# FACTORS AFFECTING THE PERFORMANCE OF WATER AND SANITATION PROJECTS IN GARISSA MUNICIPALITY, GARISSA COUNTY, KENYA

**BY**

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## DECLARATION

This is my original work and has not been presented for any academic award in any university.

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Sign …… Date…….

This report has been submitted for examination with my approval as the university supervisor.

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## DEDICATION

To my family: Annah, Christine, Robert and Tabitha

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| | |
|---|---|
| CPC | Community project cycle |
| GOK | Government of Kenya |
| KPIS: | Key performance indicators |
| KWSP | Kenya water and sanitation projects |
| M & E | Monitoring and Evaluation |
| OSM | Organizational strategic management |
| PM | project management |
| PMTT | Project management tools and techniques |
| PPM | project portfolio management |
| PM | Project management |
| SPSS | Statistical package for social sciences |
| SWAP | Sector wide approach |
| WASREB | Water service regulatory board |
| WSBs | Water service board |
| WSTF | Water service trust fund |

## ABSTRACT

This study sought to investigate the factors affecting the performance of water and sanitation projects in Garissa Municipality. The specific objectives were to find out the effect of project planning, expectations of stakeholders, monitoring and evaluation and government policies on the performance of water and sanitation projects in Garissa Municipality. The researcher used descriptive research approach which described the factors and variables of this project. A census approach was used to cover the four wards of Garissa Municipality and covered all the four water and sanitation projects currently in progress. Fifty respondents were chosen where 10 of the local respondents were selected by purposive method and 40 respondents from the other categories were picked by simple random sampling method. Questionnaires were administered to these groups of respondents to represent the entire population. Primary data was collected by the use of self administered questionnaires and researcher administered for the groups that are illiterate especially the members of the local community who may have problems reading and interpreting the questions as expected by the researcher. The collected data was analysed using descriptive statistics and factor analysis for quantitative data, correlation analysis was also carried out on the quantitative data. The researcher used the statistical package for social sciences (SPSS) to process and analyse data. The research results were presented in percentages and tables. The major finding of this study is that planning a project before undertaking it is very important as it determines the entire course of the project. Further, the involvement of stakeholders ensures that the project is implemented in such a way that it satisfies the expectation of the stakeholders. The study therefore recommends that thorough planning of projects should be performed before hand in order to ensure that the project runs without a hitch ones it is initiated. Further, implementation of projects should not only involve the implementers, but the immediate stakeholders as well.

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background to the Study

Performance is a matter not only of what people achieve but how they achieve it. The accomplishment, execution, carrying out, working out of anything ordered or undertaken. High performance results from appropriate behaviour, especially discretionary behaviour, and the effective use of the required knowledge, skills and competencies. Performance management must examine how results are attained because this provides the information necessary to consider what needs to be done to improve those results.

Gray and Larson (2008) noted that organizations are realizing the impact that projects, and therefore project management, can have on their success. A project is a distinct package of scope which when delivered will enable the organization to realize a distinct package of benefits. A project used to be one mechanism that organizations used to deliver benefits, now organizations are managed by project; this has meant the development of project management competency within the organization.

Project management nowadays is regarded as a very high priority as all companies or organisations, whether small or large, are at one time or another involved in implementing new undetakings, innovations and changes. These projects may be individually diverse, however overtime, some tools, management techniques and problem solving approaches have proven themselves to be more rewarding than others in bringing projects to a successful end (Olaf, 2009).

The performance of projects can be measured by key indicators for evaluation. The purpose of Key performance indicators (KPIs) is that clients want their projects delivered: on time, on budget, free from defects, efficiently, right first time, safely, by profitable companies (Johansson et al. 1993). So, Regular clients expect continuous improvement from their Water and Sanitation team to achieve year-on-year: reductions in project costs and time. In addition, the Key Performance Indicators (KPIs) can be used for benchmarking purposes, and will be a key component of any organization move towards achieving best practice.

Clients, for instance, assess the suitability of potential suppliers or contractors for a project, by asking them to provide information about how they response to a range of indicators. Some

information will also be available through the industry's benchmarking initiatives, so clients observe how potential suppliers compare with the rest of industry in a number of different areas. Water and Sanitation Supply chain companies will be able to benchmark their performance to enable them to identify strengths and weaknesses, and assess their ability to improve over time. The KPIs framework consists of seven main groups: time, cost, quality, client satisfaction, client changes, business Performance, health and safety .

According to (Olaf 2009) Projects typically have identifiable phases and each phase has a unique set of challenges for the project manager. These basic project phases can be also identified as major factors influencing the project success. If one of these phases is planned or executed wrongly, the project will have a high probability of failure.

Olaf (2009) indentifies the following factors that influence the performance of projects. They are choosing the right project organization as the first and probably the most important key to success for project management. Therefore a great deal of time should be spent in considering the decision about formation, preparation and initiation of the project organization. Next he notes that a project plan in the beginning is a simple planning tool, however while working on the project it will become one of the most important control instruments and after ending the project it is a measurement of whether the project has reached its goal. Finally, evaluation and control this part keeps the whole project on-track, on time and within budget. Depending on the size of the project, control will be either simple or complex (Olaf, 2009).

Other factors influencing the success of projects include the expectations of the stakeholders, these are the typical groups which could be the customer, sponsor, project team, project office, or anyone who needs project information in order to make decisions and/or contribute to the project processes (Schwalbe and cathy, 2009).

### 1.1.1 Water and Sanitation in Kenya

In Kenya, every citizen has a right to water. The National Water Strategy commits to ensuring that all people are covered by the formal water supply system and that poor Kenyans pay tariffs that they can afford.(GOK 2009).

Water has been identified as the likely cause/trigger of future wars in the next millennium. Water shortage can be a catalytic factor pushing a poverty-stricken community to disaster and conflict. Water is a fundamental basic need for sustaining human economic activities. Availability of

water in the desired quantity and quality, at the right time and place, has been the key to the survival of all civilizations. As human activities expand in scale and diversity, the demands for fresh water resources continue to grow. Fresh water lakes and rivers, springs, fountains, wetlands etc, which are the main sources of water contain an average of 90,000 $m^3$, or just 0.26 percent of total global fresh water reserves.

Garissa is the headquarter of Garissa County of Kenya. The Tana River flows through the town. Most of the town's inhabitants are ethnic Somalis and Pastoralists. Garissa forms a municipality that has four wards. Garissa's landscape is mostly arid, desert terrain.

In this study, factors affecting the performance of water and sanitation projects in the Garissa Municipality will be analyzed. Performance indicators are used to measure performance in the projects. These indicators can then be used for benchmarking purposes, and will be a key component of any organization's move towards achieving best practice in order to overcome performance problem. However, this study aims at identify the factors and attributes affecting the performance of projects in the Garissa Municipality and to obtain main criteria and indicators to measure performance.

### 1.2 Statement of the problem

Failure of any project is mainly related to failure in performance. Moreover, there are many reasons and factors which attribute to such problem. In Kenya, there are many water and sanitation projects that fail in performance. In addition, performance measurement systems are not effective or efficient to overcome such problem.

In Kenya, projects performance problem appears through different directions. There are many that projects fail in time performance, others fail in cost performance and others fail in other performance indicators. In 2006 there were many projects which finished with poor performance because of many evidential reasons such as: obstacles by client, non-availability of materials, roads closure, amendments, additional works, waiting the decision, handing over, variation order, amendments in Bill of Quantity and general delays (UNRWA, 2006&2007).

In addition there are other indicators of performance in the Garissa Municipality such as project managers, coordination between participants, monitoring, feedback and leadership skills. However, there are three important issues related to failures and problems of performance in the Municipality which are political, economic and cultural issues.(UNDP, 2007)

Therefore, this research evaluated the factors affecting the performance of water and sanitation projects in the Garissa Municipality in order to assist stakeholders, local government and the Kenya government to overcome performance problem and to improve performance of their projects. Hence, performance of any water and sanitation projects can be evaluated according to key performance indicators.

### 1.3 Purpose of the study

The purpose of the study is to examine the factors affecting the performance of water and sanitation projects in Garissa Municipality. Data and information on the factors affecting performance of water and sanitation projects and strategies of project management will be generated. Conclusions and recommendations will be documented and disseminated for future use by policy makers, governments and Non –governmental organizations.

### 1.4 Research objectives

#### 1.4.1. General objective

The general objectives of this study were to investigate the factors affecting the performance of water and sanitation projects in Garissa Municipality.

#### 1.4.2 Specific objectives

i) To establish how project planning affects the performance of water and sanitation projects in Garissa Municipality.
ii) To determine the effect of the expectations of the stakeholders on the performance of water and sanitation projects in Garissa Municipality.
iii) To investigate the effect of monitoring and evaluation on the performance of water and sanitation projects in Garissa Municipality.
iv) To explore the effect of government policies on the performance of water and sanitation projects in Garissa Municipality.

### 1.5 Research Questions

The research questions as per the research objectives were as stated below.

i) How does project planning affect the performance of water and sanitation projects in Garissa Municipality?

ii) What is the effect of the expectations of the stakeholders on the performance of the water and sanitation projects in Garissa Municipality?

iii) How does monitoring and evaluation affect the performance of water and sanitation projects in Garissa Municipality?

iv) To what extent do government policies affect the performance of water and sanitation projects in Garissa Municipality?

**1.6 Significance of the study**

The study will enable the policy makers in the ministry of water and the stakeholders of water and sanitation projects in Kenya to review their approaches to issues affecting the water and sanitation projects in order to improve their success in completion and increase their performance and meet the expectations of all the stakeholders.

The findings of this project will be useful to the leaders and management of the Garissa Municipality on how to manage the water and sanitation projects. It will also be useful to the entire country for the management of these projects.

The study will act as a useful source of information for strengthening the operational and managerial capabilities required by a manager to operate and maintain water and sanitation projects according to acceptable norms of quality, continuity, reliability and costs.

Indirectly, the study can be used to improve efficiency in providing adequate and safe drinking water supplies and appropriate sanitation facilities, which forms a sound basis for improvement in community health. And lastly, the study will be used by future scholars and researchers while undertaking related studies in future.

The study is intended to act as an eye-opener and a spring board for future academic and other researches to further carry out research on the factors affecting the performance of water and sanitation projects in the entire country. The researcher will identify possible research gap which future research can be carried on.

This study will be useful to the water and sanitation project administrators and officials in the country, they will get relevant information on what has affected the performance of projects in the country and will be in a position to make informed decisions on upcoming projects, on work-in-progress projects and possibly the stalled projects across the country.

