iv. There should be clear mechanism to promote utilization of M&E results among both internal and external stakeholders

5.6 Areas for Future Studies

- i. Inquiries in future should be conducted to establish other additional factors with an effect on performance of sanitation and water projects.
- ii. Inquiries in future need to be conducted on other variables like project sustainability or success that is conceptually different from performance
- iii. The focus of future studies should be on other projects unlike the sanitation and water projects that were central in the present study.

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APPENDICES

First Appendix: Introduction Letter

Dear Respondent,

My name is Abdikadar Mohamed Dahir, a student at the University of Nairobi currently undertaking a Master of Arts in Project Planning and Management. In this regard, I am conducting a research study titled INFLUENCE OF MONITORING AND EVALUATION ON PERFORMANCE OF WATER SUPPLY AND SANITATION PROJECTS: A CASE OF KISMAYO-BAIDOA URBAN WATER SUPPLY AND SANITATION PROJECT. I have selected you as one of my respondents in this study. Kindly note that any information you will share will only be used for academic purpose. Thank you.

Regards,

Abdikadar Mohamed Dahir

First Appendix: Study Questionnaire

SECTION A: GENERAL INFORMATION

1. Kindly indicate your gender

Male

Female

2. Kindly state your highest level of education

Certificate

Diploma

Degree

Masters

3. Please, indicate the number of years you have worked with this project

Less than 3 years

4-7 years

8-10 years

Over 11 years

SECTION B: PERFORMANCE OF KBUWS&SP

4. Kindly provide relevant responses to the following questions by indicating the extent of your agreement. Key: 1-strongly disagree, 2-disagree, 3-undecided, 4-agree and 5-strongly agree

Statement	1	2	3	4	5
This project has allowed beneficiaries to access clean water					
Accessing clean water from this project has reduced water borne diseases among beneficiaries					
Beneficiaries enjoy affordable water services from this project					
Our water services are accessible to beneficiaries					
The project provides improved sanitation facilities to beneficiaries					

SECTION C: MONITORING AND EVALUATION

5. Kindly provide relevant responses to the following four aspects of monitoring and evaluation (M&E Planning, M&E Tools, M&E Reporting and M&E Results Utilization) by indicating the extent of your agreement. Key: 1-strongly disagree, 2-disagree, 3-undecided, 4-agree and 5-strongly agree

Statements on M&E Planning	1	2	3	4	5
There are clear M&E goals in this project					
This project has well established M&E objectives					
The M&E indicators of this project are regularly reviewed					
The has a M&E budget					
There are clear M&E roles in this project					

Statement on M&E Tools	1	2	3	4	5
The project has a log frame to guide M&E activities					
Result framework government the M&E activities in this organization					
There are state of the art data collection tools in this project					
The project has invested in modern data storage tools					
There are modern data collection tools in this project					

Statement on M&E Reporting	1	2	3	4	5
Baseline survey reports are generated in this project					
Progress reports are generated to keep the project on track					
Variance analysis reports as control mechanisms in this project					
Progress reports are generated on time in this project					
Baseline reports are availed on time in this project					

Statement on M&E Results Utilization	1	2	3	4	5
M&E results are utilized to create new knowledge in this project					
The new knowledge created through M&E guides decisions in this project					
M&E results are utilized in decision making in this project					
M&E results are utilized by project staff					
M&E are utilized by external stakeholders					

THANK YOU



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15th September/2022

TO WHOM IT MAY CONCERN

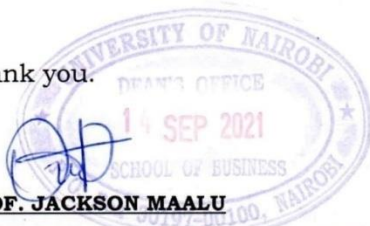
The bearer of this letter, *Abdikadar Mohamed Dahir* of Registration Number *L50/39181/2021* is a Master of Arts in Project Planning and Management student in this University.

He is required to submit as part of his coursework assessment a research project report. We would like the student to do his project on :
INFLUENCE OF MONITORING AND EVALUATION ON PERFORMANCE OF WATER SUPPLY AND SANITATION PROJECTS :ACASE OF KISMAYO-BAIDOA URBAN WATER SUPPLY AND SANITATION PROJECT.

therefore, appreciate if you assist him by allowing him to collect data within your organization for the research.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organization on request.

Thank you.


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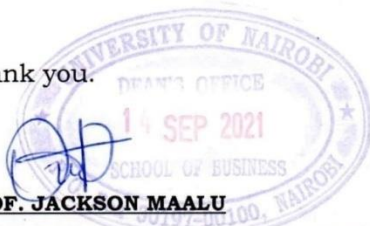
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