INFLUENCE OF MONITORING AND EVALUATION ON PERFORMANCE OF CONSTRUCTION PROJECTS: A CASE OF MOMBASA –NAIROBI PIPELINE CONSTRUCTION PROJECT

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A Research Project Report Submitted in Partial Fulfillment for the Requirement of the Award of the Master of Arts Degree in Project Planning and Management Of the University of Nairobi

2017
DECLARATION

This research project report is my original work which has never been presented to any other institution or university for the award of any degree, diploma or certificate whatsoever.

Signature ………………………………… Date………………………………………………....

Andrew Lekamparish

L50/63665/2013

This research project report is being submitted for examination with my approval as the university supervisor.

Signature ………………………………… Date………………………………………………....

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Department of Education Studies
University of Nairobi
DEDICATION

This work is dedicated to my family, special feeling of gratitude to my Wife Julia Kasweety, my son Jamil Lekamparish and my daughter Samira Lekamparish for their words of encouragement and push for tenacity which still ring in my ears. Thank you very much.

To my late mum who never stopped believing in me at a tender age, this project is yours mum. May your soul rest in peace.
ACKNOWLEDGEMENT

The process of developing this research project has been very invaluable. Different institutions and individuals have been very supportive and indeed have largely influenced this document in being what it is today.

My sincere gratitude goes out to all those in one way or another contributed to the eventual completion of this study. I would like to acknowledge my supervisor Dr. Anne Ndiritu of the University of Nairobi for her invaluable guidance throughout this research project. To the Kenya Pipeline Company Managing Director Mr. Joe Sang and the unnamed respondents who granted me access to their insightful world, am indebted to you all for your cooperation. Last but not least to my friends Fred Baru, Sam Lelelit, Solomon Lemunen and Melau Ntakuka, I can never thank you enough for your encouragement. God bless you all.
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<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
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<tr>
<td>GOK</td>
<td>Government of Kenya</td>
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<tr>
<td>ICT</td>
<td>Information and communication technologies</td>
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<td>NGOs</td>
<td>Non–governmental Organizations</td>
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<td>PAN</td>
<td>Project Activity Network</td>
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<td>PMBOK</td>
<td>Project Management Body of Knowledge</td>
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<td>PRAM</td>
<td>Project Risk Analysis and Management</td>
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<tr>
<td>SPSS</td>
<td>Statistical Software Package for Social Science</td>
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<tr>
<td>TRA</td>
<td>Theory of Reasoned action</td>
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<td>UK</td>
<td>United Kingdom</td>
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<td>UNON</td>
<td>United Nations Office in Nairobi</td>
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ABSTRACT

Monitoring and evaluation (M&E) has become an increasingly important tool within the global efforts in achieving environmental, economic and social sustainability. The purpose of this study is to determine influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa- Nairobi Pipeline construction project. The objectives of the study were to determine the influence of monitoring and evaluation feedback on performance of Mombasa -Nairobi Pipeline construction project, to examine the extent to which training and development on monitoring and evaluation influence performance of Mombasa- Nairobi Pipeline construction project, to establish the influence of communication in monitoring and evaluation on performance of Mombasa-Nairobi Pipeline construction project and to assess the influence of resource allocation on monitoring and evaluation on performance of Mombasa- Nairobi Pipeline construction project. The study adopted descriptive research design. The target population used for the study was 179 staff working in Kenya Pipeline Construction Projects. The study adopted a sample size of 124 using Slovin’s formula. The primary data for this study was collected using the questionnaires and complemented by desk research hence ensuring that detailed and relevant information on the subject of study is collected. Qualitative data was analysed through content analysis and presented in prose form. Quantitative data was presented using tables for ease of understanding and analysis. Descriptive statistics- mean and standard deviation was used to determine the extent to which monitoring and evaluation influence performance of pipeline construction project. Inferential statistics-correlation and regression were done to determine the influence of monitoring and evaluation on performance of pipeline construction project. Pearson’s correlation analysis was carried out to examine the association between the variables. From the findings, it was revealed that due to monitoring and evaluation feedback there is enhanced accountability minimizing project financial mismanagement, enhanced project decision making and the project experience transparency. Regression results revealed that monitoring and evaluation feedback, training and development in monitoring and evaluation, monitoring and evaluation communication and resource allocation on monitoring and evaluation has significance and positive influence on project performance. The study recommends that the company should enhance effective feedback in order to improve development policies, programs and practices by providing policymakers with the relevant evaluation information to assist in making informed decisions. Monitoring and Evaluation has become a necessary component of any development program or project. The study recommends that the organizations should support adequate training of field staff involved in monitoring and evaluation through offer of requisite skills and knowledge on Monitoring and Evaluation and project performance.
CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Monitoring and evaluation (M&E) has become an increasingly important tool within the
global efforts in achieving environmental, economic and social sustainability. At national
and international scales, the sustainability criteria and indicators for M&E are very
crucial in defining, monitoring and reporting on ecological, economic and social trends,
tracking progress towards goals and influencing policy and practices (Behn, 2003).

Monitoring and evaluation (M&E) helps those involved with projects to assess if progress
is being achieved in line with expectations. Monitoring is the on-going collection and
analysis of data that informs project managers if progress toward established goals is
being achieved. Evaluation is a comprehensive appraisal that looks at the long-term
impacts of a project and exposes what worked, what did not, and what should be done
differently in future projects. When planning for M&E, it is vital to consider whether
appropriate funds and staff time can be allocated to it since M&E is an on-going process
and requires a significant commitment. Another key consideration is stakeholders’
participation in design and execution of M&E. While external professionals may bring
needed expertise, involving community partners is an excellent strategy for
demonstrating accountability (Hettmut, 2002).
Monitoring and evaluation is a crucial part of the management cycle including in planning and design of projects (Gyorkos, 2003). Project planners should align monitoring and evaluation activities into the project plan with such elements included as persons to carry out the evaluations, frequency, budget for the activities as well as specification on how to report and use the findings. Institutionalization of M&E has meant creation of M&E system with policy, legal and institutional arrangements to produce monitoring information and evaluation findings which have been judged valuably by key stakeholders. Institutionalized M&E has served as an integral part of the development policy/program cycle in improving the performance accountability to provide effective feedback which has improved planning, budgeting and policy making that has achieved development effectiveness.

The Canadian M&E system has invested heavily in both evaluation and performance monitoring as key tools to support accountability and results-based management. Additionally, the current state of the M & E system has evolved over time, as the central designers have recognized that the development and implementation of M & E is long term and iterative therefore putting emphasis on the “process” of implementation as an important mechanism in itself in developing an “evaluation culture” or “results culture” in an organization and across the entire system (Lahey, 2009).
Government M&E systems in Africa operate in complex terrain. To some extent they are hostages to other forces in government, nevertheless given a results-driven reform agenda, incentives can be put in place for the evidence generated to support developments in delivery, budgeting, and monitoring and evaluation are consistently designed to support valued change in people’s lives, particularly the underprivileged. In effect, the tools of governance are aligned to citizenry, not internal bureaucratic desires. The significance of results placement for government is extensively deliberated, and finds manifestation in public management and development literature (Benington & Moore, 2011).

In Kenya, State Corporations (SCs) have not been able to achieve success in government project due to mismanagement, bureaucracy, wastage, pilferage, incompetence and irresponsibility by directors and employees (Kamunga, 2000). The government has initiated monitoring and evaluation in an effort to improve State Corporation projects performance (Kamunga, 2000). Monitoring and Evaluation is used in government to monitor progress, increase transparency, strengthen accountability, stimulate performance improvements, and communicate results to improve project performance (Wholey, Hatry, & Newcomer, 2010). This study focused on determining the influence of monitoring and evaluation on performance of construction of Mombasa-Nairobi pipeline project.
1.2 Statement of the Problem

There is a principal organ through which development projects are identified, prioritized and adopted as undertakings deserving for development. In between, are several bureaucratic agencies and processes which are provided for the purpose of overseeing or monitoring the implementation of the projects in question, Best practice requires that projects are monitored for control because stakeholders require transparency, accountability for resource use and its impact, worthy project performance and project team training and development of projects (Fazli, 2012).

The government earmarks substantial resources in initiating development projects for provision of services and elimination of poverty. In recent times, construction projects undertaken by state corporations delays and experience cost overruns raising interest in accountability; allocation, target and priority setting and overall effectiveness. Mutunga (2010), reports that public projects have either stalled or failed to kick off while others recorded shoddy performance. Kenya Pipeline Company undertook pipeline construction project which was set to be completed by September 2016. The contract to construct the 20inch new line to replace 14inc line which have been in operation for the last 36 years was awarded to a Lebanon’s Zakhem on July 2014 and set August 11, 2014 as commencement date with construction period of 18 Months with assistance of Shengi Engineering Company of China. The project was estimated to cost Kshs. 48 Billion. KPC signed a loan of Kshs. 35 Million with a consortium of six local and international banks to finance 70% of the project. The consortium includes CFC Bank, Stanbic Bank, Citibank,
National Bank, Commercial Bank of Africa, Cooperative Bank, Rand Merchant and stand chart Bank. The execution of the project has however fallen off the set timelines triggering concerns over potential cost inflation. KPC kicked off the search for an independent firm to manage and conduct a forensic audit of the distressed project giving signal that all is not well. The decision to hire a project manager was to recover lost time and put back on track a government hacked plan to stabilize supply and pricing of petroleum products in the domestic market. The audit firm was to assess the performance of the contractor and prepare a progress report including monitoring adverse delays in payment as they relate to project milestones for prompt action. The report indicated that the project demands for additional funding to cover delays in the project of laying out a new pipeline.

According to KPC (2016), the company requires an extra Ksh.4billion for a cost variation on the 450-kilometre pipeline. The company indicated that through its monitoring and evaluation systems, the laying of pipeline between Nairobi and Mombasa from amid 2014 has faced budgetary deficit and delays as the project lagged behind the project timelines. The extent to which monitoring and evaluation influence project performance at KPC has not been determined and therefore this study sought to determine the extent to which monitoring and evaluation of pipeline construction project influence performance of the project.
Previous studies such as Musomba, (2013) have identified institutional framework, training, stakeholder participation, budgetary allocation, politics, M&E tools, planning, lack of knowledgeable and skilled staff amongst others as factors affecting monitoring and evaluation of projects in public organizations. Most of these studies have focused on factors affecting monitoring and evaluation and therefore, the study sought to determine influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa- Nairobi Pipeline construction project.