### 1.7 Delimitation of the study

The study was carried out in Garissa Municipality, which is in North-eastern province in Kenya. It focused on the factors affecting the performance of water and sanitation projects in this Municipality. The area of study was limited itself to the four wards of the Garissa Municipality. The study focused on the project officials and administrators, the local residents, and the representatives of Kenya government in the Municipality.

### 1.8 Limitations to the study

The researcher faced the following limitations in the course of this research,

i) Authentic information especially from the project officials for fear of further implications for failure of the projects was had to obtain but the researcher overcome this obstacle by explaining to the officials that the project was purely academic.

ii) Generalization of results from Garissa Municipality was a challenge because the Municipality faces many location negative issues and the projects surveyed seemed too careful with the type of answers that they gave.

### 1.9 Assumption of the study

The study assumed that maximum participation of communities. It is assumed that the sampled respondents will respond more objectively and will be truthful in revealing information regarding performance of water and sanitation projects. It is also assumed that the respondents will genuinely answer questions and finally, that the respondents are knowledgeable in the implementation of water and sanitation projects and will clearly volunteer and articulate the information requested.

### 1.10 Definition of Significant Terms

| | |
|---|---|
| **Strategy** | A plan that is intended to achieve a particular purpose |
| **Management** | The act of running and controlling a business or organization |
| **Investigation** | To carefully examine the facts of a situation |
| **Community** | A group of people; living together, sharing common norms, values, fears and but struggling together to overcome them. |
| **Leadership** | The governance and management of a project. This includes management of project activities, guidance to members as well as conflict management. |

| | |
|---|---|
| **Local politics** | The involvement of politicians, in the activities of the project either directly through of proxy, in advising,, fundraising or participation |
| **Participation** | Involvement in the process of project implementation |
| **Resource** | Financial and human resource, in reference to skills or non- skilled service as well as expertise |

### 1.11 Organization of the Study

This study comprises of five chapters. Chapter one, the introduction, contains background information, the statement of the problem, objectives of the study, research questions, significance of the study, delimitations and limitation of the study, assumption of the study and definition of significant terms. Chapter two reviews information related to the study. Chapter three focuses on the methods of data collection. It covered the research design, target population, sample and sampling techniques, research instrument, validity and reliability of the instruments, data collection procedure and data analysis techniques. Chapter four will present results, data analysis and discussion of the study findings. Chapter five will deal with the summary, conclusions, recommendations and suggestion for further research

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter focused on the literature review on the concepts of performance and on the use of project management tools and technique which included the factors affecting the adoption of these tools by project managers. Thereafter are the research gaps that this study would fill and a summary of reviewed literature. This chapter concluded with the conceptual framework clearly highlighting the dependent and the independent variables.

## 2.2 Theoretical Review

Project management nowadays is regarded as a very high priority as all companies or organisations, whether small or large, are at one time or another involved in implementing new undertakings, innovations and changes. These projects may be individually diverse, however over time, some tools, management techniques and problem-solving approaches have proven themselves to be more rewarding than others in bringing projects to a successful end.( Olaf, 2009).

Additionally to external challenges, project teams are forced on a macro level to deliver satisfying results for internal or external customers and stay within the restrictions of budget, time and resources (quality and quantity). In parallel to these deliverables, executives are also asking the project management on a micro level to ensure the use of modern management tools, such as customizing the project organization to fit the operational style of the project teams and respective team members, informing the executive management about the project's progress on a real-time basis, ensuring that critical task deadlines are met and ensuring that project team members know about and monitor project risk and share accurate, meaningful and timely project documents.

As a result, the thrilling and demanding position of a project manager not only requires a particular set of skills - how to communicate, to control and to motivate people, but also the specific knowledge about tools and techniques required to run a project successfully.

According to Johansson et al. (1993), a process can be defined as the constitution of links between activities and the transformation that takes place within the process. This can include the upstream part of the value chain as a possible recipient of the process output. Therefore, every process has the following characteristics, Definability that it must have clearly defined boundaries, input and output. Order it must consist of activities that are ordered according to their position in time and space.

Customer in which there must be a recipient of the process' outcome, i.e. a customer. Value-adding to be the transformation taking place within the process must add value to the recipient, either upstream or downstream and embededness where a process cannot exist in and of itself; it must be embedded in an organizational structure. ( Olaf, 2009). There is also Cross-functionality a process regularly can, but not necessarily must, span several functions.

A project will deliver business and/or technical objectives, is made up of defined processes & tasks, will run for a set period of time, has a budget and resources. Project Management deals with tracking this process' execution, from a schedule and cost perspective. It includes functions for developing the optimal project schedule, producing a financial model of the project, scheduling and tracking of effort against plan, managing costs against budget, and reporting of status, to name but a few.

Olaf (2009) states that the uniqueness of the deliverable, whether it is a product, service, or result, requires a special approach in that there may not be a pre-existing blueprint for the project's execution and there may not be a need to repeat the project once it is completed. Uniqueness does not mean that there are not similarities to other projects, but that the scope for a particular project has deliverables that must be produced within constraints, through risks, with specific resources, at a specific place, and within a certain period; therefore, the process to produce the deliverable as well as the deliverable itself is unique.

Projects are usually chartered and authorized external to the project organisation by an enterprise, a government agency, a company, a program organisation, or a portfolio organization. (Olaf, 2009)

### 2.2.1 Project Success

Several studies have suggested that the proper use of project management tools and techniques (PMTT) affects the success of a project, while inappropriate use can be counterproductive. Many PMTT are used in different phases of a project, but it is shown that only some of them enhance the success of the project.

The success of a project can be categorized into three major groups: internal factors (times, cost and performance), customer-related factors (satisfaction, actual utilisation and benefits) and organisation related factor (financial and market benefits). In the conceptual phase, two PMTT contribute to positive project success; analogous estimate and communication plan. Significantly contributions to success in the planning phase are those that serve the purpose of developing detailed scopes, schedules or budgets.

PMTT with project success during the execution phase are those that support monitoring and control activities. In the termination phase, cost baseline, WBS, lessons learned and milestone analysis show significant contribution to project success. However, there are many more PMTT used during the different phases because project managers still use PMTT without understanding their impact on project success. It is important the project manager use the PMTT that impact on the success of the project and not only those commonly known or frequently used by others.

When a project is a success it does not necessary mean the tool or technique used will be the best suited with the next project because every project is unique and dependent on its historical and organisational context. Projects are open systems and very much dependent in its surroundings (Engwall, 2003). There is no approach of how to formulate the expected benefits that fits all projects or companies, because every project is unique (Nogeste, 2011).

### 2.2.2 Project portfolio management

When a company has many projects in progress and many project ideas, a project portfolio is a tool to manage all these projects and ideas. There are usually more ideas available for selection that can be undertaken within the physical and financial constraints of the company, so choices must be made in making a suitable project portfolio.

Project Portfolio Management (PPM) is responsible for the project portfolio, with maximising it against corporate objectives, make sure it is balanced and ultimately aligned with the company´s strategy (Bonham, 2004). Strategy can be considered to go through an organisation, linking portfolios and projects in a systematic and hierarchical manner. A strategy is implementing the goals and objectives of a company.

Many possible methodologies can be used in selecting a portfolio but there is no consensus on which are the most effective. It is important every company chose the methodology that suits its culture and allow it to consider the project attributes it believes are the important (Bonham, 2004). An overall balance needs to be achieved between the need to simplify and the need to generate well-founded and logical solutions. It is important the project review process be only for review, and not a platform for micromanaging projects (Bonham, 2004).

### 2.2.3 Prioritizing projects

Most PPM´s use ranking methods, by assigning initiatives and projects scores and put them against each other. The initiative with the highest score is usually approved to proceed.

However, when considering a balanced portfolio, it may require some initiatives with lower rank to proceed, because it may support a long-term balanced strategic direction more (Bonham, 2004). This is the balancing act between prioritising the business strategy, the limiting budget and knowing when it is the right time to start a project. In this balancing act, the projects in progress need to be monitored to make sure they fulfil the expected benefits, or they can be closed. If the corporate strategy has shifted or the project scope has changed, the

project would be considered more risky if it is not satisfying the company's strategy. In the case of a closed project, their remaining capital can be applied to other more beneficial projects at the time.

To make sure an initiation will be reviewed fairly and consistently against other proposals the review process will have to be communicated to the orderers. They need to balance between the corporate culture that encourages innovative ideas and an environment that ensures rigorous strategic assessments. Orderers will be assured their hard work in the initiation phase will get the due diligence it deserves if they know the prioritising of projects process by the PPM. This insurance is important because a project declined by the PPM is definitely closed and will never be seen by the executive review committee.

### 2.3 Performance of Projects

Performance management can be defined as a systematic process for improving organizational performance by developing the performance of individuals and teams. It is a means of getting better results by understanding and managing performance within an agreed framework of planned goals, standards and competency requirements. Processes exist for establishing shared understanding about what is to be achieved, and for managing and developing people in a way that increases the probability that it will be achieved in the short and longer term. It focuses people on doing the right things by clarifying their goals. ( Armstrong, 2009)

Performance management can be described as a continuous self-renewing cycle Planning concluding a performance and development agreement. Acting managing performance throughout the year. Reviewing assessing progress and achievements so that action plans can be prepared and agreed and, in many schemes, performance can be rated.

Performance agreements form the basis for development, assessment and feedback in the performance management process. They define expectations in the form of a role profile that sets out role requirements in terms of key result areas and the competencies required for effective performance. The role profile provides the basis for agreeing objectives and methods of measuring performance and assessing the level of competency reached. The performance agreement incorporates any performance improvement plans that may be necessary, and a

personal development plan. It describes what individuals are expected to do but also indicates what support they will receive from their manager.

It's stated that the performance of any industry is considered as a source of concern to both public and private sector clients. Karim and Marosszeky (1999) studied performance measurement using key performance indicators (KPIs). KPIs enable a comparison between different projects and enterprises to identify the existence of particular patterns. The specialist contractors hoped that the data trends observed will provide insight into certain inefficiencies that are prevalent in the market. They intend to use the data expose these inefficiencies and as a basis for industry development.

Key performance indicators (KPIs) include factors such as time, cost, quality, client satisfaction; client changes, business performance and safety in order to enable measurement of project and organizational performance throughout the any industry. This information can then be used for benchmarking purposes, and will be a key component of any organization move towards achieving best practice. Performance measurement is a current issue in academia, as well as in business community. KPIs are very important in order to deliver value to stakeholders. So, companies must be sure they have right processes and capabilities in place. The KPIs also allow to trace which processes and capabilities must be competitively and distinctive, and which merely need to be improved or maintained.

