

**FACTORS INFLUENCING SUSTAINABILITY OF COUNTY GOVERNMENT
FUNDED CONSTRUCTION PROJECTS IN LAIKIPIA COUNTY, KENYA.**

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Of The Degree Of Masters Of Arts In Project Planning And Management Of The
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DECLARATION

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

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This research project has been submitted for examination with my approval as University supervisors.

Signature Date

Prof .Ndunge Kyalo

DEDICATION

This project is dedicated to family for their priceless support, inspiration and belief in me.

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ABBREVIATIONS AND ACRONYMS

APPA	American Public Power Association
DBS	Direct Budget Support
M&E	Monitoring and Evaluation
MTEF	Medium-Term Expenditure Frameworks
NGO	Non-Governmental Organizations
PBA	Programmes-based Approaches
SAM	Structural Adjustment measures
SWA	Sector-Wide Approaches
CIDP	County Integrated Development Plan

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ABSTRACT

Project sustainability is a major challenge in many countries, both developed and developing, hence; it has been emphasized on in the recent years. The main objective of this study was to establish the factors influencing sustainability of County Government funded construction projects in Laikipia County, Kenya. The main objectives of the study included; To establish the extent to which availability of resources influences sustainability of County Government funded construction projects in Laikipia County, Kenya, to determine how stakeholders' participation influences sustainability of County Government funded construction projects in Laikipia County, Kenya, to establish the influence of monitoring and evaluation on sustainability of County Government funded construction projects in Laikipia County, Kenya and to determine the influence of staff capacity on sustainability of County Government funded construction projects in Laikipia County, Kenya. The target population of this study was 65 individuals. The main tool for data collection in this study was a questionnaire, which was used for collection of primary data from the selected respondents. Data was then analyzed through Statistical package for Social Sciences (SPSS), and was presented in form of tables, graphs and appropriate descriptions and interpretations. The findings of the study showed that availability of resources, stakeholders' participation, monitoring and evaluation and staff capacity have great effects on sustainability of projects. This study concludes that resources allocated for construction projects, the levels of stakeholders' participation, emphasis given on monitoring and evaluation and training and experience levels of county staff are strong determinants of sustainability of projects. This study recommends that for the community to benefit from county funded construction projects, the County Government should involve stakeholders in project design, implementation, resource contribution, and monitoring and evaluation in order to ensure ownership of projects, and hence; there will be enhanced projects' sustainability. This study also recommends that Government of Laikipia County should adequately plan on effective M&E. Adequate financial resources should be allocated for M&E during implementation of County Funded construction projects to ensure all areas that need remedial measures are taken care of in advance to ensure sustainability. It is as well recommended in this study that the County Government should engage competent staff and agencies to implement and monitor all County Funded construction Projects.

CHAPTER ONE: INTRODUCTION

1.1 Background to the study

Project sustainability is one of the most critical challenges for all grassroots, national and international development projects (Ahmed, Azhar, Castillo & appagantulla, 2012). Globally, billions of shillings have been spent in public funded construction projects as a way of enhancing the living situation of the people. Project sustainability in local governments is a growing concern for governments worldwide. In the recent past, development practitioners have been focusing on efficient project monitoring and implementation that lead to project success and sustainability (ZouP, Zhang and Wang, 2017). The shift from project mode to Sector-Wide Approaches, Structural Adjustment measures to Programmes-based Approaches, Direct Budget Support, Medium-Term Expenditure Frameworks reflect this concern for reducing the fragmentation of development systems and change the way projects are implemented. The reason why many of the projects become unsustainable is not because of technical issues but are related to management, social relationships, community dynamics, monitoring and evaluation procedures, resources, staff capacity and the level of participation of stakeholders in projects (Al-Bahar and Crandall, 2010).