1.3 Purpose of the Study

The purpose of this research was to determine influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa -Nairobi Pipeline construction project.

1.4 Research Objectives

The objectives of this research work were:

i. To determine the influence of monitoring and evaluation feedback on performance of Mombasa -Nairobi Pipeline construction project.

ii. To examine the extent to which training and development on monitoring and evaluation influence performance of Mombasa -Nairobi Pipeline construction project.

iii. To establish the influence of communication in monitoring and evaluation on performance of Mombasa-Nairobi Pipeline construction project.
iv. To assess the influence of resource allocation on monitoring and evaluation on performance of Mombasa- Nairobi Pipeline construction project.

1.5 Research Questions

The study sought to answer the following questions;

i. How does monitoring and evaluation feedback influence performance of Mombasa -Nairobi Pipeline construction project?

ii. To what extent does training and development in monitoring and evaluation influence performance of Mombasa -Nairobi Pipeline construction project?

iii. How does monitoring and evaluation communication influence performance of Mombasa-Nairobi Pipeline construction project?

iv. How do resource allocation on monitoring and evaluation on influence performance of Mombasa- Nairobi Pipeline construction project?

1.6 Significance of the Study

The study is invaluable to the management board of Kenya Pipeline Company in that it provides an insight on how monitoring and evaluation can influence the performance of pipeline construction project. The findings of the study through this project would enhance capacity and response by management and stakeholders leading to improvement in monitoring and evaluation to achieve success in pipeline construction project.
The Ministry of Energy officers would gain insight on the significant role played by monitoring and evaluation on government development projects. This would enable policy makers in formulating and implementing measures that would enhance efficient monitoring and evaluation of government projects and achieve success in project performance in an effort to achieve better development and achieve vision 2030. The study will form a foundation in which further study can be carried out and therefore the study provides a foundation and material for further related research.

1.7 Limitation of the Study

In undertaking this study, the researcher encountered challenges as follows: Fear of victimization was a key limitation to this research work. Respondents were afraid to provide factual information on the basis that information provided could be used against them. There were also concerns of confidentiality of respondents that could have affected their honesty in providing information. Respondents were uncomfortable sharing information with the researcher based on rank differences, that is, the researcher being of a senior rank in management than the respondents and the evident chain of command in communication between junior and senior officers within the organization.

Based on these limitations, the researcher informed the respondents that this is a research work and confidentiality of all respondents and information provided was guaranteed as it was one of the ethical issues in research. As a result, no respondent was victimized based on their contributions in informing this study.
The researcher neither pointed out that any names nor did he request for identification numbers in any of the research instruments and therefore no chances of linking any information to particular respondents. These influenced respondents in providing true, factual and adequate information.

1.8 Delimitations of the Study

The study was delimited to determining influence of monitoring and evaluation on performance of Mombasa-Nairobi Pipeline construction project in Kenya. The study focused on influence of monitoring and evaluation on project performance in State Corporation in Kenya. The project under focus was Mombasa- Nairobi Pipeline construction project. The project is one of the flagship projects for achieving vision 2030. The study variables were Monitoring and Evaluation Feedbacks, training and development in monitoring and evaluation, resource allocation on monitoring and evaluation, monitoring and evaluation communication and Pipeline construction project performance.

1.9 Assumptions of the Study

The researcher assumed that sampling would not be biased and that the chosen sample population would participate voluntarily. There was also assumption that respondents gave information so as to get valid data. The other assumption was that all the questionnaires were responded to and that the respondents were truthful in their responses to enable credibility of the findings.
1.10 Definition of significant terms used in the study

The study sought to define various significant terms used in the study as cited by various scholars and the researcher.

A Construction project – This refers to a temporary building undertaken by people or organizations who work cooperatively together to create a unique building or within an established period of time and within and established budget to produce identifiable (Carley, 2006)

Evaluations – This refers to a rigorous and independent assessment of either completed or ongoing activities to determine the extent to which they are achieving stated objectives and contributing to decision making.

Monitoring – This is defined as the ongoing process by which stakeholders obtain regular feedback on the progress being made towards achieving their goals and objectives (Chan, 2013).

Monitoring and evaluation – This is a process that helps program implementers make informed decisions regarding program operations, service delivery and program effectiveness, using objective evidence (Kanua, 2009)

Monitoring and Evaluation Communication- Refers to a communications management project plan that can organize and document the process, types, and expectations of communications and provide the stakeholder communications requirements in order to communicate the appropriate information as demanded by the stakeholders

Monitoring and Evaluation Training – This refers to an intervention on the mechanism in order to achieve increased project success, greater innovation, world-class client satisfaction service and project cost effectiveness.

Resource allocation on This refers to a plan for allocating available resources for
monitoring and evaluation – example human and finance resources in monitoring and evaluation, to achieve project goals for the future development. It is the process of allocating scarce resources among the various construction project activities

Project Performance- It is the measure of project through cost, time and quality as the basic elements of project success. (Nichols, 2000)

1.11 Organizational of the Study

The study is organized in five chapters. Chapter one presents the introduction, background of the study, statement of the problem, purpose of the study, research objectives and research questions, significance of the study and definition of significant terms. Chapter two presents the literature review, theories and conceptual framework and ethical issues. Chapter three presents research design, target population, sample size, sampling procedure, data collection, validity of instruments and reliability of the research instrument, methods of data analysis techniques while chapter four presents the findings, presentation of the results and interpretation of the findings in statistical methods. Finally, Chapter five presents the summary of findings, conclusions and recommendations.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents review of studies related to performance of projects and community participation. This study presents theoretical review, gaps identified in the literature reviewed which if bridged would contribute to successful operation of community projects. The chapter introduces the variables namely; Project performance, Monitoring and evaluation feedbacks, Training and development in M&E, Communication in M&E, and Resource allocation in M&E. The conceptual framework was used to demonstrate the relationship between the variables.

2.2 Project Performance

Project performance has been defined by the criteria of time, budget and deliverables. It is the overall quality of a project in terms of its impact, value to beneficiaries, implementation effectiveness, efficiency and sustainability (IBBS and Kwak, 2000). The ultimate importance of project performance is achieved through avoiding the project’s failure to keep within cost budget, failure to keep within time stipulated for approvals, design, occupancy and failure to meet the required technical standards for quality, functionality, fitness for purpose, safety and environment protection (Flanagan and Norman 2003). Project performance ensures that enterprises maximise on profitability, minimise the consequences of risky and uncertain events in terms of achieving the
project’s objectives and seizes the chances of the risky events from arising (Kululanga & Kuotcha, 2010). The criteria of project performance for the project will be cost, time and quality which are basic elements of project success (Mohammed, 2002).

Quality is all about the entirety of features requisite by a product to meet the desired need and fit for purpose. To ensure the effectiveness and conformity of quality performance, the specification of quality requirements should be clearly and explicitly stated in design and contract documents. Project performance is measured through project cost, quality, customer or stakeholder’s satisfaction, timeliness and achieving of project objective is effective indicator to measure of project performance (Nyikal, 2011).

Despite the great relevance of individual performance and the widespread use of job performance as an outcome measure in empirical research relatively little efforts has been put on clarifying the performance concept. Previous studies have highlighted on factors affecting performance of projects both in developed and developing countries. Juliet and Ruth, (2004) did evaluation of factors affecting performance of construction projects in Niger state.

Takim and Akintoye (2010) carried out a study on the performance indicators for successful construction project management. The variables focused on three company performance indicators namely; safety, profitability and productivity, the research recommended further study in developing a robust framework for bench marking
construction project development that reasonably takes into account the stakeholders expectations, objectives and priorities for the project.

2.3 Monitoring And Evaluation Feedbacks and Project Performance

Effective Monitoring and Evaluation of projects is usually one of the ingredients of good project performance. It provides means of accountability, demonstrating transparency to the Stakeholders and facilitates organizational learning through documenting lessons learnt in implementation of the projects and incorporating the same in the subsequent project planning and implementation or through sharing experiences with other implementers (Kogan, 2004).

Project Managers today are concerned with the development of their projects as evidenced by their enthusiasm in the adoption of M&E system. This is so because a lot of donor and government resources are provided to organizations for the implementation of various projects. However, the productivity of these projects has been lagging behind because of lack of Monitoring and Evaluation systems. To alleviate this problem, some projects have adopted M&E system as a way of managing the projects. However, most projects have not adopted M&E system even though outcomes and effectiveness of M&E system are known (Gray & Larson, 2008).
Project performance is traditionally measured using the golden triangle, which means completing the project on time, within budget and to specification (PMI, 2004). This is the operational mindset, which is influenced by the get the job done approach (Dvir, Sadeh, Malach-Pines, 2006). However, several studies support the inclusion of customer satisfaction as the fourth dimension of success (Kerzner, 2006).

Monitoring and evaluation systems for projects exist in a real-world context where external factors such as national and international policies, climate, markets, and governance are dynamic and affect the communities and target populations in which programs operate (ADRA, 200). Local conditions such as politics, infrastructure, and services can also affect programs and their target groups. Monitoring these changing conditions is necessary for program effectiveness and assessment of project impact (Ivanceh, 2003). Monitoring and Evaluation (M&E) has become an expected and necessary component of any development program or project.

The primary purpose of M&E is to measure the degree to which an operational design is implemented as planned. Some efforts in rural water development projects have lacked a clear focus on learning and results – including understanding what works and why, in what contexts, and how the best impacts can be achieved with resources invested. To remedy this, dozens of evaluations have been carried out and there have been recent efforts to take stock of evidence according to KFW and IEG (2011), including the systematic reviews (Waddington et al, 2010). According to Ogolla and Moronge (2016)
effective monitoring and evaluation feedbacks on budget allocation and utilization influence increased in number of the completed projects, increase in number of people served with projects and lead to sustainability of established projects.

2.4 Training and Development in Monitoring and Evaluation and Project Performance

The adequate staffing and training of the project team on how to carry out monitoring and evaluation enhances effectiveness in monitoring and evaluation of construction projects. The training of the project team personnel for different activities such as data collection, data analysis, report writing, dissemination of M & E funding and logical framework approach is paramount in any organization. Organizations support adequate training of the field staff involved in monitoring and evaluation through offer of adequate and requisite skills.