Performance measurement and its indicators had been studied for several years. Karim Performance measurement is defined as an operational management accounting including financial and non-financial performance indicators. Karim and Marosszeky (1999) stated that performance measurement is a process of re-thinking and re-evaluation of business processes to achieve significant performance improvements of projects. Reichelt and Lyneis (1999) defined performance measurement as a model which treat project as the complex dynamic system.

The key performance indicators are identified as an applicable indication of project and/or company levels. In some cases the company indicator is the average value of that company's project indicators. Its stated that the owner satisfaction for performance can be defined as the gap between what the owner expects and the level of performance they believe is being delivered by the contractors. Performance measurement is a basis for progressive

improvement and monitoring of company productivity. Project performance measurement include time, budget, safety, quality and overall client satisfaction. Thomas (2002) defined performance measurement as monitoring and controlling of projects according to regular basis. Project performance measurement means an improvement of cost, schedule, and quality for design and construction stages. Project performance measurement is related to many indicators such as time, budget, quality, specifications and stakeholders satisfaction. Navon (2005) defined performance measurement as a comparison between the desired and the actual performances.

According to previous studies, concepts and definitions, it can be said that the performance measurement is a process include factors as Key Performance Indicators (KPIs) such as time, cost, quality, client satisfaction; productivity and safety in order to enable measurement of current organizational project performance and to achieve significant performance improvements of future projects.

## 2.4 Empirical Review

### 2.4.1 Project Planning and Performance of projects

A typical description of the project manager goal is to bring a project to completion on time, within the budget cost, and to meet the planned performance or end-product goals (Simpson 1987). This commonly held view of the project manager task is based on the assumption that the performance or end product goals are always clear and well defined in advance. All the project manager has to do is to prepare a solid project plan and follow this plan all the way to success. Although there are some that claim that too much planning can curtail the creativity of the project team, there is no argument that atleast a minimum level of planning is required.

Simpson (1987) states that, although planning does not guarantee project success, lack of planning will probably guarantee failure. However, there are many cases where projects are executed as planned, on time, on budget and achieve the planned performance goals, but turn out to be complete failures because they failed to produce actual benefits to the customer or adequate revenue and profit for the performing organization.

### 2.4.2 Project Planning

Most authors agree that a project is a unique endeavour, a special task that has not been done before. Consequently, it is very difficult or even impossible to know precisely at the initial planning stage what are all the activities that need to be carried out in order to complete the project, and what their cost and duration parameters are. (Andersen 1996). The issue is even more severe when the kind of activities that should be undertaken depends on the outcome of earlier activities. For that reason some might even jump to a conclusion that planning is not necessarily helpful or even desirable. (Andersen 1996).

Andersen (1996) proposes to replace the standard planning approach with milestone planning (Turner 1993), where a milestone is defined as a result to be achieved. Since a milestone describes what is to be done, but not the way it shouldbe done, milestone planning promotes result-oriented thinking rather than activity oriented thinking.

Bart (1993) points out that the traditional approach of planning and controlling of R&D projects tend to fail mainly because of too much formal control which curtails creativity from playing a crucial role in executionof the project. Bart (1993) proposes to reduce the formal control and keep only a minimum required level.

There is no argument as to the contribution of complete and accurate capture of end-user requirements to successful project completion. This is because the output of the requirements analysis stage will most likely determine the output of the entire development process. Posten (1985) has found that 55% of all defects in R&D projects occur during requirement analysis and specification whereas 43% of all defects are not found until after the testing stage.

The importance of the initiation phase stands out relative to other phases in the project life cycle in a recent study of development projects in Israel indicate that the origination and initiation phase, in which major decisions are made, such as deciding the project's objectives and planning the project's execution, has the most influence on the project's success. They also found that although the preparation of formal design and planning documents has a strong positive effect on

meeting the project's time and budget objectives, it also contributes significantly to the customer's benefits from the end-product.

Although studies of organizational effectiveness and organizational success have been at the heart of organization theory for many years, research into project success has not converged to a standard approach. One widely used approach searches for a simple formula that is unequivocal and easy to apply. Measures of this type have typically equated success with meeting the project's budget and schedule and achieving an acceptable level of performance (Pinto 1988). However, these measures, even when taken together, are at most partial. They may count as successful projects that met the planning objectives (schedule, budget and performance objectives), but may not have met end-user needs and requirements or there may have been difficulty in commercializing the final product (Baker 1988).

The success rating of a project may also differ according to subjective, individual judgment. Freeman and Beale (1988) point out that success means different things to different people. Comprehensive success criteria must therefore reflect different interests and views, which lead to a multi-dimensional, multi-criteria approach (Cooper et all 1987). Pinto and Mantel (1990) identified three aspects of project performance as benchmarks for measuring the success or failure of a project, the implementation process, the perceived value of the project, and client satisfaction with the delivered project.

Shenhar, Dvir and Levy (1997) used 13 success measures adapted from previous research and showed that these measures could be grouped into four dimensions which are Meeting design goals, Benefit to the customer, Commercial success, and Future potential. Clearly, not all four success dimensions are of the same importance. Lipovetsky et al. (1997), who analyzed defence projects, concluded that the success dimensions meeting design goals and benefit to the customer are the most important ones to all stakeholders in the projects.

### 2.4.3 Stakeholder expectations and the performance of projects

Organizational Strategic Management (OSM) integrates all major activities and functions of an organization and directs them towards advancing an organization's strategic agenda. It

integrates all other management processes to provide a systematic, coherent and effective approach in establishing, attaining, monitoring and upgrading an agency's strategic objectives. Given the dynamic political and institutional environment within which many public agencies operate in Africa, an effective strategic management capability is essential for maintaining or strengthening the links between the organization, external stakeholders, and managing for results.

Public services cannot expect to serve their clients and customers effectively without their full involvement in policy initiation, analysis and formulation (DPMD 2003). The stakeholders in the public service include, the private sector, including the informal sector, professional associations and trade unions, non-governmental organizations, regulatory bodies, multinational corporations, international financial institutions, international development institutions and foreign Governments and Agencies.

In the twenty-first century, citizens and other stakeholders are demanding to be heard with greater frequency. The development of partnerships with these stakeholders is therefore paramount to effective formulation and implementation of public sector reforms and strategies for public service delivery. If the ultimate goal of the public sector is to satisfy the needs of the population, then any credible programme should ensure that it represents the interests of the people.

Gergis (1999) dwelt on the need to empower and engage relevant stakeholders in the decision-making process in Botswana. Citizen economic empowerment is seen as a socio-economic process through which the Botswana people are motivated to enhance their belief in self-efficacy, to improve their abilities to control their own resources, and to unleash their creative and productive energies to achieve sustainable improvement in their living standards. Effective empowerment requires multilateral communications and two-way power relations among government, policy makers, private sector organizations, and other civil society organizations at the international, national and local levels. Gergis(1999) concludes by stating that the involvement of stakeholders will increase the transparency and accountability of any process.

### 2.4.4 Monitoring and Evaluation and performance of projects

Baker (2000) defines a comprehensive evaluation as one that includes monitoring, process evaluation, economic evaluation, and impact evaluation. She also summarizes the different purposes each type of evaluation. Monitoring is used to assess whether a program is being implemented as was planned. Process evaluation assesses how the program operates and focuses on problems in service delivery. Economic evaluation (cost-benefit or cost-effectiveness) assesses program costs and benefits. Impact evaluation, the focus of this document, measures the impacts of the program on individuals, households, or other groups such as firms, and determines whether the program caused these impacts (Baker 2000; WB-OED 2004).

The fact that impact evaluation is concerned with the results that are caused by the program distinguishes it from process evaluations. Process evaluation is focused on how well the program is operating, and relies mainly on qualitative analyses to identify bottlenecks in program implementation or service distribution, deviations from the project plan, user satisfaction, as well as conflicts or transaction costs. As described, these are vital complements to an impact evaluation in gaining a thorough understanding of what works and why.

Baker (2000) noted that to measure final impact, an impact evaluation must determine what would have happened in the absence of the program this is known as the counterfactual. This is complicated by the fact that the counterfactual is naturally unobservable we can never know what change would have occurred in program participants (treatment group) if the program was not implemented.

The key focus of impact evaluation is its ability to measure the causes of outcomes. In general, impact evaluation use either randomized trials or, when interventions are not randomly assigned, appropriate quasi-experimental methods. An experimental design, in theory, eliminates all sources of selection bias. However, experimental designs are often not feasible for political or logistical reasons and these designs have rarely been used in WSS. Thus, we rely on quasi-experimental designs that employ a battery of purposive sampling and econometric estimation techniques to control for selection on observables and unobservable (Shadish, Cook, and Leviton, 1991). Most WSS impact evaluations use these designs.

An impact evaluation measures a program's progress by tracking indicators of the program's inputs and results. An indicator is any direct and unambiguous measure of progress toward the intended goals of a program. Prenusshi et al. (2000) sees a good indicator as, relevant to program objectives (e.g., per capita water consumption), varying across areas, groups, over time, and sensitive to changes in policies, programs, and institutions (e.g., hours of water supply), not easily diverted or manipulated (e.g., presence of a pit latrine), and able to be tracked (e.g., functionality of public stand pipes). During the evaluation process, it is important to monitor program inputs though what are called "intermediate" indicators provide information on activities and outputs and thus provide valuable information on whether a program was implemented successfully (Bosch et al. 2000; Prenusshi et al. 2000). Outcomes and impacts are tracked through "final indicators".

Program resources and program activities constitute the program inputs. Resources are the available financial, human, social, and institutional capital for the program. These include funds from donors, government, and matched funds from communities. It includes the human capital (from the government, nongovernmental organizations, and communities) that contributes to operating and maintaining the system and partnerships that facilitate system operations. Finally, formal institutions (laws, regulations, economy) and informal institutions (custom, norms, social capital) that support or constrain the system are also program resources. (Pattanayak et. al, 2006). A good evaluation should track any "external" indicators, which measure factors exogenous to the program that could influence the program's ability to achieve its intended results (Prenusshi et al. 2000). As discussed previously, ignoring these exogenous factors can introduce confounding bias into the evaluation. For example, rural WSS programs may initially target poor communities that are located closer to water sources because of the cost advantages of serving these communities relative to more distant communities. Due to their proximity to water sources, targeted communities may have better WSS conditions, health, and incomes at baseline. Failing to account for the differences between the treated and untreated groups in these external factors, which are correlated with both the intervention and the impacts of interest, would lead to upwardly biased estimates of impacts.