Sustainability can be viewed within time and changing social, economic and political contexts. According to Ayudhya (2011), sustainability is reflected in the capacity of the community to cope with change and adapt to new situations. Hussin & Omran (2012) assert that project sustainability means that new structures are appropriately owned by the stakeholders and supported on ongoing basis with locally available resources. Hence, managing sustainability is a process aimed at maximizing the flow of sustainable benefits, it should be an ongoing process and needs to be reviewed and updated as circumstances change and lessons are learned from experiences (Carignac, 2017). Substantial resources have been allocated to developing and maintaining community-based programs in most developing countries, however, relatively little is known about how these programs are sustained and what factors lead to their failure. Quite often, the typical community-based program has a relatively short life once its original funding base expires. Inadequate information and understanding of what sustains community based projects has led to various researches focusing on how community projects can be sustained past

their initial funding base and increase their longevity in addressing the needs of the community (Koushki, Al-Rashid & Kartam, 2015).

Carlsson, Josephson & Larson (2011) assert that there are four aspects of sustainability, which are needed to be recognized and analyzed. These include societal influence, which measures the impact a society makes upon the corporation in terms of the social contract and stakeholder influence; environmental impact, which is the effect of the actions of the corporation upon its geophysics environment; organizational culture, which is the relationship between the corporation and its internal stakeholders and finances, an adequate return for the level of risk undertaken in pursuit of sustainable development and financial sustainability (Mojahed, 2015). Maintaining benefits from projects flows after major external funding is completed assumes that stakeholders (government, community groups and private sector) will provide an appropriate level of financial, technical and managerial resources. However, AID providers may need to provide some limited follow-on assistance such as intermittent technical support (including sector advisory visits or supplementing financial support to enhance the prospects for sustainability and consolidate achievements (Fapohunda & Stephenson, 2010).

Globally, projects implemented by the County Governments in states like Texas for example include: modern community hospitals, mobile hospitals units, residential buildings, feeder roads, interconnecting railway lines, water projects, tourism project construction, waste management, agricultural projects, and housing units (Assaf & Al-Heiji, 2016). However, Jha, & Iyer (2016), on the development of manufacturing companies in America, Austria, Malaysia and India indicated that there is imbalanced development in various states, counties and local states or municipalities in all these most countries. The major reason cited for this different development in states/counties despite the fact that they are operating in the same countries include: differing state/county by laws, rates of imposed taxes, financial resources availability, natural resources availability, corruption, infrastructure, politics, security, cultural factors and educational factors and climatic conditions (Olatunji, 2010). Factors like political opposition, level of technology, human resources development, financial resources allocation from the budgets, availability of minerals and many more has greatly influenced projects implementation in most countries up to the tune of 55% (Omran, Abdalrahman & Pakir, 2012).

In the UK, Fapohunda and Stephen (2010) state that in construction, conflicts exist between the projects stated objectives with regard to the appropriateness of cost, time and quality; hence affecting project sustainability. In Sudan Omran, Abdalrahman and Pakir (2012) reveal that despite large number of reported cases, construction ranging from the simplest to more complex projects have increasingly experienced cost overruns, which ultimately results in sustainability problems. In Ghana, studies reveal increasing cost overruns, delays in completion, unsatisfactory and unmet project objectives in most road construction projects because after completion, sustainability becomes a major issue (Gaba, 2013). In South Africa, studies reveal that client, project team do not have comprehensive understanding of road project from inception to completion (Olatunji, 2010). This affects the entire implementation and sustainability process in projects. In Nigeria, road construction delay has become endemic, thus affecting sustainability.

It is evident that most projects implemented at huge amounts often tend to experience difficulties with sustainability (Carlsson *et al.*, 2011). Donors such as the World Bank, DFID, USAID and other bilateral aid agencies have been expressing concerns on project sustainability, while the trend with implementation of projects is showing significant improvement, post-implementation sustainability is rather disappointing with very few projects being sustained (Tabishl & Jha, 2011; Mojahed, 2015). Despite huge amounts of money spent on implementation of projects in Kenya, poor sustainability is depriving them from the returns expected of these investments. Several factors are responsible for poor project sustainability. Some factors are simple and others are quite complex. Some are within the control of the project management, while others come as external threats (Nyaguthii & Oyugi, 2013).