According to Mwani (2005), project team should be given clear roles and designations depending on their level of expertise for effective implementation of the CDF development projects. If their skills and expertise is inadequate, training for relevant skills should be organized especially for those projects where staff have to go out and do project activities on their own (Owour, 2013).
The level of M&E skills of the personnel conducting the M&E implementation is key. These skills were assumed to be obtained through training. The skills were measured on aggregate number of months on M&E training. An increase in training on M&E is assumed to positively influence the M&E implementation status and vice versa. The major focus of the organization should be on developing employee skills and abilities so that they can contribute to the organization effectively and enable them conduct an independent Monitoring and evaluation exercise (Gikonyo, 2008). Independence is achieved when it is carried out by entities and persons free of the control of those responsible for the design and implementation of the development intervention (Musumba et al, 2013).

2.5 Monitoring and Evaluation Communication and Project Performance

Monitoring is the systematic and routine collection of information from projects and programs for four main purposes as written in (World Bank, 1980), to learn from experiences and improve practices and activities in the future (Ben, 2002), to have internal and external accountability of the resources used and the results obtained and to take informed decisions on the future of the initiative to promote empowerment of beneficiaries of the initiative. Evaluation is the assessing, as systematically and objectively as possible, a completed project or program (or a phase of an ongoing project or program that has been completed). Evaluations appraise data and information that inform strategic decisions in improving the project or program in the future as clearly indicated by (Yang, Sun & Martin, 2008). From the point of view of (Pfohl, 2006),
evaluations should help to draw conclusions about five main aspects of the intervention which are relevance, effectiveness, efficiency, impact and sustainability.

Communication of a shared culture and values to human resources in the whole enterprises and infuse the said human resources with the desire to perform highly. It involves motivating the entire firm’s human resources. The project manager should assign roles to staff and volunteers conducting monitoring and evaluation be it in data collection, analysis and reporting. Effective communication of Monitoring and Evaluation results of projects is usually one of the ingredients of good project performance. It provides means of accountability, demonstrating transparency to the Stakeholders and facilitates organizational learning through documenting lessons learned in implementation of the projects and incorporating the same in the subsequent project planning and implementation or through sharing experience with other implementers.

2.6 Resource allocation on Monitoring and Evaluation and Project performance

After the initiation stage, the project is planned to an appropriate level of detail. The main purpose is to plan time, cost and resources adequately to estimate the work needed and to effectively manage risk during project execution. As with the initiation process group, a failure to adequately plan greatly reduces the project's chances of successfully accomplishing its goals (Nijkamp et al., 2002). It defines the nature of the project scope, develop the project scope, develop the project management plan, identify and schedule the project activities that occur within the project. Rao (2001) defines planning as a
common thread that intertwines all the activities from conception to commissioning and handing over the clockwork to client. This shows that planning encompasses the essential activities such as scheduling, break down structures, time estimates and statement of work.

Harold (2003) argues that project monitoring and evaluation of company resources for a relatively short – term project which has been established for the completion of specific goal is important. This assist in determining how to plan, developing the scope statement; selecting the planning team, identifying deliverables and creating the work breakdown structure; identifying the activities needed to complete those deliverables and networking the activities in their logical sequence, estimating the resource requirements for the activities; estimating time and cost for activities; developing the schedule; developing the budget; risk planning; gaining formal approval to begin work (Rosario, 2000).

Most organizations in public sector are likely to have less budgetary allocation for monitoring and evaluation of construction projects. Due to their limited funds, they face notably greater challenges to obtain and run monitoring and evaluation activities effectively (Mbotho, 2014). It is important therefore that organizations need adopt monitoring and evaluation approach that would enable organization track utilization of project funds, enhance accountability and transparency and identify suppliers of finance to meet the identified needs for monitoring and evaluation (Thairu, 2004).
According to Gray and Larson (2008), a project is a complex non-routine, one life time effort limited by time, budget and resources to meet customers’ needs. Effective resource monitoring in projects is determined by parameters which govern funds control such as auditing (Kogan, 2004). This influence adequate and sufficient disbursement of resources in time for successful implementation of development projects, avoid project cost overrun and completion of project within budget limits (Bennel & Sayid, 2012).

For the system to be an integrated one, a budgetary allocation on M&E for every specific development project is critical. M&E budgetary Allocation is assumed to refer to the amount of finance budgeted, allocated and spent on the M&E functions in a specific project (Kogan, 2004). An increase in the amount allocated on M&E in projects is assumed to positively influence project performance. A decrease is assumed to negatively affect the project performance.

2.7 Theoretical Framework

The theoretical framework for monitoring and evaluation of projects has been described as a frame of reference which helps human beings in understanding their world and learning how to function within it. The study was guided by “Evaluation Theory” The concept of evaluation occurred in the US in the 1960 and 70s during the administrations of Kennedy and Johnson with heavy support from the federal government under the policies on ‘war on Poverty’ and the Great Society (Rossie, Lipsey & Freeman, 2004). The evaluation theory consists of the social science theory as well as the Program theory.
2.7.1 The social theory

The social theory plays a major part and role in evaluation practice. Such a theory and prior research are instrumental for providing information on the initial needs assessment and program design. A review of available literature is crucial as it provides knowledge on the effective strategies to use in dealing with the problems at hand. Further, they can provide lessons about what is not effective as such saving program designs and other resources (Donaldson, 2001). The theory is related with the study due to the fact that the study focused on influence of Monitoring and Evaluation on project performance and this is a social accountability which is an important motivation for project performance, a way to improve programs and society.

2.7.2 The Program theory

Program theory on the other hand contributes to evaluation practice through the identification of key program elements as well as providing information on how these elements relate to each other (Lipsey 1990). Program theory is a plausible and sensible model on how a program is supposed to work (Bickman, 1987). Lipsey (1993) stated that it is a proposition with regard to the transformation of input into output and how to transform a bad situation into a better one through inputs. It is also illustrated as the process through which program components are presumed to affect outcomes. Rossi (2004) argued that a program theory consists of an organizational plan on how to deploy resources and organize the activities of the program activities to ensure that the intended service system is developed and maintained.
The theory further deals with the service utilizations plan which analyses how the intended target population receives the intended amount of intervention. This is through the interaction of the service delivery systems. Finally, program theory looks at how the intended intervention for the specified target population represents the desired social benefits. Rogers as cited by Uitto (2000) illustrates the advantages of using a theory based framework in monitoring and evaluation. It includes the ability to attribute project outcomes of specific projects or activities as well as identification of anticipated and undesired program consequences. Theory based evaluations as such enables the evaluator to understand why and how the program is working (Weiss, 2003).The theory is relevant to study since the study used social research methods to systematically investigate the effectiveness of social interventions on performance of the project.

2.8 Conceptual Framework

A conceptual framework provides a link between independent and dependent variables (Orodho, 2009). This study sought to establish whether monitoring and evaluation has a significant influence on project performance in State Corporation focusing on Mombasa-Nairobi Pipeline construction under Kenya Pipeline Limited. The independent variables in this study included monitoring and evaluation feedback, training and development in M&E, monitoring and evaluation Communication and resource allocation on monitoring and evaluation while dependent variable is the project performance.
Independent Variables

Monitoring and Evaluation Feedbacks
--Coordination
-Decision Making
-Sharing of Ideas

Training and development in monitoring and evaluation
- Skills
-Knowledge level
-Transfer of knowledge

Monitoring and evaluation Communication
-Error Correction
-Deviation control
-Reports

Resource allocation on monitoring and evaluation
- Adequate finance
- Efficient resource distribution
- Competency of human resource

Moderating Variable
-Government Policy
-Organization Procedures

Dependent Variable
Pipeline construction
Project Performance
- Completion rate
-Completion within Budget
-Meet Project Specifications

Figure 2.1: Conceptual framework
2.9 Knowledge Gaps

Monitoring and evaluation of projects in state corporations is very critical because lots of government resources are provided to organizations to implement various projects. Not only does best practices require that projects are monitored for control but also project stakeholders require transparency, accountability for resource use and impact, good project performance and organizational learning to benefit on future projects. Previous studies such as Musomba, (2013) have identified institutional framework, training, stakeholder participation, budgetary allocation, politics, M&E tools, planning, lack of knowledge skilled staff amongst others as factors determining monitoring and evaluation projects in public organizations. Also, Mutunga (2010) opined that public projects yielded little success but he failed to determine the extent to which monitoring and evaluation impact on project performance.

Enshassi, Mohamed and Abushan (2009) did a study on factors affecting the performance of construction projects in Gaza strip. Their variables focused on delays due to road closures, qualifications of personnel and availability of quality raw materials. The researcher recommended that further studies should focus on developing human resources in construction industry through proper and continuous training programs about construction projects. The Government of Kenya invests a lot of funds in a number of water development projects in the urban areas which is as a result of high level of poverty, rapid increase of population and weather variability. However, most of these projects experience performance challenges in terms of completion thereby leading to
confusion and uncertainty in implementation of project activities due to ineffective monitoring and evaluation. Monitoring and evaluation of project has been carried out in government projects but extent to which monitoring and evaluation influence project performance in government organizations has not been determined. This study sought to fill the existing knowledge gap by determining influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa-Nairobi Pipeline construction project.

2.10 Summery of Literature Review

The literature reviewed offered insight into the studies done on how different initiatives have been put forward to address the question of project performance. It is noted that most projects in the construction industry faces delays and cost overruns attributed to various factors such institutional framework, training, stakeholder participation, budgetary allocation, politics, M&E tools, planning, lack of knowledge skilled staff amongst others. The question that this study sought to address is, How does monitoring and evaluation influence performance of projects in State Corporation in Kenya focusing on Mombasa- Nairobi Pipeline construction project.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

A research methodology guides the researcher in collecting, analyzing and interpreting observed facts. This chapter outlines the research design, target population, variables, sampling techniques and sample size, data collection methods and instruments, validity and reliability, data analysis and presentation techniques and operationalization of variables.

3.2 Research Design

According to Chandaran, (2004), a research design defines the techniques that are to be used in collecting data, sampling strategies and tools appropriate for a study. It is the arrangement of conditions for collection and analysis of data in a manner that aims to instill relevance to the research purpose. The research design used in this study is descriptive research design. This is because it portrays an accurate profile of persons, events or situations and allows the collection of large amounts of data from a sizeable population in a highly economical way.