Baker (2000) describes key steps in designing and implementing impact evaluations. The first step is to determine whether or not to carry out an evaluation. Since impact evaluation can be

complex and expensive, Baker (2000) and Ferraro and Pattanayak (2005) suggest a number of criteria to determine whether an impact evaluation is required. One is to compare the likely costs and benefits of the impact evaluation. The benefits of an evaluation are likely to be higher when the project is innovative (e.g., testing new technology, new delivery mechanisms, or new organizational structure); is scalable, replicable, and likely to be expanded to other settings; involves substantial resource allocations; and has well-defined interventions.

On the other hand, the benefits of impact evaluation are likely to be low when a program's outcomes cannot be generalized because of certain peculiar characteristics of the population, institutions, systems, program, or environmental setting. If the project is experimental and likely to be revised over time, it could be difficult to conduct an impact evaluation. However, if the evaluation is integrated with a well planned experimental project, it is possible that the evaluation could provide an answer on which intervention to scale up within a given project. (Bamberger et al, 2004)

### 2.4.5 Government Policies and Performance of projects

In 1999, Kenya embarked on a radical water sector reform in order to improve the dire state of the water services and water resource management. Kenya's intention to reform in light of the problems faced and the lessons learnt paved the way for the Sector Wide Approach (SWAp). The Water Act of 2002 is currently the main piece of legislation for the regulation of the water sector in Kenya. All policies, regulations and bylaws, directives and administration actions from the water ministry and strategic plans and all activities by water sector institutions must be carried out in accordance with its provisions.

An institutional framework with eleven new Water Sector Institutions was created, with water resources management and water services forming separate entities and given clear mandate of a division of regulatory and implementing roles. Additionally, as a part of the overall Public Sector Reform, performance contracting was introduced into the water sector, leading to performance objectives being spelt out both at institutional as well as individual level. (Danida, 2010).

According to Danida (2010) the major achievements of the KWSP can be defined as supporting, through technical assistance and direct investment, the effective establishment of the new water

sector institutions and the development of a project cycle (Community Project Cycle or CPC) for the support and financing of rural water and sanitation schemes.

The institutions and the CPC system is sustainable and will continue to result in improved access to water supply and sanitation beyond the life of the KWSP. Through Non CPC and CPC schemes the total number of people provided with improved access to water during the KWSP does not fall far short of the 900 000 people anticipated.(Danida, 2010). By all accounts, the KWSP has made a considerable and significant contribution in the establishment of each of the WSBs. It has further assisted the WSTF in its orientation and development as it has supported the WASREB in addressing key constraints.(GOK, 2009).

From the late 1980s, the debate on good governance and its requirements has provided an impetus for new approaches to public sector management reforms. Some of the changes that have taken place have been aimed at tackling some of the worst forms of governance abuses and failures in Africa: the personalized nature of rule in which key political actors exercise unlimited power; systemic clientelism; misuse of State resources and institutionalized corruption; opaque government; the breakdown of the public realm; the lack of delegation of power and the withdrawal of the masses from governance.
Good public management and administration, with emphasis on accountability and responsiveness to customer needs, has been seen as an aspect of good governance by donor agencies supporting reforms in developing countries. To the World Bank (1992), good governance consists of a public service that is efficient, a judicial system that is reliable, and an administration that is accountable to the public.

The World Bank elaborates on four elements of good governance (World Bank, 1989, 1992): Public sector management emphasizing the need for efficient financial and human resource management through improved budgeting, accounting and reporting, and rooting out inefficiency particularly in public enterprises. Accountability in public services, including efficient accounting, auditing and decentralization, and generally making public officials responsible for their actions and responsive to consumers.

A predictable legal framework with rules known in advance, a reliable and independent judiciary and law enforcement mechanisms, and availability of information and transparency in order to enhance policy analysis, promote public debate and reduce the risk of corruption. It is apparent from the above conception of "good governance" that there is some emphasis on improving public-sector management systems. Thus, in the good governance prescriptions, one finds public management reforms as a key component pointing towards market and private sector approaches to public sector management (DPMD 2003).

The volume of external financial assistance is not likely to grow fast enough to meet water and sanitation needs around the world. Governments will have to continue to be primarily responsible for raising and using public funds (from general revenue, cross subsidization, user fees, and borrowing) for water resources and sanitation infrastructure needs. (UNDP, 2007).

**2.5 Summary of Literature Review and Research Gaps**

Project managers typically use several tools and techniques to help them manage project activities from the beginning of the project to completion of the project. The proper use of these project tools impacts the success of the project. Projects generally have outcomes and performance targets that have been set by the overseers of the project. These overseers may be the government, funders, financiers or the non-governmental organizations in charge of the project.

Project performance indicators must be met and these are accountability of the use of funds and ensuring that projects complete on the set budgets, effective utilization of resources and completion of the projects on the expected date. However, these targets are affected by some external factors which influence the project success and project management. All project managers must ensure that they look into the influences of these factors so as to efficiently complete their projects.

The manner and way in which the project manager sets their objectives, executes the project and carries out project implementation is vital to the success of any project. Project planning can never be overemphasized on how it is essential in the success of projects. The stakeholders on the hand also closely monitor the progress of these projects and are quick at pointing out any

deficiencies. Their decisions are important and project managers must be keen in taking in their suggestions.

Other factors such as government policies on issues such as funding or financing, their policies on the expectations of the benefits of the projects to the community, political influence on the projects and the deadlines set must be monitored by the project managers. Monitoring and evaluation as another factor affecting the performance of projects should be ensured that impact assessments are carried out to give feedback on how far projects have been carried, they also point out areas of improvement and the work in progress charts.

This empirical review has categorically shown that this research on the factors affecting water and sanitation projects has been done on a general term in Kenya but not on specific Municipality's hence the need to carry the research in Garissa Municipality. These studies do not show the specific effect and how these factors affect the performance of water and sanitation projects in the selected Municipality.

## 2.6 Conceptual Framework

Conceptual framework is a schematic diagram of the independent variables and the dependent variables. The independent variable includes project planning, expectation of the stakeholders, monitoring and evaluation, and government policies. These are the variables as used in the performance of water and sanitation projects in Garissa Municipality.

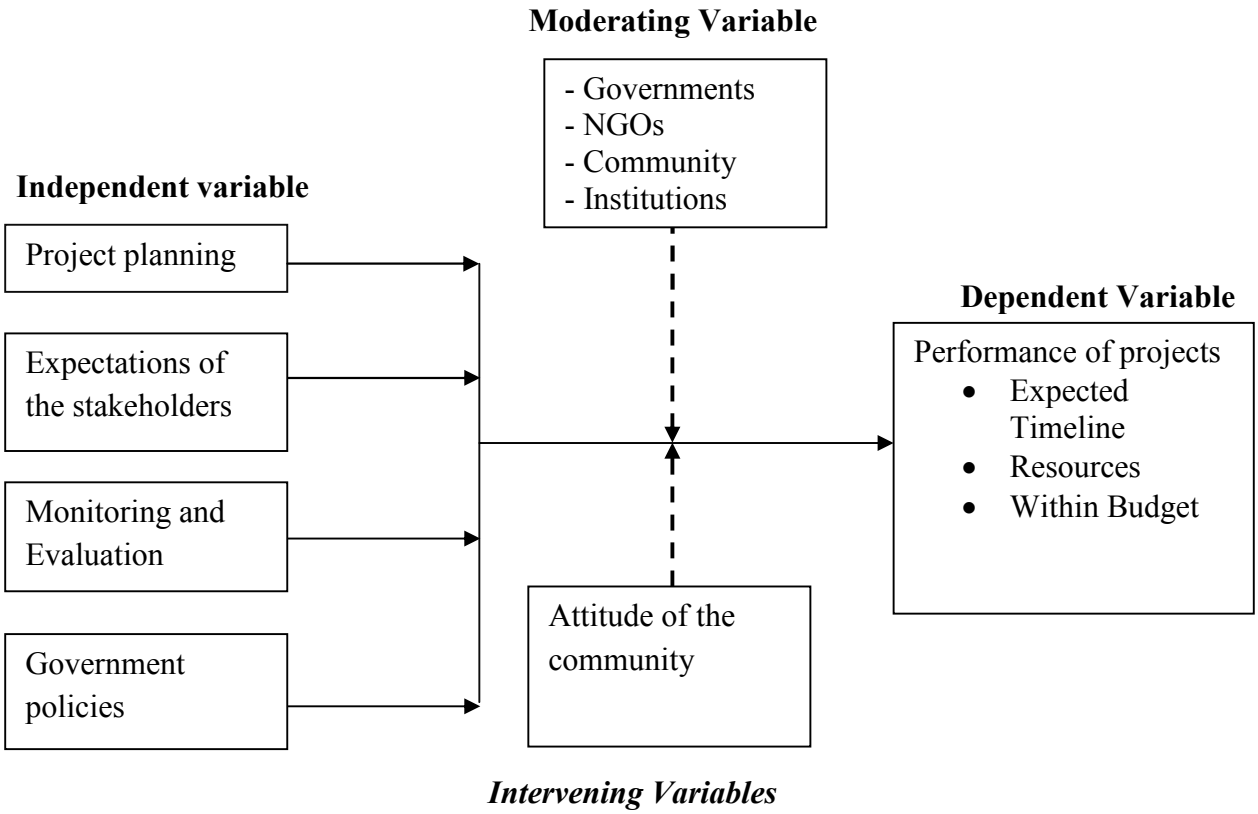


**Figure 1: Schematic diagram**

Expectations of stakeholders - The expectations of the typical groups such as the customer, sponsor, project team, project office, or anyone who needs project information in order to make decisions and/or contribute to the project processes. The stakeholders' decisions and support also affect the performance of the projects.

Monitoring and evaluation – this holds a big place in the success of the projects for it gives proper feedback to the stakeholders on the progress of the projects, it provides the control of the progress by indicating whether the standards set are being met and it provides the corrective measures and way forward for successful completion of the projects.

Government policies – the government gives directives, rules, or orders which can affect the performance of the project. Procedures and policies in support of the project are essential ingredient of successful completion of projects.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter was to discuss the research design used, the total population and the target population, the sampling procedure and the sample size. It also discussed the validity and reliability of the instruments of the research, the methods of data collection and the method of data analysis and presentation.

## 3.2 Research Design

The researcher adopted a descriptive research design with a case study of the water and sanitation projects in Garissa Municipality. According to Kombo and Tromp (2006) a descriptive design determines and reports the way things are by describing the behaviour, attitudes, values and characteristics. The descriptive design was appropriate because the researcher sought to determine the present effect of factors on a selected population. Descriptive design is also a method of collecting information by interviewing or administering a questionnaire to a sample of individuals (Orodho, 2005).