In Kenya, the construction industry has been robust with a lot of roads and buildings being constructed. Foreign investors have shown a lot of interest to have a stake in Kenyan road construction industry. They consider Kenya as a business hub in East and Central Africa and a centre from which they can operate within Africa as a consequence; all the 47 Counties have witnessed a boom in road construction projects (Wambugu, 2013). Other construction projects include government, Private individuals, private companies, international businesses and institution sanctioned. In Laikipia County, government funded construction projects are managed by the county officials. The construction industry is full of projects that are completed with significant cost, scope and time deviation (Amhed, Zahara & Juma, 2010). However, just as in

other counties in Kenya, project sustainability remains a major challenge. The need for sustainability of construction projects arises from the desire for the project to start serving its intended use and thus recouping the investment ploughed in. In the event that this is not realized, various outcomes play into such a reality.

There have been many more failures than successes in the implementation of projects, particularly in the developing countries (World Bank, 2010). According to Ebbesen & Hope (2013), wrong priority leads to failure of 32% of projects; shortfalls in resource availability fails 67% of projects, inadequate assessment of targets fails 43% of projects, wrong scheduling of time for project completion fails 86% of projects, inadequate project identification fails 51% of projects, while formulation and design and faulty conceptualization of policy fails about 60% of projects. In Kenya, counties have for five years carried out various projects successful with counties like Machakos, Meru and Kericho reporting up to 12% pa positive projects implementation, but a number of the 47 counties have failed on the way due to prevailing factors like wrong prioritization of development projects, lack of financial resources, political influence, corruption, low levels of technology, poor infrastructure, lack of community involvement, poor management support and many more. As a matter of fact, there is an abundance of project failure, resulting from the inability to or poor performance in terms of implementation. It is on this backdrop that this study seeks to establish factors influencing sustainability of County Government funded construction projects in Laikipia County, Kenya.

1.2 Statement of the Problem

Generally, the successful measure of a project is defined by completing it within specified cost, time, scope and quality and continued sustainability. Olukotun (2014) termed a construction project to be successfully sustained if it passed four success test criteria including the time criterion, period of sustenance; the cost or money criterion –budgetary allocation for sustenance, the effectiveness criterion, how efficient is the sustenance procedure and quality standards; and client’s satisfaction criterion, accepted by the intended users or clients whether the client is internal or from outside the organization. However, most projects are poorly sustained due to low management skills possessed by government officials, cost overruns, poor monitoring and evaluation of how projects are implemented and sustained and inadequacy of resources (Aibinu & Jagboro, 2012).

In Kenya, the 47 County Governments are in charge of overseeing majority of functions such as provision of health care, pre-primary education, and maintenance of local roads that were under Kenya's national government. In order to smoothly facilitate service delivery, devolved governments, gets funding from the national government as required by Article 203(2) of the Kenya Constitution (Wambugu, 2013). However, increase in project delays in the construction industry is hurting the economy because it results in wastage of resources, enhanced costs of projects and frustration among customers, yet construction is one of the principal sectors that can revitalize economic growth in Kenya. Investment in construction projects and related infrastructure and services has multiple direct and indirect effects. It triggers forward and backward linkages through additional investment in manufacturing of building material, transport and government (GoK, 2001).

Laikipia County Government remains the main implementer of capital projects and the implementing agency of many projects, particularly public infrastructure, such as schools, hospitals and health centers and roads. In Laikipia County, construction projects are facing sustainability challenges, where only about 30% of construction projects have been successful so far in the researcher's view. Many infrastructure projects fail to be implemented due to factors like time in efficiency, financial constraints and lack of political will. Ayudhya (2011) notes that a project sustainability depends on meeting objectives within time and budget limits, this has not been realized in Laikipia County basically due to lack of emphasis on sustainability factors of these projects that are funded by the County Government.