According to Saunders, Lewis and Thornhill (2007), a descriptive research design involves planning, organizing, collecting and analyzing of data so as to provide the information being sought. It refers to the way the study is designed; the method used to carry out a research. This research design involves gathering data that describe events and...
then organizes, tabulates, depicts, and describes the data that helped in answering research questions or to test hypothesis of the current status on influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa- Nairobi Pipeline construction project under Kenya Pipeline Company Limited.

3.3 Target Population

According to Ngechu (2004), a population of the study is the specific population about which information is desired. A population of the study is a well-defined set of people, services, elements, and events, group of things or households that are being investigated. It’s a complete group that fits the researcher’s specification from which the researcher wants to generate the result of the study. The target population used for the study was 179 staff working in Pipeline Construction Projects. The study population included Managers, Project managers, Monitoring and evaluation Officers, and Project Officer, Supervisors, Project Engineers and Project technicians making total of 179 respondents who were selected from the Kenya Pipeline project team.
Table 3.1: Target Population

<table>
<thead>
<tr>
<th>Centre</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>5</td>
</tr>
<tr>
<td>Project managers</td>
<td>10</td>
</tr>
<tr>
<td>Monitoring and Evaluation officers</td>
<td>25</td>
</tr>
<tr>
<td>Project Supervisors</td>
<td>15</td>
</tr>
<tr>
<td>Project officers</td>
<td>64</td>
</tr>
<tr>
<td>Engineers</td>
<td>4</td>
</tr>
<tr>
<td>Project technicians</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>179</strong></td>
</tr>
</tbody>
</table>

Source: Kenya Pipeline Company, (2016)

3.4 Sample Size and Sampling Procedures

Sampling is a process or technique of choosing a sub-group from a population to participate in the study; it is the process of selecting number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected (Ogola, 2005).

3.4.1 Sample Size

A sample size is a subgroup of the population that the researcher is interested in (Kumar, 2005).
The study adopted purposive sampling to select a sample size. The sample size of this study was calculated from the Slovin’s formula given as:

\[ n = \frac{N}{1 + N(e)^2} \]

n = Sample size  
N = Total population  
e = Error tolerance  

Since the study population (N) is 179. Error of tolerance was 0.05. Thus, the sample size was determined as shown below:

\[ n = \frac{179}{1 + 179(0.05)^2} = 124 \]

The study selected a sample size of 124 study population which was selected using stratified random sampling technique. This constitutes a 68% sample proportion of study population. The study adopted stratified random sampling technique to select respondents who were representative of the target population. Stratified sampling method was used as it involves dividing the target population’s various levels of management at a sample proportion of 68%. According to Mugenda and Mugenda (2003), a sample proportion of 10 to 20% of the target population will be sufficient. Kothari indicate a sample of more than 30 unit of the population is sufficient for the study. The study adopted sample proportion of 68% in determining sample size of each of the level of management in the organization. The respondents were selected using simple random selection to eliminate biasness.
Table 3.2: Sampling Frame

<table>
<thead>
<tr>
<th>Centre</th>
<th>Respondents</th>
<th>Sample Proportion</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>5</td>
<td>0.68</td>
<td>4</td>
</tr>
<tr>
<td>Project managers</td>
<td>10</td>
<td>0.68</td>
<td>7</td>
</tr>
<tr>
<td>Monitoring and Evaluation officers</td>
<td>25</td>
<td>0.68</td>
<td>17</td>
</tr>
<tr>
<td>Project Supervisors</td>
<td>15</td>
<td>0.68</td>
<td>10</td>
</tr>
<tr>
<td>Project officers</td>
<td>64</td>
<td>0.68</td>
<td>44</td>
</tr>
<tr>
<td>Engineers</td>
<td>4</td>
<td>0.68</td>
<td>3</td>
</tr>
<tr>
<td>Project technicians</td>
<td>56</td>
<td>0.68</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>179</td>
<td></td>
<td>124</td>
</tr>
</tbody>
</table>

3.5 Research Instruments

The primary data for this study was collected using the structured questionnaires. The questionnaire was used in collecting data and consisted of a mixture of open ended and close ended questions. A 5- Point Likert scale was adopted where 1-No at all, 2-to small extent, 3-to a moderate Extent, 4- to a large Extent and 5- to a very large Extent. According to Kothari (2004), use of questions allows for intensity and richness of individual perceptions in respondent responses. The study used questionnaires because it is flexible and facilitates the capture of in-depth knowledge of the respondents and promotes respondent cooperation (Kothari, 2004). As a method of data collection, questionnaires are appropriate because they are easy to analyze and are cost effective. The questionnaire was administered through drop and pick later approach.
3.6 Pilot- Testing

Pilot testing is undertaken to make corrective revisions to instruments and data collection procedures to ensure that the data that is collected is reliable and valid. Pre-testing allowed errors to be discovered before the actual data collection and 10% of the sample size was considered adequate for piloting (Mugenda & Mugenda, 2003). Pilot testing was carried out on staff working in Kenya Pipeline Company who were not to be considered for the study. The Comments made by the respondents during piloting was used to improve on the instrument through correcting errors and ambiguity that existed in the instrument.

3.6.1 Validity of instrument

The important criterion of research is validity. Validity is the degree to which an instrument measures what it purports to measure. It estimates how accurately the data in the study represents a given variable or construct in the study (Saunders, Lewis, & Thornhill, 2009). During questionnaire construction, various validity checks were conducted to ensure that the instrument measured what it is supposed to measure and performed as it was designed to perform. Content validity was verified through expert opinions from supervisors and practitioners. Construct validity which was achieved through restricting the questions to the conceptualization of the variables and ensuring that the indicators of each variable fell within the same construct. Furthermore, Mugenda (2008) indicates that the quality of a research study depends to a large extent on the accuracy of the data collection procedure.
3.6.2 Reliability of the Instrument

Reliability is the tendency toward consistency and therefore, different measures of the same concept or the same measurements repeated over time should produce the same results. The index alpha is the most important index of internal consistency and is attributed as the mean of correlations of all the variables, and it does not depend on their arrangement (Williams, 2006). A Cronbach’s alpha (Cronbach coefficient alpha), which is based on internal consistency, was calculated using SPSS to establish the reliability of the survey instrument. This methodology measures the average of measurable items and its correlation. Field (2009) contends that Cronbach's alpha value that is at least 0.70 suffices for a reliable research instrument.

In this study, reliability was ensured through a piloted questionnaire that was subjected to a sample of individuals who were staff working in Pipeline Construction Projects. The results obtained are presented in Table 3.3. From the findings, coefficient of feedback was 0.7665 making question items concerning feedback reliable. The Cronbach Alpha of training and development was 0.8128 making items concerning training and development reliable. The items concerning communication were reliable as they had a Cronbach Alpha coefficient of 0.8476. The 5 items concerning resource allocation on monitoring and evaluation were reliable with Cronbach Alpha coefficient of 0.8325. This clearly indicated that the instrument for influence of monitoring and evaluation on project performance in State Corporation in Kenya presented to staff working in

32
Mombasa- Nairobi Pipeline construction project for data collection was reliable as all the Cronbanch Alpha were closer to 1 and greater than 0.7.

**Table 3.3: Reliability Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>No. of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback</td>
<td>0.7665</td>
<td>5</td>
</tr>
<tr>
<td>Training and development</td>
<td>0.8128</td>
<td>5</td>
</tr>
<tr>
<td>Communication</td>
<td>0.8476</td>
<td>5</td>
</tr>
<tr>
<td>Resource allocation on monitoring and</td>
<td>0.8325</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Author (2017)

### 3.7 Data Analysis and Procedure

The collected data was well examined and checked for completeness and comprehensibility. The researcher used qualitative and quantitative techniques in analysing the data. Qualitative data was analysed through content analysis and presented in prose form. Quantitative data was presented using tables. It was analyzed with the use of the Statistical Packages for Social Sciences (SPSS) Version 20. Descriptive analysis techniques- mean and standard deviation was used to determine the extent to which monitoring and evaluation influence project performance in State Corporation in Kenya focusing on Mombasa- Nairobi Pipeline construction project. Inferential statistics- correlation and regression was done to determine the relationship between monitoring and evaluation and Mombasa- Nairobi Pipeline construction project performance.
Pearson’s correlation analysis was carried out to examine the association between the variables monitoring and evaluation and Mombasa- Nairobi Pipeline construction project performance.

3.8 Operationalization of Variables.

Table 3.3 present the Operationalization of the variables. This is done by presenting the research objectives, the research independent variables, measurement, the instrument of data collection and data analysis techniques
Table 3.4 Operationalization of Variables

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Operational Definition of Variables</th>
<th>Variables</th>
<th>Indicators</th>
<th>Measurement</th>
<th>Data Collection</th>
<th>Scale</th>
<th>Data analysis Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine the influence of monitoring and evaluation feedback on performance of Mombasa-Nairobi Pipeline construction project.</td>
<td>Independent Variable monitoring and evaluation feedback</td>
<td>-Coordination -Decision Making -Share Ideas -Governance</td>
<td>Extent of monitoring and evaluation feedback influence performance of Mombasa-Nairobi Pipeline construction project</td>
<td>Questionnaire</td>
<td>Ordinal</td>
<td>Means, standard deviation and Percentages -Correlation -Regression</td>
<td></td>
</tr>
<tr>
<td>To examine the influence of training and development in monitoring and evaluation on performance of Mombasa-Nairobi Pipeline construction project.</td>
<td>Independent Variable Training and development in monitoring and evaluation</td>
<td>-Skills gained -Knowledge level -Expertise</td>
<td>To what extent training and development in monitoring and evaluation influence performance of Mombasa-Nairobi Pipeline construction project</td>
<td>Questionnaire</td>
<td>Ordinal</td>
<td>Frequencies, Means and Percentages -Correlation -Regression</td>
<td></td>
</tr>
<tr>
<td>To establish the influence of monitoring and evaluation communication on performance of Mombasa-Nairobi Pipeline construction project.</td>
<td>Independent Variable monitoring and evaluation communication</td>
<td>-Error Correction -Deviation control</td>
<td>Extent to which monitoring and evaluation communication influence performance of Mombasa-Nairobi Pipeline construction project</td>
<td>Questionnaire</td>
<td>Ordinal</td>
<td>Frequencies, Means and Percentages</td>
<td></td>
</tr>
<tr>
<td>To assess the influence</td>
<td>Independent Variable</td>
<td>-Budget</td>
<td>Extent to which</td>
<td>Questionnaire</td>
<td>Ordinal</td>
<td>Means and</td>
<td></td>
</tr>
<tr>
<td>of resource allocation in monitoring and evaluation on performance of Mombasa- Nairobi Pipeline construction project.</td>
<td>Variable resource allocation on monitoring and evaluation</td>
<td>adequacy - Adequate finance - Efficient resource distribution - Competency of human resource</td>
<td>resource allocation on monitoring and evaluation influence performance of Mombasa-Nairobi Pipeline construction project</td>
<td></td>
<td>Percentages Frequencies, Means and Percentages correlation, Means and Percentages -Correlation -Regression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The purpose of this research is to determine influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa- Nairobi Pipeline construction project.</td>
<td>Dependent variable Performance of Pipeline construction project</td>
<td>-Completion rate -Completion within Budget -Meet Project Specifications</td>
<td>Level of Project success/perform ance</td>
<td>Questionnaire</td>
<td>Ordinal Means, standard deviation and Percentages -Correlation -Regression</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.9 Ethical Consideration