## 3.3 Target Population

The target populations for this study were the people who are directly involved in the water and sanitation projects in Garissa Municipality. There are a total of 100 employees employed in the 4 projects currently on progress, 30 government representatives in the Municipality and approximately 14,000 people who benefit directly from these WAS projects (USAID, 2011). The target population comprised of individuals who were drawn from 4 projects in the Municipality. They comprised of a total of 50 respondents from the four water projects. The respondents included the water and sanitation project employee, local residents and government representatives from the district water office.

## 3.4 Sampling design and procedure

Since the researcher surveyed all the WASAN projects in the Municipality a census approach was used. When the universe is small there is no use resulting to a sample. When all items are covered, no element of chance is left and highest accuracy is obtained (Kothari, 2004) The

respondents were picked using the random sampling method to ensure that all the respondents stand equal chance of being selected to avoid sample bias and ensure that the results are reliable enough to be generalized. 10 residents will be picked purposively simple random sampling method was used to select 30 employees of WASAN from the projects currently running. Finally, 10 government officials were also selected randomly. The sample size was a total of 50 respondents.

### 3.5 Data collection instruments and procedures

Both primary and secondary data was used for this study. Primary data was collected from the respondents using data collection instrument which comprised of questionnaires. The questionnaires were self administered where the respondents completed them on their own. The Researcher obtained a letter of introduction from the university it was attached to the questionnaires and delivered to the targeted respondents by the researcher and his assistants. The questionnaires were collected after two weeks.

Secondary data was obtained from journals, published materials, government reports and articles and also from the United Nation library on water and sanitation projects.

### 3.6 Validity of instruments

Sekaran (2003) defines validity as the accuracy and meaningfulness of inference using the validity index which measured the degree of accuracy of the data collected representing a specific domain of indicators or constructs of a concept. Gay (1992) identified that content validity is a matter of judgment by the researcher and professionals, and has no specific formula for determination. The instruments for this study were therefore validated through application of content validity, which is determined by expert judgment by knowledgeable lecturers and researcher's supervisors.

### 3.7 Reliability of the Instruments

Sekaran (2003) defines reliability as the measure of degree to which a research instrument yields consistent results. To ensure reliability, the research instruments were pre-tested in a selected group of 10 respondents to ensure consistency and comprehensiveness. Reliability of instruments in this study was assessed using test-retest method, in which the same respondents will be subjected to a test twice, the second being two weeks from the first. To attain the reliability

coefficient, each questionnaire item was awarded specific maximum scores for relevant response by the respondents. The responses in the first test were scored on the scale of each of the scores of each questionnaire item. The same was repeated in the second test. Pearson's product moment correlation coefficient of reliability will be calculated for the scores of corresponding items of the two sets of tests using the formula:

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\{x^2 - (\sum x)^2\}} X \sqrt{n\{y^2 - (\sum y)^2\}}}$$

Where: r is the coefficient of reliability required

n is the number of questionnaire items being correlated,

x is the set of scores attained in the first test

y is the set of scores of corresponding items in the second test

After computation, a reliability coefficient from 0.84 was attained, which was considered good enough for the study as advocated by Gay (1992).

### 3.8 Data Analysis and Presentation

Data was compiled, sorted, classified into qualitative and quantitative data. Factor analysis was conducted on the variables. The intent is to reduce the variables to a manageable number and eliminating variables that may belong together and have overlapping measuring characteristics to fit well into the model. Quantitative data was analyzed using descriptive statistics. Descriptive statistics was worked out and percentages formed the presentation. Correlation analysis was also conducted and correlation coefficients obtained for analysis. The results were presented in Tables.

### 3.9 Ethical Consideration.

Ethical considerations were observed in this study. The research assured the respondents that their identity would remain confidential and were only be used for the purpose of the study. The researcher also created relationship with the respondents, share in their mind – set especially those affected by water shortage. The researcher also explained the purpose of the study to the respondents and asked them to participate in the study. References to works by other scholars or writers was made and appreciated. Subjective questions were avoided by the researcher so that respondents cooperated.

# CHAPTER FOUR

# DATA ANALYSIS, PRESENTATION AND INTERPRETATION.

## 4.1 Introduction

This chapter presents the findings of the study, analyses the data and discusses the results of the analysis. The findings are presented according to the research objectives of the study. The analysis was done by considering each of the research questions, presenting the results of the study on that particular question and then discussing the results. The results were presented in frequency tables, percentages and using graphs. Qualitative data was categorized into themes and the major themes discussed and reported.

## 4.2 Demographic Information

### 4.2.1 Response Rate

Out of the total fifty 50 questionnaires distributed, 30 of them were correctly filled and returned giving a response rate of 60%. Descriptive statistics was carried out on the background characteristics of the respondents which seemed to affect the results.

### 4.2.2 Distribution of Response by Gender

The table below gives the gender response between men and women who filled the questionnaires as distributed.

**Table 4.1 Gender of Respondents**

| **Gender** | **frequency** | **percentage (%)** |
|---|---|---|
| Male | 23 | 76.7 |
| Female | 7 | 23.3 |
| **Total** | **30** | **100.0** |

According to the the results shown in table 4.1 shows that the male respondents were 76.7%, which is very high from the respondents of the female, which was 23.3%. This may imply that most of the projects in Garissa Municipality are managed and supervised by the male community.

### 4.2.3 Distribution of Response by Education.

The respondents' level of education is analyzed in Table 4.2 below; which shows how literate the respondents are.

**Table 4.2 level of Education of Respondents**

| Education Level | frequency | percentage (%) |
|---|---|---|
| Secondary | 2 | 6.7 |
| Diploma | 7 | 23.3 |
| Degree | 12 | 40.0 |
| Masters | 5 | 16.7 |
| Professionals | 4 | 13.3 |
| **Total** | **30** | **100.0** |

Table 4.2 represents the level of education of the respondents. The table indicates that the evenly distributed. The respondents were educated with 6.7% with secondary education which without bias may be the respondents from the local communities or clerical employees and 23.3% holding a diploma qualification, the holders of degree certificates with the highest percentage of (40.0%). Professional certification and qualification holders were at 13.3%. This may signify that the projects are managed by equally qualified personnel.

### 4.2.4 Job Role

The respondents' job positions are analysed as indicated in table 4.3 below.

**Table 4.3 Respondents' Job Role**

| Job Role | Frequency | Percentage (%) |
|---|---|---|
| Clerical | 6 | 20.0 |
| Supervisor | 7 | 23.3 |
| Managerial | 9 | 30.0 |
| Local | 8 | 26.7 |
| **Total** | **30** | **100.0** |

Table 4.3 shows the various job roles or positions held by the respondents who manage or are interested in the successful completion of the projects. Those who hold clerical positions are 20% and the supervisors are 23.3% while the management took a percentage of 30% comprising the highest positions to respond to the questionnaires however, the local took a percentage of 26.7%. This table depicts that the respondents were balanced across job roles or positions.

## 4.3 Factors Affecting Performance

### 4.3.1 Project planning

Section B of the questionnaire comprised of questions that indicated how the various factors affect the performance of water and sanitation projects in Garissa Municipality. The first factor to be analysed was project planning which was studied by means of a five-item likert rating scale ranging from 'strongly agree' to 'strongly disagree'. The results are presented in the following Table 4.4.

**Table 4.4 project Planned Timeline**

| Respondent's opinion | No. of respondents (n= 30) | Percentage of respondents |
|---|---|---|
| Strongly agree | 22 | 73.3 |
| Agree | 6 | 20 |
| Undecided | 1 | 3.3 |
| Disagree | 1 | 3.3 |
| Strongly disagree | 0 | 0 |

Table 4.4 above shows the level of agreement or disagreement on whether the project operate as per the planned time lines that have been set for starting and completion of projects in the Municipality. The highest number of respondents standing at 73.3% strongly agreed that the water and sanitation projects work as per the timelines that have been set. Just 20% of them agreed while 3.3 % were not decided and 3.3% disagreed that the project begun on time and finished on time. This may signify that the projects begun on the timelines given by the project planners.

**Table 4.5 Resource Utilization**

| Respondent's opinion | No. of respondents (n= 30) | Percentage of respondents |
|---|---|---|
| Strongly agree | 17 | 56.7 |
| Agree | 5 | 16.7 |
| Undecided | 7 | 23.3 |
| Disagree | 1 | 3.3 |
| Strongly disagree | 0 | 0 |

Table 4.5 above shows whether the planned project resources are utilized as planned without either misappropriation or unnecessary wastage. A very high percentage of 56.7% strongly agreed that resources are well utilized by the project officials. 16.7% of the respondents agreed to this statement however, 23.3% were not decided whether the resources were utilized as planned or not and 3.3% disagreed that the resources were utilized as agreed by the project planners.

**Table4.6: Completion on Planned schedule**

| Respondent's opinion | No. of respondents (n= 30) | Percentage of respondents |
|---|---|---|
| Strongly agree | 16 | 53..3 |
| Agree | 4 | 13.3 |
| Undecided | 8 | 26.7 |
| Disagree | 1 | 3.3 |
| Strongly disagree | 1 | 3.3 |

Table 4.6 above shows the level of agreement on whether the water and sanitation projects are completed on the planned scheduled time. 53.3% of the respondents strongly agree that the projects are completed on the scheduled time, 13.3% of them just agree with the completion schedules while 26.7% actually are not decided. 3.3% disagree and strongly disagree that the projects are completed on schedule.

### 4.3.2 Stakeholder Expectation

Project stakeholders play a vital role on how projects are managed and run. The stakeholders in reference are government officials, local community, banks, donors, and other interested parties to the projects. Respondents were asked to state their level of agreement or disagreement on the expectations of the stakeholders.

The frequency distribution table for the stakeholders is as given by table 4.4 below

**Table 4.7 Project Stakeholders**

| Stakeholders | Frequency (n= 30) | Percentage of respondents |
|---|---|---|
| Government officials | 17 | 56.8 |
| Local community | 8 | 26.2 |
| Banks/donors | 5 | 17 |
| Total | 30 | 100 |

**Table 4.8 Stakeholder Involvement**

| Respondent's opinion | No. of respondents (n= 30) | Percentage of respondents |
|---|---|---|
| Strongly agree | 6 | 20 |
| Agree | 11 | 36.7 |
| Undecided | 9 | 30 |
| Disagree | 2 | 6.7 |
| Strongly disagree | 2 | 6.7 |

Table 4.8 shows that 36.7% the highest level of agreement agree that project stakeholders are involved in the projects and are aware of the progress and activities of the projects, 30% are not decided on whether the stakeholders get involved or not, 20% of the respondents strongly agree that the stakeholders are involved in the daily management of the projects. Respondents who either disagree or strongly disagree respectively disagree to an extent of 6.7%. this signifies that there is balanced level of agreement on whether stakeholders are involved on the daily management of the projects.