The study did not attempt to infringe on the respondents’ rights by treating them fairly and cautiously. The researcher also explained the purpose of the study to the respondents and how the information they would give would be used. This however was done with caution by assuring that the given information was used for the purpose of achieving the research objective. The researcher ensured that other scholars work was acknowledged and referenced. Any personal information was kept strictly confidential. Respondents’s rights to decline to fill the questionnaire was also respected.
3.10 Chapter Summary

The research adopted descriptive research design, it asked the respondents about the influence of Monitoring and Evaluation on performance of Mombasa-Nairobi pipeline construction project. The target population were Kenya Pipeline Company personnel working at Pipeline construction project whereby a sample of 124 personnel were selected through stratified sampling to take part in this survey. Validity and reliability of the study was assured by use of Cronbach Alpa of not less than 0.70. The data collected was analysed using STATA tool.
4.1 Introduction

This chapter presents the data analysis, presentation interpretation and discussion of findings of the study that focused on the influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa- Nairobi Pipeline construction project.

4.1.1 Response Rate

The researcher administered questionnaires to 124 respondents who formed the study sample size as shown in Table 4.1 below.

Table 4.1 Response Rate

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returned questionnaires</td>
<td>118</td>
<td>95%</td>
</tr>
<tr>
<td>Unreturned questionnaires</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the table, a total of 118 respondents filled in and returned the questionnaires on time for data analysis. This constituted to 95% response rate. According to Mugenda and Mugenda (2003) a response rate above 70% is very good. This also agrees with Barbie (2008) that a response rate greater than 70% is very good. This implies that based on this assertion, the response rate in this study was good enough. The total response was analyzed by the use of SPSS and presented in tables.
4.2 Demographic Information

The researcher sought to establish the general information of the respondents since it forms the basis under which the study accesses the relevant information. The general information captured the respondent’s gender, age, highest level of education/professional qualification reached and number of years worked in the organization.

4.2.1 Gender of the sampled workers

The study sought to know the gender of respondents in the Mombasa- Nairobi Pipeline construction project and from the findings, the study found that the total male respondents were 67 and female 51 representing 56% and 44% respectively. This information shows that there was gender balance.

4.2.2 Age of the respondents

The study sought the age of respondents involved in the Mombasa- Nairobi Pipeline construction project.

Table 4.2 shows the age bracket of employees in percentage
Table 4.2: Age of the respondents

<table>
<thead>
<tr>
<th>Age of the respondents</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-40 yrs</td>
<td>51</td>
<td>43</td>
</tr>
<tr>
<td>41-50 yrs</td>
<td>32</td>
<td>27</td>
</tr>
<tr>
<td>20-30 yrs</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>51 and above</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>118</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The study revealed that majority of the employees 43% were aged between 31-40 years. On the other hand, 27% of the employees were aged between 45-50 years while 19% of the respondents were aged between 20-30 years. Additionally, 11% of the respondents indicated to be aged between 51 years and above. This information shows that employees in the Mombasa-Nairobi Pipeline construction project under study were well distributed in terms of their ages. It is thus important that those employees could effectively respond to issues on influence of monitoring and evaluation on project performance in State Corporation.

4.2.3 Level of education

The study requested the respondents to indicate their highest level of education. The results are presented in Table 4.3.
Table 4.3: Highest level of education

<table>
<thead>
<tr>
<th>Respondents highest level of education</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>53</td>
<td>45</td>
</tr>
<tr>
<td>Diploma</td>
<td>32</td>
<td>27</td>
</tr>
<tr>
<td>Degree</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100</td>
</tr>
</tbody>
</table>

From the findings, majority of the respondents 45% had attained Certificate level of education, 27% of the respondents had Diploma level of education while 19% of the respondents indicated to have attained a Degree level of education, 9% of the respondents indicated post graduate level of education. This showed that all the respondents were well educated and therefore could understand the influence of monitoring and evaluation on project performance in State Corporation.

4.2.4 Number of Years while involved in Pipeline Construction

The study also sought to determine the number of years worked by the respondents in the pipeline construction. The results are presented in Table 4.5
Table 4.4: Number of Years Worked in Pipeline Construction

<table>
<thead>
<tr>
<th>No. of Years</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 to 9 years</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>9 to 12 years</td>
<td>41</td>
<td>35</td>
</tr>
<tr>
<td>Above 12 years</td>
<td>21</td>
<td>17</td>
</tr>
<tr>
<td>Less than 3 years</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100</td>
</tr>
</tbody>
</table>

From table 4.5, the researcher noted that 24% had served in the pipeline construction for a period between 3-9 years, 35% 9-12 years, 17% above 12 years and 24% less than 3 years. This showed that the respondents had enough exposure to monitoring and evaluation on project. This exposure is an indicator that there is enough staff experienced to really understand the monitoring and evaluation on projects to give reliable information.

4.3 Monitoring and Evaluation feedback and Mombasa- Nairobi Pipeline Construction Project

The study sought to determine the extent to which monitoring and evaluation feedback influence performance of Mombasa- Nairobi pipeline construction Project and results presented in Table 4.5.
4.3.1 Monitoring and Evaluation feedback report

The study sought to examine the extent to which monitoring and evaluation feedback report influence performance of Mombasa-Nairobi pipeline construction project

Table 4.5: Monitoring and Evaluation feedback report

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Large Extent</td>
<td>53</td>
<td>45</td>
</tr>
<tr>
<td>Large Extent</td>
<td>20</td>
<td>38</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>45</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100</td>
</tr>
</tbody>
</table>

From the findings, a majority 45% of the respondents indicated that monitoring and evaluation feedback report influence performance of Mombasa-Nairobi pipeline construction project to a Very large extent. Most 38% of the respondents indicated that monitoring and evaluation feedback report influence performance of Mombasa-Nairobi pipeline construction project to a large extent while 17% of the respondents indicated that monitoring and evaluation feedback report influence performance of Mombasa-Nairobi pipeline construction project to a moderate extent. Respondents explained that monitoring and evaluation feedback report has been a good management tool which when used properly; provide continuous feedback on the project performance as well assist in the identification of potential successes and constraints to facilitate timely decisions. This implies that feedback in monitoring and evaluation results are integral parts of the evaluation cycle that contributes to project performance.
4.3.2 Monitoring and Evaluation in Co-ordination

The study sought to know the extent to which monitoring and evaluation in coordination influence performance of Mombasa- Nairobi pipeline construction Project.

Table 4.6: Monitoring and Evaluation in coordination

<table>
<thead>
<tr>
<th>Statement Monitoring and evaluation in coordination</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>67</td>
<td>57</td>
</tr>
<tr>
<td>Large extent</td>
<td>31</td>
<td>26</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100</td>
</tr>
</tbody>
</table>

From the findings, majority 57% of the respondents indicated that monitoring and evaluation in coordination influence performance of Mombasa- Nairobi pipeline construction Project to a very large extent, 26% indicated to a to a large extent while 17% of the respondents indicated to a moderate extent. The respondents explained that monitoring and evaluation in coordination enhanced determination and implementation of the project’s M&E strategy and approach, updating project monitoring frameworks and maintaining comprehensive and realistic indicators. This implies that monitoring and evaluation in coordination influence performance of projects.
4.3.3 Monitoring and Evaluation feedback influence performance

The study sought the extent to which monitoring and evaluation feedback influence performance of Mombasa- Nairobi pipeline construction Project. The response is presented in table 4.7.

<table>
<thead>
<tr>
<th>Statement on Monitoring and evaluation feedback influence performance</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion of project coordination</td>
<td>4.51</td>
<td>0.43</td>
</tr>
<tr>
<td>The project experience transparency</td>
<td>4.79</td>
<td>0.70</td>
</tr>
<tr>
<td>There is enhancement of accountability minimizing project financial mismanagement</td>
<td>4.93</td>
<td>0.07</td>
</tr>
<tr>
<td>The feedbacks from monitoring and evaluation enhance project decision making</td>
<td>4.82</td>
<td>0.63</td>
</tr>
<tr>
<td>There is sharing of ideas on management of project risks</td>
<td>4.55</td>
<td>0.58</td>
</tr>
</tbody>
</table>

From the findings, majority of the respondents indicated that due to monitoring and evaluation feedback there is enhanced accountability minimizing project financial mismanagement, enhanced project decision making and the project experience transparency to a very large extent M=4.93, 4.82 and 4.79. Most of the respondents indicated that due to monitoring and evaluation feedback there is sharing of ideas on management of project risks and promotion of project coordination to a very large extent M= 4.55 and 4.51. This implied that offering feedbacks after monitoring and evaluation exercise influence achievement of project goals.
4.4 Training and development in Monitoring and Evaluation

The study sought to establish the influence of training and development in monitoring and evaluation on performance of Mombasa-Nairobi pipeline construction Project.

4.4.1 Project team training in Monitoring and Evaluation

The respondents were requested to indicate the extent to which project team training in monitoring and evaluation influence performance of Mombasa-Nairobi pipeline construction Project. The responses are provided in Table 4.8.