**Table 4.9: Pulling out of projects by Stakeholders**

| Respondent's opinion | No. of respondents (n= 30) | Percentage of respondents |
|---|---|---|
| Strongly agree | 14 | 46.7 |
| Agree | 5 | 16.7 |
| Undecided | 3 | 10 |
| Disagree | 3 | 10 |
| Strongly disagree | 5 | 16.7 |

Table 4.9 shows the level of agreement whether pulling out of the projects by any of the stakeholders have any impact on the progress on the projects. 46.7% of the respondents strongly agree that if any of the stakeholders pull out of the project, there is a notable impact on the progress of the projects. 16.7% agree and strongly disagree respectively that pulling out of stakeholders have an effect on the running of the projects. 10% of the respondents are not decided or disagree with the statement that pulling out of projects affects the progress of projects. This signifies that stakeholders are of important value to the progress of the projects.

### 4.3.3 Monitoring and Evaluation

Projects must be continuously be monitored and evaluated phase by phase to be able to assess the progress and to ensure that the planned timelines, schedules, resources are sufficient to carry the projects through. The respondents were asked to state their level of agreement on the issues of monitoring and evaluation.

**Table 4.10: Continuous M & E**

| View | Frequency (n = 30) | Percentage |
|---|---|---|
| Yes | 29 | 97 |
| No | 1 | 3 |

Cleary Table 4.10 above shows that 97% of the respondents agree that projects are continuously monitored and evaluated by the relevant officials hence why the success rate of completion is too high. Only 3% of the respondents state that projects are not continuously monitored, this is a small percentage which can be ignored in favour of continuous Monitoring and evaluation.

**Table 4.11 Government Policies and Regulations**

| View | Frequency (n = 30) | Percentage |
|---|---|---|
| Always | 29 | 70 |
| Sometimes | 1 | 30 |

The respondent posits that government policies and regulations are followed by project managers. 70% of the respondents agree that the project managers follow the policies and regulations set by the government while 30% disagree. This signifies that the project managers work closely with government officials to ensure the success of the projects.

**Table 4.12: Government Deadlines**

| Opinion | Frequency | Percentage |
|---|---|---|
| Strongly Agree | 20 | 66.7 |
| Agree | 6 | 20 |
| Not Decided | 2 | 6.7 |
| Disagree | 1 | 3.3 |
| Strongly disagree | 1 | 3.3 |

From Table 4.12 above, the respondents were to state their level of agreement or disagreement on whether the timelines and deadlines were adhered to by the project managers. 66.7% of the respondents strongly agreed that the timelines and deadlines were adhered to. 20% of the respondents agree to the level of adhering on the timelines and deadlines. 6.7% were not decided while 3.3% of the respondents disagreed and strongly disagreed respectively. This may signify that the projects in Garissa Municipality are on track to successful completion.

### 4.4 Factor Analysis and Correlation Analysis

A principal component analysis was conducted on the 26 items using Varimax technique. Field (2009), states that a factor loading of 0.6 is significant regardless the sample size. Field (2009) particularly recommends an average of communalities of 0.4 to be significant.

The average communalities obtained from the analysis yielded 0.830, which is far above the acceptable limit of 0.4. Generally, a small value below 0.4 indicates variables that do not fit well

with the model and such variables should possibly be dropped from the analysis. Nonetheless, from the factor loading table below, all the values are above 0.4, which means that all the variables can be included in the analysis. The total variance explained was 83.03%.

Correlation looks at whether two variables or more are associated or whether they covary. This research used correlation analysis to find out the relationship between the factors affecting the performance of projects. Selected performance dimensions were selected appropriately for ease of data analysis. Bivariate correlation analysis was chosen and Spearman correlation coefficients were found. A Spearman correlation is used when one or both of the variables are not assumed to be normally distributed and interval but are assumed to be ordinal (Field, 2009).

### 4.4.1 Project Planning

Project planning entails the plans and items that the project managers and officials consider important for successful completion of projects. This includes items such as planning for the objectives of the projects, planning for the timelines, the utilization of resources, planning for the timelines that the project should take phase wise and completion schedules.

**Table 4.13 Factor Analysis for Project Planning**

| Factor Name | Item | Factor Loading |
|---|---|---|
| Project Planning | • The projects have clear objectives | 0.766 |
| | • Project activities are documented and well laid down | 0.726 |
| | • Project managers are transparent in the planning process. | 0.754 |
| | • Stakeholders participate during the planning of projects. | 0.845 |
| | • Projects operate as per the planned timelines. | 0.644 |
| | • Project resources are utilized as planned by the project managers. | 0.755 |
| | • The planned budget is adhered to. | 0.849 |
| | • Projects are completed as per the planned schedule. | 0.893 |

Table 4.13 shows the factor loading for project planning dimensions a variance of .766 explains the project planning variables with project planned schedules with the highest factor loading of .893 and utilization of planned resources as carrying a factor loading of .644.

**Table 4.14 Spearman's correlation Analysis between project planning and performance**

| | | Transparent | Budget | Plan schedule |
|---|---|---|---|---|
| Quality | Correlation Coefficient | -0.016 | .462(*) | .376(*) |
| | Sig. (2-tailed) | 0.933 | 0.01 | 0.04 |
| | N | 30 | 30 | 30 |
| Resources | Correlation Coefficient | .390(*) | -0.045 | -0.043 |
| | Sig. (2-tailed) | 0.033 | 0.813 | 0.823 |
| | N | 30 | 30 | 30 |

Table 4.14 shows the relationship between project planning and performance parameters. There is a significant relationship between the budget levels and the quality of the projects. This relationship is explained by a coefficient of .462 at a significant level of 0.05. There is also a notable relationship between the completion of projects as per the planned schedule and the quality of the projects; this is again explained by a correction coefficient of .376 at a significant level of 0.05. On the other hand how transparent the project managers are in the planning process has a significant relationship with the utilization of the resources. This relationship is explained by a correlation coefficient of .390 at a significant level of 0.05. This signifies that the quality of projects and the resource utilization is affected by the transparency of the project managers, the budget schedules and the set schedules.

### 4.4.2 Stakeholder Expectations

The stakeholders of the projects have certain expectations from the projects this includes been involved in key decision making process of the projects, actively getting involved in the management of the projects on a daily basis, their opinions on dissatisfaction on the progress of the projects been considered and taken seriously by the project managers among other.

**Table 4.15 Factor Analysis for Stakeholder Expectations**

| Factor Name | Item | Factor Loading |
|---|---|---|
| **Stakeholder Expectations** | ▪ Stakeholder decisions matter in the management of the projects. | .860 |
| | ▪ Stakeholders are actively involved in the daily management of the projects. | .844 |
| | ▪ Stakeholders are always aware of the progress of the projects. | .854 |
| | ▪ Stakeholders' dissatisfaction about any aspect of the progress of the project is documented and acted upon. | .850 |
| | ▪ Any stakeholder can pull out of the project without much impact on the progress of the project. | .924 |

Table 4.7 shows the factor loading for stakeholder expectations, the highest factor loading is that stakeholders can pull out of the projects without much impact this is explained by the highest factor loading of .924 although the decisions of the stakeholders matter to a great extent and has a factor loading of .860. This table shows that the dimensions of stakeholder expectations are highly related and explains a very close relationship between the variables.

**Table 4.16 Spearman's correlation Analysis between stakeholder expectations and performance**

| | | Decisions | Involvement | awareness | disatisfaction | budget | timeline |
|---|---|---|---|---|---|---|---|
| Awareness | Correlation Coefficient | .227 | .445(*) | 1.000 | | | |
| | Sig. (2-tailed) | .228 | .014 | . | | | |
| | N | 30 | 30 | 30 | | | |
| Disatisfaction | Correlation Coefficient | .404(*) | .616(**) | .623(**) | 1.000 | | |
| | Sig. (2-tailed) | .027 | .000 | .000 | . | | |
| | N | 30 | 30 | 30 | 30 | | |
| Pullout | Correlation Coefficient | .444(*) | .583(**) | .719(**) | .741(**) | | |
| Resources | Correlation Coefficient | .050 | .439(*) | .166 | .483(**) | .430(*) | -.518(**) |
| | Sig. (2-tailed) | .794 | .015 | .380 | .007 | .018 | .003 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 |

Table 4.16 depicts the results of correlation coefficient matrix which looks at the relationship between stakeholder expectations and the performance of projects. The matrix shows that there is a significant relationship between the factors variables Table 4.8 depicts the results of correlation coefficient matrix, which looks at the relationship between stakeholder expectations and the performance of projects. The matrix shows that there is a significant relationship between the factors variables for example there is a significant relationship between awareness of stakeholders on the progress of the projects with a correlation coefficient of .443 at a significant level of 0.05, their pullout impact on the progress of the projects with correlation coefficient of .444 at a significant level of 0.05 and correlation coefficient of .583 which is very significant at a

significant level of 0.01 and their involvement into the relationship. There is also a significant relationship between the factors and performance, utilization of resources with a correlation coefficient of .439 at a significant level of 0.05 and stakeholder involvement into the projects, resource utilization with a correlation coefficient of .483 at a significant level of 0.01 and dissatisfaction of stakeholders,

### 4.4.3 Monitoring and Evaluation

Monitoring and Evaluation of projects explained the need to continuously monitor the projects, it involves who monitors the projects, whether the results for monitoring and evaluation are considered in decision making and if the exercise makes any impact on the completion of the projects.

**Table 4.17 Factor Analysis for Monitoring and Evaluation**

| Factor name | Item | Factor Loading |
|---|---|---|
| **Monitoring and Evaluation** | ▪ Are projects continuously monitored and evaluated. | .794 |
| | ▪ Who evaluates the projects. | .757 |
| | ▪ Are the results of monitoring and evaluation published. | .743 |
| | ▪ The progress of the Projects can be attributed to effective reporting of monitoring and evaluation results. | .900 |
| | ▪ Project managers take the results seriously and amend any loopholes in the progress of the project. | .766 |
| | ▪ Adjustments in project implementation can be attributed to the result of M&E. | .767 |
| | ▪ Projects that are not monitored do not finish on the scheduled time. | .907 |
| | ▪ M &E ensures projects utilize allocated resources effectively | .871 |

Table 4.17 gives the factor loading for Monitoring and Evaluation and clearly from the table there is a close relationship between the variables. The results for monitoring and evaluations once implemented by the project managers explains the success of the project by a factor loading of .907 which is the key and major reason for carrying out monitoring and evaluation of projects. Taking the results of the M&E by project managers is explained by a factor loading of .900, these results signifies that there is a very close relationship between M&E of projects and the performance of these projects.