<table>
<thead>
<tr>
<th>Statement on Project team training in monitoring and evaluation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>76</td>
<td>64</td>
</tr>
<tr>
<td>Large extent</td>
<td>42</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100</td>
</tr>
</tbody>
</table>

From the findings, majority 64% of the respondents indicated that project team training in monitoring and evaluation influence performance of the project to a very large extent. Most 36% of the respondents indicated that project team training in monitoring and evaluation influence performance to a large extent.
4.4.2 Influence of organizational culture change on project performance

The study sought to know the extent to which organizational culture change in monitoring and evaluation influence performance of Mombasa–Nairobi Pipeline project and results presented in Table 4.9.

Table 4.9: Influence of organizational culture change on project performance

<table>
<thead>
<tr>
<th>Statement on organizational culture change influence construction</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and development of the project staff to acquire skills and knowledge on how to operate the project</td>
<td>4.84</td>
<td>0.75</td>
</tr>
<tr>
<td>Providing support and strengthening of M &amp; E team</td>
<td>4.85</td>
<td>0.83</td>
</tr>
<tr>
<td>Project staff on the project are given clear job allocation and designation be fitting their project skill</td>
<td>4.92</td>
<td>0.85</td>
</tr>
<tr>
<td>Project staff are adequately trained to reduce occurrence of errors in projects</td>
<td>4.36</td>
<td>0.35</td>
</tr>
<tr>
<td>Employees gain expertise accomplishing tasks within time allocated</td>
<td>4.21</td>
<td>0.30</td>
</tr>
<tr>
<td>Training project staff on appropriate action to take incase deviation occur</td>
<td>4.90</td>
<td>0.88</td>
</tr>
<tr>
<td>Creating employees awareness of project importance</td>
<td>4.66</td>
<td>0.65</td>
</tr>
</tbody>
</table>
From the findings, majority of the respondents indicated that project staff are given clear job allocation and designation befitting their project skill, training project staff on appropriate action to take incase deviation occur and providing support and strengthening of M & E team influence performance of project to a very large extent M= 4=92, 4.90 and 4.85. most of the respondents indicated that training and development of the project staff to acquire skills and knowledge on how to operate the project and creating employee’s awareness of project importance influence performance of project to a very large extent M=4.84 and 4.66. Most of the respondents indicated that Project staff are adequately trained to reduce occurrence of errors in projects and Employees gain expertise accomplishing tasks within time allocated thus influencing performance of project to a large extent M=4.36 and 4.21.

This clearly implied that training of project team in monitoring and evaluation of the construction project influence achievement of the project success.

4.4.3 Monitoring and Evaluation Communication

Table 4.10 presents the respondents response on the extent to which monitoring and evaluation communication influence performance of Mombasa- Nairobi pipeline construction Project.
Table 4. 10: Monitoring and Evaluation Communication influence performance of Project

<table>
<thead>
<tr>
<th>Statement</th>
<th>Monitoring and evaluation</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td></td>
<td>85</td>
<td>72</td>
</tr>
<tr>
<td>Large extent</td>
<td></td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>Moderate extent</td>
<td></td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>118</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the findings, majority 72% of the respondents indicated that monitoring and evaluation communication influence performance of the project to a very large extent. Most 21% of the respondents indicated that monitoring and evaluation communication influence performance of project to a large extent while 7% of the respondents indicated to a moderate extent. Respondents explained that there are regular communication reports, fact sheets and information sheets for the Project Management Team. This implies that Monitoring, Reporting and Communications of the project are done to ensuring improved project performance.

4.4.4 Error correction in Monitoring and Evaluation influence performance

The study investigated on the extent to which error correction in monitoring and evaluation influence performance of Mombasa- Nairobi pipeline construction Project and results presented in Table 4.11.
Table 4.11: Error correction in Monitoring and Evaluation influence performance

<table>
<thead>
<tr>
<th>Statement on extent Error correction in monitoring and evaluation influence performance</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very large extent</td>
<td>118</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100</td>
</tr>
</tbody>
</table>

From the findings, all the respondents indicated that error correction in monitoring and evaluation influence performance of the project to a very large extent. Respondents explained that staff are adequately trained to reduce occurrence of errors in projects and to identify error and escalate them as appropriate. This implies that error correction in monitoring and evaluation influence performance of project.

4.4.5 Monitoring and Evaluation Communication influence performance of the project

The study investigated the extent to which monitoring and evaluation communication influence performance of Mombasa- Nairobi pipeline construction Project and results presented in Table 4.12.
Table 4. 12: Monitoring and Evaluation Communication influence performance of the project

<table>
<thead>
<tr>
<th>Statement on monitoring and evaluation communication influence performance of the project</th>
<th>Mena</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and evaluation report indicate correction measure to be taken to ensure project is on the right track</td>
<td>4.67</td>
<td>0.69</td>
</tr>
<tr>
<td>Communication during monitoring promote project control</td>
<td>4.50</td>
<td>0.56</td>
</tr>
<tr>
<td>Identification of deviation when the project is going off the track</td>
<td>4.60</td>
<td>0.71</td>
</tr>
<tr>
<td>There is increase in project auditing minimizing risks</td>
<td>4.64</td>
<td>0.59</td>
</tr>
<tr>
<td>Increase in project governance</td>
<td>4.62</td>
<td>0.60</td>
</tr>
<tr>
<td>Provision of information on where the project is at any given time relative to respective targets and outcomes</td>
<td>4.54</td>
<td>0.50</td>
</tr>
</tbody>
</table>

From the findings, majority of the respondents indicated that monitoring and evaluation report indicate correction measure to be taken to ensure project is on the right track, there is increase in project auditing minimizing risks and increase in project governance to a very large extent M=4.67, 4.64 and 4.62. Most of the respondents indicated that provision of information on where the project is at any given time relative to respective targets and outcomes and the identification of deviation when the project is going off the track influence performance of Mombasa- Nairobi pipeline construction project to a very large extent M=4.60 and 4.54. Most of the respondents indicated that communication during
monitoring promote project control deviation thus influencing project performance to a very great extent M=4.50.

4.5 Resource allocation on Monitoring and Evaluation

The study sought to assess the influence of resource allocation on monitoring and evaluation on monitoring and evaluation on monitoring and evaluation on performance of Mombasa –Nairobi Pipeline.

4.5.1 Project finance utilization under monitoring and evaluation

The study investigated the extent to which project finance utilization under monitoring and evaluation influence performance of Mombasa- Nairobi pipeline construction Project. The results presented in table 4.13

<table>
<thead>
<tr>
<th>Statement on Project finance utilization under monitoring and evaluation</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Large Extent</td>
<td>84</td>
<td>71</td>
</tr>
<tr>
<td>Large Extent</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>118</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the findings, majority 71% of the respondents indicated that project finance utilization under monitoring and evaluation influence performance of the project to a very
large extent. Most 29% of the respondents indicated that finances utilization under monitoring and evaluation influence project performance to a large extent.

4.5.2 Resource efficient distribution influence

Table 4.14 shows the respondents response on the extent to which resource efficient distribution under monitoring and evaluation influence performance of Mombasa-Nairobi pipeline construction Project.

Table 4.14 Resource Efficient Distribution

<table>
<thead>
<tr>
<th>Statement</th>
<th>Resource Efficient Distribution under monitoring and evaluation</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Large Extent</td>
<td></td>
<td>104</td>
<td>88</td>
</tr>
<tr>
<td>Large Extent</td>
<td></td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>118</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the findings, majority 88% of the respondents indicated that resource efficient distribution under monitoring and evaluation influence project performance to a very large extent while 12% of the respondents indicated influence to a large extent.
4.5.3 Resource allocation on Monitoring and Evaluation feedback influence

Table 4.15 shows the respondents response on the extent to which resource allocation on monitoring and evaluation feedback influence performance of Mombasa- Nairobi pipeline construction Project.
### Table 4.15: Resource allocation on Monitoring and Evaluation Feedback

<table>
<thead>
<tr>
<th>Statement on resource allocation on monitoring and evaluation feedback</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficient resource allocation on monitoring and evaluation in project activities</td>
<td>4.77</td>
<td>0.63</td>
</tr>
<tr>
<td>Ensure budget adequacy</td>
<td>4.86</td>
<td>0.88</td>
</tr>
<tr>
<td>Adequate project team members with relevant project skills</td>
<td>4.06</td>
<td>0.21</td>
</tr>
<tr>
<td>Enhance resource planning</td>
<td>4.69</td>
<td>0.71</td>
</tr>
<tr>
<td>Control project costs on project activities</td>
<td>4.73</td>
<td>0.76</td>
</tr>
</tbody>
</table>

From the findings majority of the respondents indicated that ensuring budget adequacy, efficient resource allocation on monitoring and evaluation controlling project costs on project activities influence performance of the project to a very large extent $M = 4.86$, 4.77 and 4.73. Most of the respondents indicated that enhancing resource planning and adequate project team members with relevant project skills influence project performance to a very large extent $M = 4.69$ and 4.56.

### 4.6 Inferential Statistics

The independent variables in this study included monitoring and evaluation feedback, training and development in M&E, monitoring and evaluation Communication and resource allocation on monitoring and evaluation while dependent variable is the project performance.

### 4.6.1 Correlation Analysis

The study undertook correlation matrix analysis to examine the association between monitoring and evaluation feedback, training and development in M&E, monitoring and evaluation Communication and resource allocation on monitoring and evaluation.
evaluation Communication, resource allocation on monitoring and evaluation and project performance and presented in Table 4.16. The correlation factor ranged from \(-1 \leq r \geq 1\). The acceptance confidence level was 95% or significance level of 0.05.

Table 4.16: Correlation of the study variables

<table>
<thead>
<tr>
<th>Project performance</th>
<th>Monitoring and evaluation</th>
<th>Training and development in M&amp;E</th>
<th>Monitoring and evaluation on monitoring and evaluation on monitoring allocation on monitoring and evaluation</th>
<th>Resource allocation on monitoring and evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project performance</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.002</td>
<td>.498 *</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Monitoring and evaluation feedback</td>
<td>Pearson Correlation</td>
<td>.001</td>
<td>.347 *</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.003</td>
<td>.763</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Training and development in M&amp;E</td>
<td>Pearson Correlation</td>
<td>.688*</td>
<td>.078</td>
<td>.211</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.001</td>
<td>.604</td>
<td>.155</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Monitoring and evaluation Communication</td>
<td>Pearson Correlation</td>
<td>.717 *</td>
<td>.253</td>
<td>.158</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.02</td>
<td>.001</td>
<td>.289</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
There was a significant, strong and positive correlation between monitoring and evaluation feedback and the projects performance as indicated by r= 0.498. The correlation was statistically significant P=0.01<0.05 at 95% confidence level. The study found that there existed a significant, positive correlation between training and development in M&E and projects performance with a correlation coefficient r=0.347, P=0.003<0.05. This implied that there was a strong association between training and development in M&E and performance of the projects.