**Table 4.18 Spearman's correlation Analysis between M&E and performance**

| | | Me by who | taken seriously | progress | effect resources |
|---|---|---|---|---|---|
| Quality | Correlation Coefficient | -0.202 | 0.198 | .439(*) | .424(*) |
| | Sig. (2-tailed) | 0.284 | 0.294 | 0.015 | 0.019 |
| | N | 30 | 30 | 30 | 30 |
| Budget | Correlation Coefficient | .398(*) | .409(*) | -0.081 | 0.086 |
| | Sig. (2-tailed) | 0.029 | 0.025 | 0.669 | 0.65 |
| | N | 30 | 30 | 30 | 30 |
| Timeline | Correlation Coefficient | -.382(*) | 0.048 | 0.234 | .376(*) |
| | Sig. (2-tailed) | 0.037 | 0.801 | 0.213 | 0.041 |
| | N | 30 | 30 | 30 | 30 |
| Resources | Correlation Coefficient | 0.3 | 0.066 | 0.158 | 0.013 |
| | Sig. (2-tailed) | 0.107 | 0.728 | 0.404 | 0.947 |
| | N | 30 | 30 | 30 | 30 |

Table 4.18 gives a correlation analysis of monitoring and evaluation factors and performance. The quality of the projects is affected by taking M&E results seriously and by amending any loopholes in the progress of the projects. The correlation coefficient of .439 at a significant level of 0.05 explains this significant relationship. There is a negative relationship between who evaluates the projects and the timelines of the projects. The coefficient is .382 at a significant level of 0.05. This signifies that whoever evaluates the projects does not affect the completion timeline of projects and the quality of projects is affected by the amendments done after M&E results are given to project managers.

### 4.3.4 Government Policies and Regulation

This variable checks whether the policies and regulations set by the government explains any relationship with the performance of the projects. The factor entails dimensions of how often the regulations are followed, whether the presence of the government officials is felt in the projects

progress and whether the government policies on utilization of funds and resources are followed by the project managers.

**Table 4.19 Factor analysis for Government Policies and Regulations**

| Factor name | Item | Factor Loading |
|---|---|---|
| **Government Policies and Regulations** | ▪ How often are government policies and regulations followed. | .805 |
| | ▪ Is the presence of government officials and representatives felt. | .967 |
| | ▪ In the allocation of funds/financial budgets. | .921 |
| | ▪ Their decisions are valued by the project managers. | .902 |
| | ▪ The timelines and deadlines given by the officials are adhered to. | .926 |

Government policies and regulations factor loadings of the variables are depicted in Table 4.19. This table shows that among all the other factors affecting the performance of projects this factor has the highest relationship; the dimensions have a variance of .921. This table shows that the government policies are followed highest in the allocation of funds and financial budgets of the projects and is explained by the highest factor loading of .967. This signifies that the project managers take seriously the presence of the government officials in the management of the projects for successful completion.

**Table 4.20 Spearman's correlation Analysis between Government policies and regulations and performance**

| | | regulations | Funds | Budget | Timeline | Resources |
|---|---|---|---|---|---|---|
| Quality | Correlation Coefficient | .467(**) | -.199 | -.112 | -.008 | .070 |
| | Sig. (2-tailed) | .009 | .293 | .557 | .965 | .714 |
| | N | 30 | 30 | 30 | 30 | 30 |
| Budget | Correlation Coefficient | -.089 | .027 | 1.000 | -.161 | .430(*) |
| | Sig. (2-tailed) | .641 | .886 | . | .396 | .018 |
| | N | 30 | 30 | 30 | 30 | 30 |
| Timeline | Correlation Coefficient | .209 | -.303 | -.161 | 1.000 | -.518(**) |
| | Sig. (2-tailed) | .267 | .104 | .396 | . | .003 |
| | N | 30 | 30 | 30 | 30 | 30 |
| Resources | Correlation Coefficient | -.004 | .472(**) | .430(*) | -.518(**) | 1.000 |
| | Sig. (2-tailed) | .982 | .008 | .018 | .003 | . |
| | N | 30 | 30 | 30 | 30 | 30 |

Table 4.20 shows the relationship between government policies and regulations and performance. The table shows that there is a significant relationship between the utilization of resources and funds that have been allocated by the government. The relationship is significant with correlation coefficient of .472 at a significant level of 0.01. There is also a strong negative relationship between the utilization of resources and the timelines given by the government to complete the projects.

# CHAPTER FIVE

# SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

## 5.1 Introduction

This chapter is for summaries, conclusion and recommendations. It summarizes the research study, presents the major findings and discusses implications for the project managers of Garissa Municipality Water and Sanitation Projects. It also gives the appropriate recommendations.

## 5.2 Summary of findings

### 5.2.1 Background Information

The completed and returned questionnaires were 60% which is a good response rate, 76.7% of the respondents were male and 40% had university degrees. The highest numbers of questionnaires were responded to by the project managers and those in managerial positions in and around the projects.

### 5.2.2 Performance of projects

The purpose of this study was to analyze the factors that affect the performance of projects in reference to water and sanitation projects in Garissa Municipality. The literature review chapter gave empirical evidence between the study variables, how the study variables affect the performance of projects positively or negatively. The study used a sample population of thirty respondents. Data was collected primarily through both primary and secondary sources. One research assistant administered data collection through personal contact. Statistical analysis methods used in the research analysis included descriptive statistics, factor analysis, and correlation analysis. All the research variables were significant and fitted in the model that was tested. The research findings indicated that all the independent variables had a direct relationship with performance. However, monitoring and evaluation and government policies and regulations had the most effect on the quality, timelines, resource utilization and budgets of the projects.

### 5.2.3 Project Planning

Project planning was considered as one of the independent variables of this study and it included checking for planning dimensions such as planning and setting of project objectives, documentation of project activities, transparency in the planning process and stakeholder participation in the planning process. 53.3% of the respondents strongly agree that the projects complete on time. The project planning dimension has a variance of .766 indicating that these dimensions are highly related, and a significant correlation coefficient of .462 between the quality of projects and the budgets planned by the project managers.

### 5.2.4 Stakeholder Expectations

Stakeholders of the projects have expectations from the projects this includes been involved in key decision making process of the projects which takes 36.7% highest level of agreement, actively getting involved in the management of the projects on a daily basis, their opinions on dissatisfaction on the progress of the projects been considered and taken seriously by the project managers among other expectations. There is a very significant relationship between stakeholder dissatisfaction and the pullout rates of stakeholders of .719 at a significant level of 0.01.

### 5.2.5 Monitoring and Evaluation

M&E of projects explained that 97% of the projects are continuously monitored by the relevant authorities and it involves who monitors the projects, whether the results for monitoring and evaluation are considered in decision making and if the exercise makes any impact on the completion of the projects. A factor loading of .907 agrees that projects that are not monitored and evaluated do not finish on time.

### 5.2.6 Government Policies and Regulations

The researcher sought to checks whether the policies and regulations set by the government explains any relationship with the performance of the projects. 70% of the respondents agreed that the projects keenly followed the policies and regulations as set. The factor entails dimensions of how often the regulations are followed, whether the presence of the government officials is felt in the projects progress and whether the government policies on utilization of funds and resources are followed by the project managers. It was found out that the highest variable in the allocation of funds and financial budgets which has a factor loading of .967.

### 5.3 Discussion

With respect to the first objective on effect of project planning on the performance of water and sanitation projects, the study found that it was found that most of the indicators were positive. Majority (73%) of respondents agreed that water and sanitation projects operate as per the time lines set. Most respondents (56%) agreed that most resources are well utilized while 53.3% were of the view that projects were completed on schedule. It therefore follows that project planning affect the performance of water and sanitation projects in such a way that when projects are planned, there are positive indicators. This sentiment is in agreement with that of Simpson (1987), who asserts that although planning does not guarantee project success, lack of planning will probably guarantee failure. Thus, planning is necessary for successful project implementation.

Expectations of project stakeholders play a role in the performance of projects. When the stakeholders' expectations are high, the project implementers are forced to go an extra mile to ensure that they meet the expectations of the stakeholders. Further, the involvement of the stakeholders, together with their awareness tends to improve the performance of projects, as found from the study of water and sanitation projects in Garissa Municipality. If any one of the stakeholders pulls out of a running project, it negatively impacts on the project. Thus, stakeholders in any project should be involved as much as possible in the project. This finding agrees with the conclusion drawn by Gergis (1999), who concludes by stating that the involvement of stakeholders will increase the transparency and accountability of any process.

Monitoring and evaluation is very important in the process of project implementation. Nearly all (97%) respondents agreed that it is important to monitor and evaluate a project in the implementation stage. As indicated by most of the respondents, project implementers usually follow the government policies and regulations. It therefore follows that if projects are implemented according to the right procedures and following the prescribed government policies and regulations, the entire project is completed successfully. This is in agreement with the finding by Bamberger et al. (2004), who concluded that if evaluation is integrated with a well planned experimental project, it is possible that the evaluation could provide an answer on which intervention to scale up within a given project.

With respect to government policies and regulations, the study found that most projects (as depicted by 70% of the respondents), keenly adhered to the regulations. Thus, most of the projects were successful. This agrees with the proposition fronted by DPMD (2003), who states that in the good governance prescriptions, one finds public management reforms as a key component pointing towards market and private sector approaches to public sector management. Thus, since most projects adhered to the right governance prescriptions, they were most likely to succeed.

### 5.5 Recommendation

Based on the research findings, as the researcher the commendation will be that the project officials involved in project planning align their planning strategies appropriately because project planning variable seemed to be the only factor with minimal effect on the quality, timelines and budget though it had an effect on the utilization of resources.

Project planning is the only factor with lesser relationship with the performance of the projects in Garissa Municipality, the recommendation is that the project managers should involve all the stakeholders in the project planning process and should ensure that the objectives and plans set out in the beginning of the projects are followed for successful implementation of the projects.