There also existed a significant, strong and positive correlation between, monitoring and evaluation Communication and projects performance with a correlation coefficient factor r=0.688, P=0.001<0.05. This implies that there existed a strong association between, monitoring and evaluation Communication and projects performance. The correlation results indicated that there existed a strong, significant and positive correlation between resource allocation on monitoring and evaluation and projects performance as indicated by a correlation coefficient r=0.717, P= 0.02<0.05. This implies that resource allocation on monitoring and evaluation activities would results into improvement of projects.

4.7 Regression Analysis

The study conducted regression analysis to examine whether there exists a relation between monitoring and evaluation and project performance.
4.8. Model Summary

The model summary results in table 4.17 was used to test whether there existed significant variation between independent variables and dependent variable. It was also used to test the proportion variation of independent variables on dependent variable.

Table 4. 17: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.779a</td>
<td>.594</td>
<td>.526</td>
<td>.56895</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), monitoring and evaluation feedback, training and development in M&E, monitoring and evaluation Communication and resource allocation on monitoring and evaluation.

b. Dependent variable project performance

R squared 0.594 indicated that there existed a variation of 59.4% in dependent variable due to change in independent variable. Adjusted R squared is called the coefficient of determination and indicate proportion change in dependent variable due to change in independent variable. This implied that there was proportion variation of 52.6% of project performance due to influence of projects monitoring and evaluation including monitoring and evaluation feedback, training and development in M&E, monitoring and evaluation Communication and resource allocation on monitoring and evaluation.
4.8.1 ANOVA

Result in Table 4.18 indicated that the Total variance (35.585) was the difference into the variance which can be explained by the independent variables (Model) and the variance which was not explained by the independent variables (Error).

Table 4. 18: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8.780</td>
<td>6</td>
<td>1.195</td>
<td>9.838</td>
<td>.001b</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>111</td>
<td>.505</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65.655</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), monitoring and evaluation feedback, training and development in M&E, monitoring and evaluation Communication and resource allocation on monitoring and evaluation.

b. Dependent variable project performance

The study established that there existed a significant goodness of fit of the model \( Y_i = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \). Based on the findings, in Table 4.10 the results indicate the \( F_{\text{Cal}} = 9.838 > F_{\text{Cri}} = 6.478 \), \( P=0.001<0.05 \). This implies that there was a goodness of fit of the model fitted for this study: \( Y = 4.210 + 0.653X_1 + 0.430X_2 + 0.535X_3 + 0.261X_4 + \varepsilon \)
4.8.2 Coefficient Analysis

From the results on table 4.19, \( \beta_{0} \) 4.210 represented the constant which predicted value of projects performance while monitoring and evaluation feedback, training and development in M&E, monitoring and evaluation Communication and resource allocation on monitoring and evaluation were constant at zero (0).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.210</td>
<td>.359</td>
<td>9.779</td>
<td>.000</td>
</tr>
<tr>
<td>Monitoring and evaluation feedback</td>
<td>.653</td>
<td>.716</td>
<td>.415</td>
<td>12.279</td>
</tr>
<tr>
<td>Training and development in M&amp;E</td>
<td>.430</td>
<td>.145</td>
<td>.317</td>
<td>11.396</td>
</tr>
<tr>
<td>1 Monitoring and evaluation</td>
<td>.535</td>
<td>.161</td>
<td>.493</td>
<td>10.246</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource allocation on monitoring and</td>
<td>.261</td>
<td>.937</td>
<td>.189</td>
<td>7.527</td>
</tr>
<tr>
<td>evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a. Predictors: (Constant), monitoring and evaluation feedback, training and development in M&E, monitoring and evaluation Communication and resource allocation on monitoring and evaluation.

b. Dependent variable project performance

The optimal regression model is therefore:

\[ Y = 4.210 + 0.653X_1 + 0.430X_2 + 0.535X_3 + 0.261X_4 + e \]

Regression results revealed that monitoring and evaluation feedback has significance and positive influence on project performance as indicated by \( \beta_1 = 0.653 \), \( p = 0.001 < 0.05 \), \( t = 12.279 \). The implication is that an increase in monitoring and evaluation feedback lead to an increase in projects performance by \( \beta_1 = 0.653 \). This implied that effective monitoring and evaluation feedback would lead to highly performing projects. Regression results revealed that training and development in M&E has a significance influence on projects performance as indicated by \( \beta_2 = 0.430 \), \( p = 0.014 < 0.05 \), \( t = 11.396 \). This implied that an increase in training and development in M&E would lead to an increase in projects performance by \( \beta_2 = 0.430 \). This implied that enhancement of training and development in M&E would lead to well performance in project.

From the regression results, the study revealed that there existed a significant positive relationship between monitoring and evaluation communication and performance in project as indicated by \( \beta_3 = 0.535 \), \( p = 0.003 < 0.05 \), \( t = 7.527 \). The implication is that an increase in monitoring and evaluation communication would lead to increase in
performance in project by $\beta_3 = .535$. This implied that effective monitoring and evaluation communication would lead to performance in project. The regression findings further indicated that there existed a significant relationship influence of resource allocation on monitoring and evaluation and the project performance as indicated by $\beta_4 = 0.261$, $p=0.002>0.05$, $t=7.527$. This implied that an increase in resource allocation on monitoring and evaluation would led to increase in project performance as indicated by $\beta_4 = 0.261$. This implied that there existed a significant positive relationship between adequate resource allocation on monitoring and evaluation and project performance.
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter describes the summary of findings from the study, conclusions, and recommendations of the study which was to determine influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa-Nairobi Pipeline construction project.

5.2 Summary of Study Findings
Monitoring and evaluation has been found to influence project success. The summary of the findings was presented in this section based on the research objectives.

5.2.1 Monitoring and Evaluation feedback report and pipeline construction project performance
The study established that monitoring and evaluation feedback report influence performance of Mombasa- Nairobi pipeline construction project to a large extent. The study revealed that monitoring and evaluation feedback report has been a good management tool which when used properly; provide continuous feedback on the project performance as well assist in the identification of potential successes and constraints to facilitate timely decisions. The finding concurred with Ivanceh (2003) who asserted that monitoring feedback reports are utilized to improve project effectiveness and promote
achievement of project success. From the findings, monitoring and evaluation in coordination influence performance of Mombasa-Nairobi pipeline construction Project to a very large extent. This is in line with Lahey (2009), who stated that effective feedback contributes to improving development policies, programs and practices by providing policymakers with the relevant evaluation information for making informed decisions. The study established that monitoring and evaluation in coordination influence performance of projects. It was revealed that due to monitoring and evaluation feedback there is enhanced accountability minimizing project financial mismanagement, enhanced project decision making and the project experience transparency. Due to monitoring and evaluation feedback there is sharing of idea management of project risks and promotion of project coordination. The findings were supported by Ivanceh (2003), who indicated that monitoring and evaluation has become an expected and necessary component of any development program or project.

5.2.2 Monitoring and Evaluation Training and pipeline construction project performance

The study established that project team training in monitoring and evaluation influence pipeline construction project performance of the project to a very large extent. This implies that project team training in monitoring and evaluation influence project performance. This is line with Mwani (2005), who stated that the organizations support adequately training the field staff involved in monitoring and evaluation through offer adequate training for the requisite skills. From the findings, majority of the respondents
indicated that project staff are given clear job allocation and designation be fitting their project skill, training project staff on appropriate action to take incase deviation occur and providing support and strengthening of M & E team influence performance of pipeline construction project.

Training and development of the project staff to acquire skills and knowledge on how to operate the project and creating employees awareness of pipeline construction project importance and project staff being adequately trained to reduce occurrence of errors in projects and employees gaining expertise accomplishing tasks within time allocated influence performance of pipeline construction project. The findings were supported by Gikonyo (2008) who indicated that an increase in training on M&E led to positive M&E implementation status and achieving project intended outcome.

5.2.3 Monitoring and Evaluation Communication and pipeline construction project performance

The study established that monitoring and evaluation communication influence performance of the project to a very large extent. This concurred with Ben, (2002), who indicated that the purpose of a systematic and routine collection of information from projects and programs is to learn from experiences to improve practices and activities in the future to achieve expected project outcomes. Error correction in monitoring and evaluation influence performance of the pipeline construction project to a very large extent. Monitoring and evaluation report indicate correction measure to be taken to
ensure project is on the right track, increase in project auditing minimizing risks and increase in project governance, provision of information on where the project is at any given time relative to respective targets and outcomes influence performance of Mombasa- Nairobi pipeline construction project. Identification of deviation when the project is going off the track and communication during monitoring promote project control deviation thus influencing project performance. This is in line with John and Khilesh, (2008) who stated that effective Monitoring and Evaluation communication is usually one of the ingredients of good project performance.

5.2.4 Resource allocation on under Monitoring and Evaluation and pipeline construction project performance

The study established that project finance utilization under M&E influence performance of the pipeline construction project to a very large extent. Resource efficient distribution under monitoring and evaluation influence performance of pipeline construction project to a very great extent. The study established that ensuring budget adequacy, efficient resource allocation on monitoring and evaluation in project activities and controlling pipeline construction project costs on project activities influence performance of the pipeline construction project. Enhancing resource planning and adequate project team members with relevant project skill influence performance of the pipeline construction project to a large extent. The results were similar to Ivanceh, (2003) who stated that resource allocation on monitoring and evaluation activities has become an expected and necessary component of any development program or project.
From a Pearson Moment Correlation analysis which was done, there was a significant, strong and positive correlation between monitoring and evaluation feedback and the projects performance. The correlation was statistically significant. The study established a significant, strong positive association between training and development in M&E and performance of the pipeline construction projects. There also existed a significant, strong and positive correlation between monitoring and evaluation Communication and project performance. A significant positive correlation between resource allocation on monitoring and evaluation and project performance exist. Regression results revealed that monitoring and evaluation feedback, training and development, monitoring and evaluation communication and resource allocation on monitoring and evaluation has significant and positive influence on pipeline construction project performance. The findings were supported by John and Khilesh (2008) who indicated that effective monitoring and evaluation of projects is usually one of the ingredients of good project performance as it provides means of accountability, demonstrating transparency to the stakeholders and facilitates, organizational learning through documenting lessons learned in implementation of the projects and incorporating the same in the subsequent project planning and implementation or through sharing experience with other implementers.