Although the results showed that stakeholders are involved in the daily running of the projects, it also showed that when a stakeholder pulls out of the project there is less impact. The project managers should ensure that they utilize the stakeholders as a vital resource in the running of the projects and also ensure that they keep the stakeholders satisfied at all times during the management and implementation of the projects.

The researcher recommends that since that there is a negative correlation between M&E and the persons who monitors and evaluates the projects, the project managers should ensure that they re-strategies on the persons or divisions will be responsible for this exercise in the future.

Since there is a very high relationship between the government policies and regulations the researcher would recommend that the project managers continue to work closely with the government officials and keep up the spirit of ensuring that the policies are followed as expected.

### 5.6 Recommendations for further research

Since this research was limited to the factors affecting performance of water and sanitation projects in Garissa Municipality, a strong recommendation is to carry out a survey of all the

projects of various dimensions and compare the results in order to validate the results obtained from this research. A further research could also be done using different analysis methods to also cross confirm the results obtained.

**REFERENCES**

Andersen E.S. (1996) Warning:activity planning is hazardous to your project's health! *International Journal of Project Management.*

Andersen E.S., Grude KV, Haug T. (1995) *The goal directed project management*. 2nd edition. London.

Armstrong ( 2009) Hand book of performance management.

Bart CK. (1993) Controlling new product R&D projects. R&D Management.

Baker B.N., Murphy D.C, Fisher D (1988). *Factors affecting project success*. In: Cleland DJ,

King WD, editors. Project management handbook. New York: Van Nostrand

Baker, J.L. (2000). *Evaluating the Impact of Development Projects on Poverty*: A Handbook for Practitioners. The World Bank, Washington.

Bamberger, M., J. Rugh, M. Church, and L. Fort. (2004). Shoestring Evaluation: Designing Impact Evaluations under Budget, Time, and Data Constraints. *American Journal of Evaluation* 25 (1): 5-37.

Bamberger, M. (2006). *Conducting Quality Impact Evaluations under Budget, Time, and Data Constraints.* World Bank Independent Evaluation Group Evaluation Capacity Development Publication.

Bonham (2004) Communicating as a mental health carer.

Chatzoglou P.D., Macaulay L.A., (1996) A review of existing models for project planning and estimation and the need for a newapproach. *International Journal of Project Management*.

Cooper RG, Kleinschmidt EJ. (1987)New Products: What separates winners and losers? *Journal of New Product Management*

Duncan, W. R. (1996) A Guide to the Project Management Body of Knowledge, Project Management Institute, Upper Darby.

Dvir D, Lipovetsky S, Shenhar A.J, Tishler A. (1998) *In search of project classification*: a non-universal approach to project success factors.Research Policy.

Dvir D, Lipovetsky S, Shenhar A, Tishler A.(1999) *Common managerial factors affecting project success*. Working paper, Tel AvivUniversity, School of Management

Engwall (2003) No project is an island, linking project to history and context

Gray, Clifford F. and Erik W. Larson: (2008) Project Management - The managerial process; 4th edition; New York.

Freeman M, Beale P.(1992) Measuring project success. Project Management Journal

Iyer K.C. and Jha K.N., (2005), Factors affecting cost performance: evidence from Indian construction projects, *International Journal of Project Management*, Vol. 23, PP. 283 and 295

Kerzner, and Harold (2006) Project management: a systems approach to planning, scheduling, and controlling; 9th edition; New Jersey

King W.R., Cleland DJ.(1988) Life_cycle management. Project management handbook.New York:Van Nostrand.

Lipovetsky S, Tishler A, Dvir D. Shenhar, A.(1997) The relative importance of defense projects success dimensions. R&D Management.

Marosszeky and Karim ( 2004) Quality Management tools for lean production, Moving from enforcement to empowerment.

Meyer M, Utterback J.M.(1995) Product development cycle time and commercial success. IEEE Transactions on Engineering Management.

Nogeste ( 2011) Project/program objective and alignment strategies

Olaf P. (2009) Project Management, Ventus Publising, Horizons University.

Orodho, J.A. (2005). *Techniques of Writing Research Proposals and Reports in Education and Social Sciences.* 2nd edition. Nairobi. Masola Publishers.

Pattanayak, S.K., Yang, J.C., Patil, S., Poulos, C., Jones, K., Kleinau, E. Corey, C., and R. Kwok. 2005 b. *Environmental Health Impacts of Water Supply, Sanitation and Hygiene Interventions in Rural Orissa, India*. The World Bank.

Pinto J.K., Slevin D.P.(1988) Project success: definitions and measurement techniques. *Project Management Journal.*

Posten R.M.(1985) Preventing software requirements specification errors with IEEE 830. IEEE Software.

Saleh ,Samir, and Abu 2008 *Factors Affecting the Performance of Construction Projects in the Gaza Strip,* University of Gaza.

Schwalbe and Cathy (2009) Introduction to Project Management; 2nd edition; Boston.

Sekaran ( 2003) Research methods for business, skill building approach.

Simpson W.D. (1987) New techniques in software project management. New York: John Wiley.

Shenhar A.J., Dvir D, Levy O. (1997) Mapping the dimensions of project success. *Project Management Journal.*

Turner J.R. (1993) The handbook of project-based management londan mcgraww hill.

UNDP. (2007) Imporving water governance in Kenya through the human rights-based approach, *A Mapping and baseline report 2007.*

UNRWA, (2007), Projects completion reports, UNRWA, Gaza.

USAID, (2011) Emergency livelihood recovery intervention (ELRI), FAFI-district-Garissa Municipality- North Eastern Kenya, Horn relief USAID OFDA

World Bank, (2004) infrastructure assessment finance, private sector and infrastructure group, Middle East and North Africa.

## APPENDICES

### Appendix 1: Letter of introduction

Benedict Mutinda Kimwaki

P.O Box 495 - 70100
Garissa.

TO
The District Water Officer
Garissa District
P. O. Box 495-70100
GARISSA

Dear Sir/Madam,

**Re: Request for permission to collect data**

I am undertaking a Master of Art in Project Planning and Management in Nairobi University. I am carrying out a study entitled; "**factors affecting the performance of water and sanitation projects in Garissa Municipality**". I have selected your organisation/ ward for data collection.
I hereby request to be allowed to administer a questionnaire to you and some of the members of this this Organisation /ward which will assist me to complete my study. The information shall be used for the study purpose only.
Thank you in advance

Yours sincerely,

Benedict Mutinda Kimwaki

**Appendix 2: Questionnaire**

**Part A**

a. Ward of the respondent _____

b. Job Position _____

c. Level of education _____

**Part B**

**Objective One: project planning and performance of water and sanitation projects.**

1. To what extent has project planning affected project performance?

(5) Strongly agree (4) Agree (3) Not decided (3) Disagree (1) Strongly disagree

**PROJECT PLANNING**

| | Score | | | | |
|---|---|---|---|---|---|
| 1. The projects have clear objectives | 1 | 2 | 3 | 4 | 5 |
| 2. Project activities are documented and well laid down. | | | | | |
| 3. Project managers are transparent in the planning process. | | | | | |
| 4. Stakeholders participate during the planning of projects. | | | | | |
| 5. Projects operate as per the planned time lines. | | | | | |
| 6. Project resources are utilized as planned by the project managers | | | | | |
| 7. The planned budget is adhered to | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 8. Projects are completed as per the planned schedule | | | | | |

**Objective Two: stakeholder expectation and the performance of water and sanitation projects**

(6) What is the effect of stakeholder expectations on the performance of projects?

(5)Strongly agree (4) Agree (3) Not decided (3) Disagree (1) Strongly disagree

**STAKEHOLDER EXPECTATIONS**

| Statement | Score | | | | |
|---|---|---|---|---|---|
| 1. Stakeholder decisions matter in the management of the projects | 1 | 2 | 3 | 4 | 5 |
| 2. Stakeholders are actively involved in the daily management of the projects | | | | | |
| 3. Stakeholders are always aware of the progress of the projects | | | | | |
| 4. Stakeholders' dissatisfaction about any aspect of the progress of the project is documented and acted upon. | | | | | |
| 5. Any stakeholder can pull out of the project without much impact on the progress of the project. | | | | | |

**Objective Three: monitoring and Evaluation and the performance of water and sanitation projects**

(7) How does monitoring and evaluation affect the performance of projects?

a) Are projects continuously monitored and evaluated?

Yes ☐ No ☐

b) If yes 3(a) is (Yes), who evaluates these projects? (Tick as appropriate)

Government officials ☐ project managers ☐

Project official's ☐ stakeholders ☐

Others (specify)_____

c) Are the results of the monitoring and evaluation exercise published?

Yes ☐ No ☐

d) If 3 (c) is Yes, state your level of agreement or disagreement to the following statements.

(5)Strongly agree (4) Agree (3) Not decided (2) Disagree (1) Strongly disagree

**MONITORING AND EVALUATION**

| Statement | Score | | | | |
|---|---|---|---|---|---|
| 1. The progress of the Projects can be attributed to effective reporting of monitoring and evaluation results. | 1 | 2 | 3 | 4 | 5 |
| 2. Project managers take the results seriously and amend any loopholes in the progress of the project. | | | | | |
| 3. Adjustments in project implementation can be attributed to the result of M&E | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 4. Projects that are not monitored do not finish on the scheduled time | | | | | |
| 5. M &E ensures projects utilize allocated resources effectively | | | | | |

**Objective Four: Government policy and the performance of water and sanitation projects**

(8) To what extent do government policies on the performance of projects?

a) How often are government policies and regulations followed by project managers?

Always ☐ Sometimes ☐ Never ☐

b) Is the presence of government officials and representatives felt in the management and progress of the projects?

Yes ☐ No ☐

c) If 4 (b) is Yes, to what extent (tick as appropriate)

(5)Strongly agree (4) Agree (3) Not decided (2) Disagree (1) strongly disagree

**GOVERNMENT POLICY**

| Statement | | | | | |
|---|---|---|---|---|---|
| 1. In the allocation of funds/financial budgets. | 1 | 2 | 3 | 4 | 5 |
| 2. Their decisions are valued by the project managers. | | | | | |
| 3. The timelines and deadlines given by the officials are adhered to | | | | | |

**PART C: PERFOMANCE OF PROJECTS**

1. Rate the performance of the projects as per the following indicators

   (5) Excellent (4). Good 3. Average (2). Poor (1). Very poor

| Dimension | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. The quality of the project, both work in progress and final product. | | | | | |
| 2. How the budgets are appropriated/used and spend. | | | | | |
| 3. How are the deadlines/benchmarking phase by phase adhered to. | | | | | |
| 4. How appropriate are the resources utilized and managed | | | | | |

Thank You.