5.3 Conclusion
The study concludes that feedback in monitoring and evaluation results are integral parts of the evaluation cycle that contributes to pipeline construction project performance. Monitoring and evaluation in coordination enhances the determining and implementing
the project’s M&E strategy and approach, updating project monitoring frameworks and maintaining comprehensive and realistic indicators.

The study concludes that monitoring and evaluation in coordination enhanced the determining and implementing the pipeline construction project’s M&E strategy and approach, updating project monitoring frameworks and maintaining comprehensive and realistic indicators.

The study concludes that project team training in monitoring and evaluation influence pipeline construction project performance. Training project staff on appropriate action to take incase deviation occur and providing support and strengthening of M & E team and promote acquisition of skills and knowledge on how to operate the project and creating employees awareness of project importance influence performance of Mombasa-Nairobi pipe construction project.

The study concludes that regular communication reports, fact sheets and information sheets for the pipeline construction project Management Team, Monitoring, Reporting and Communications of the pipeline construction project are done to ensuring improved project performance. The study concludes that staff is adequately trained to reduce occurrence of errors in pipeline construction projects and to identify error and escalate them as appropriate.
5.4 Recommendation

The study recommends that the company should enhance effective feedback in order to improving development policies, programs and practices by providing policymakers with the relevant evaluation information for making informed decisions. Management board of Kenya Pipeline Company should enhance monitoring and evaluation feedbacks, enhance capacity and response, engage stakeholders to achieve improvement in monitoring and evaluation and improve success in pipeline construction project.

Monitoring and Evaluation has become a necessary component of any development program or project. The study recommends that the organizations should support adequate training of the field staff involved in monitoring and evaluation through offer of adequate training for the requisite skills.

The study recommends management in public sector to foster a systematic and routine collection of information from projects and programs in order to learn from experiences to improve practices and activities in the future and to have internal and external accountability of the resources used and the results obtained. The study recommends that there should be error correction in monitoring and evaluation in order to influence performance of project. The government should promote formulation and implementing measures that would enhance efficient monitoring and evaluation of government projects to achieve success in project performance in an effort to achieve better development and achieve vision 2030.
The study recommends that there should be effective Monitoring and Evaluation communication as it is one of the ingredients of good project performance. Monitoring and evaluation report promote correction of project errors, increase in project auditing minimizes risks and increase in project governance, identification of deviation influence performance of projects.

5.5 Suggestions for Further Studies

This study contributes to existing theory and practices in project management. The researchers and scholars would gain knowledge on influence of monitoring and evaluation on project performance. The study forms a foundation in which further study can be carried out. Therefore, the study provides foundation and material for further related research. Further studies should be carried out as enlisted in this section.

i. The study determined the influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa- Nairobi Pipeline construction project.

ii. The study recommends that a further study should be carried out to determine factor that influence success in monitoring and evaluation of Mombasa Pipe Construction project in Kenya.

iii. The study recommend that a further study should be carried out to determine challenges affecting training of project teams during monitoring and evaluation and find out whether training of project teams enhance project monitoring and evaluation.
iv. A study should be carried out to determine impact of monitoring and evaluation communication on completion rate of Mombasa-Nairobi Pipeline construction project.

v. The study finally recommends that a study should be carried out to determine impact of resource allocation on monitoring and evaluation and performance of Mombasa-Nairobi Pipeline construction project.
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APPENDICES

Appendix I: Introduction Letter

Andrew Lekamparish
P.O. Box 61130
Nairobi.

Dear Respondent,

RE: COLLECTION OF DATA

I am a Masters student in the Department of Extra Mural Studies at the University of Nairobi. As part of the requirement for the award of the degree, I am expected to undertake a research study on “determine influence of monitoring and evaluation on project performance in State Corporation in Kenya focusing on Mombasa-Nairobi Pipeline construction project”. I’m therefore seeking your assistance to fill the questionnaires attached. The attached questionnaire will take about ten minutes to complete.

Your co-operation will be appreciated.

Yours faithfully,

Andrew Lekamparish
Appendix II: Questionnaires

Instructions: Please do not write your name anywhere on this questionnaire. Read each question carefully and give your honest response. The information provided will be treated with utmost confidentiality. Use a tick (✓) where appropriate.

Section A: General Information

1. Please indicate your gender

   Female [  ]

   Male [  ]

2. Indicate your age bracket

   20-30 yrs [  ]

   31-40 yrs [  ]

   41-50 yrs [  ]

   51 and above [  ]

3. State your highest level of education

   Primary level [  ]

   Secondary level [  ]

   College [  ]

   University [  ]

   Postgraduate [  ]
4. For how long have you been involved in Pipeline Construction at KPC?

   Less than 3 years [   ]
   3 to 9 years [   ]
   9 to 12 years [   ]
   Above 12 years [   ]

**Section B. Performance of Mombasa- Nairobi Pipeline construction project.**

**Part I. Monitoring and Evaluation feedback and Mombasa- Nairobi Pipeline Construction Project.**

5. To what extent does monitoring and evaluation feedback report influence performance of Mombasa- Nairobi pipeline construction Project?

   i. No at all [   ]
   ii. To small extent [   ]
   iii. To a moderate Extent [   ]
   iv. To a large Extent [   ]
   v. To a very large Extent [   ]

Give reason for your answer……………………………………………………………………………………………………

6. To what extent does monitoring and evaluation in coordination influence performance of Mombasa- Nairobi pipeline construction Project?

   i. No at all [   ]
   ii. To small extent [   ]
   iii. To a moderate Extent [   ]
iv. To a large Extent    [   ]

v. To a very large Extent [   ]

Give reason for your answer.................................................................

7. To what extent do monitoring and evaluation feedback influence performance of Mombasa- Nairobi pipeline construction Project? Use a scale of 1 to 5; (1-No at all, 2-to small extent, 3-to a moderate Extent, 4- to a large Extent and 5- to a very large Extent).

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<td>Promotion of project coordination</td>
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<td>The project experience transparency</td>
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<td>There is enhance accountability minimizing project financial mismanagement</td>
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<td>The feedbacks from monitoring and evaluation enhance project decision making</td>
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<td>There is sharing of idea management of project risks</td>
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**Part II: Influence of Training and Development in monitoring and evaluation on Mombasa- Nairobi Pipeline Construction Project**

8. To what extent does project team training in monitoring and evaluation influence performance of Mombasa- Nairobi pipeline construction Project

vi. No at all    [   ]
vii. To small extent [   ]
viii. To a moderate Extent [   ]
ix. To a large Extent [   ]
x. To a very large Extent [   ]

Give reason for your answer……………………………………………………………………..

9. To what extent do organizational culture change influence performance of ICT Transformational Project Performance? Use a scale of 1 to 5; (1-No at all, 2-to small extent, 3-to a moderate Extent, 4- to a large Extent and 5- to a very large Extent).

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<td>Training and development of the project staff to acquire skills and knowledge on how to operate the project</td>
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<td>Providing support and strengthening of M &amp; E team</td>
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<td>Project staff on the project are given clear job allocation and designation be fitting their project skill</td>
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<td>Project staff are adequately trained to reduce occurrence of errors in projects</td>
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<td>Employees gain expertise accomplishing tasks within time allocated</td>
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<td>Training project staff on appropriate action to take incase deviation occur</td>
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<td>Staff gain knowledge on</td>
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<td>Project employees with awareness of project importance</td>
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Part III. Monitoring and Evaluation Communication and Mombasa- Nairobi Pipeline Construction Project.

10. To what extent does monitoring and evaluation communication influence performance of Mombasa- Nairobi pipeline construction Project?

vi. No at all [ ]

vii. To small extent [ ]

viii. To a moderate Extent [ ]

ix. To a large Extent [ ]

x. To a very large Extent [ ]

Give reason for your answer……………………………………………………………………

11. To what extent does error correction in monitoring and evaluation influence performance of Mombasa- Nairobi pipeline construction Project?

xi. No at all [ ]

xii. To small extent [ ]

xiii. To a moderate Extent [ ]

xiv. To a large Extent [ ]

xv. To a very large Extent [ ]

Give reason for your answer……………………………………………………………………

7. To what extent do monitoring and evaluation communication influence performance of Mombasa- Nairobi pipeline construction Project? Use a scale of 1 to 5; (1-No at all, 2-to small extent, 3-to a moderate Extent, 4-to a large Extent and 5-to a very large Extent).
Monitoring and evaluation report indicate correction measure to be taken to ensure project is on the right track

Communication during monitoring promote project control deviation

Provide information on Project activities

Identification of deviation when the project if going off the track

There is increase in project auditing minimizing risks

Increase in project governance

Provision of information on where the project is at any given time relative to respective targets and outcomes
Part IV. Resource allocation on monitoring and evaluation and Mombasa- Nairobi Pipeline Construction Project.

12. To what extent does project finance utilization under monitoring and evaluation influence performance of Mombasa- Nairobi pipeline construction Project?

xi. No at all [ ]

xii. To small extent [ ]

xiii. To a moderate Extent [ ]

xiv. To a large Extent [ ]

xv. To a very large Extent [ ]

Give reason for your answer………………………………………………………………………………

13. To what extent does resource efficient distribution in monitoring and evaluation influence performance of Mombasa- Nairobi pipeline construction Project?

xvi. No at all [ ]

xvii. To small extent [ ]

xviii. To a moderate Extent [ ]

xix. To a large Extent [ ]

xx. To a very large Extent [ ]

Give reason for your answer………………………………………………………………………………

7. To what extent do resource allocation on monitoring and evaluation feedback influence performance of Mombasa- Nairobi pipeline construction Project? Use a scale of 1 to 5; (1-No at all,2-to small extent, 3-to a moderate Extent,4- to a large Extent and 5- to a very large Extent).
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<td>activities</td>
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<td>Ensure budget adequacy</td>
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<td>Adequate project team members with relevant project skills</td>
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<td>Enhance resource planning</td>
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<td>Control project costs project activities</td>
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