Studies done by Rimbera (2012), Ali Jatan (2012), Olukotun (2014) and Airo (2017) point out lack of project sustainability due to low level of community awareness, approaches used by developers and lack of proper feasibility studies. Studies by Gaba (2013) and Koushki *et al.* (2015) point community participation, project location, training on technology used and community capital contribution as factors hindering project sustainability. Clearly, in Kenya's construction industry, there are factors that have affected sustainability construction projects, particularly in Laikipia County. It is a major concern for every stakeholder in a construction projects to understand these factors (Mochal, 2009). This study therefore sought to look at factors influencing sustainability of County Government funded construction projects in Laikipia

County, Kenya, that stakeholders would need to address. It was hoped that in addressing these factors, sustainability of construction projects would greatly be enhanced.

1.3 Purpose of the Study

The purpose of this study was to establish the factors influencing sustainability of County Government funded construction projects in Laikipia County, Kenya.

1.4 Objectives of the Study

This study was guided by the following objectives;

- i. To determine the extent to which availability of resources influences sustainability of County Government funded construction projects in Laikipia County, Kenya.
- ii. To find out the stakeholders' participation influences sustainability of County Government funded construction projects in Laikipia County, Kenya.
- iii. To establish the influence of monitoring and evaluation on sustainability of County Government funded construction projects in Laikipia County, Kenya.
- iv. To establish the influence of staff capacity on sustainability of County Government funded construction projects in Laikipia County, Kenya.

1.5 Research Questions

This study was guided by the following research questions;

- i. To what extent does availability of resources influence sustainability of County Government funded construction projects in Laikipia County, Kenya?
- ii. How does stakeholders' participation influence sustainability of County Government does funded construction projects in Laikipia County, Kenya?
- iii. What is the influence of monitoring and evaluation (M&E) on sustainability of County Government funded construction projects in Laikipia County, Kenya?

- iv. What is the influence of staff competence on sustainability of County Government funded construction projects in Laikipia County, Kenya?

1.6 Significance of the Study

The study could play an instrumental role in identifying and also making an assessment of the factors that influence sustainability of County Funded Projects in Laikipia County Kenya. Lessons drawn from this study would be employed by the local communities, implementing partners, donors and international NGOs to address the sustainability challenges and plan for better means of implementing sustainable development projects. Further, the study would also benefit future scholars who would wish to do similar studies as source of documented literature.

1.7 Limitations of the Study

The researcher noted that County funded construction projects are multi-sectorial and multi-disciplinary in nature and involve different county departments including roads and transport; health; sports and culture; labour and social welfare; tourism and recreation; and finance. Therefore, the greatest limitation to this study was the cross sectional majority of data to be investigated. To avoid this however, the researcher made sure that the data collected focused on critical factors influencing sustainability of County Government funded construction projects. In addition, the study was only conducted in Laikipia County, Kenya, and may not allow generalization to other counties; however, it could be applied to counties with similar characteristics. Another major limitation was on great suspicion among the respondents on the intention of the research. This led them to either refuse to provide the required information or even provide data that was less reliable for the study.

1.7 Delimitations of the Study

The study was carried out in Laikipia County. The reason as to why the study was limited to Laikipia County is because of lack of time and enough resources to allow the researcher to consider all Funded Projects in all Counties in Kenya. The study targeted the CEC, Ministry of Transport and Infrastructure within the County, Departmental heads and project managers as these were people deemed to have relevant information on factors influencing sustainability of County Funded construction projects due to the nature of their duties and responsibilities.

1.9 Assumptions of the Study

This study was based on several assumptions. It was assumed that the people that were targeted to provide information relating to this study were accessible and also willing to respond on research questions. This study assumed that there were no security challenges in the study area during the research process. The study ignored the minor factors that had indirect impact on project sustainability. It assumed that the weight of project sustainability variable would remain constant throughout the duration of the project life. It assumed no stage hosting by respondents while they are giving the basic information for the investigation. The study also assumed that the statistical models to be used in data analysis shall hold constant and yield reliable results for the intended analysis. Further, the study assumed that the individuals that were sampled conveniently and effectively represented the entire population.

1.10 Definition of Significant Terms

Project: Refers to a planned set of interrelated tasks to be executed over a fixed period and within certain cost and other limitations (Hwang and Lim, 2013).

Project Sustainability: Refers to the ability of an organization to continue its mission, program or project far into the future (Hwang and Lim, 2013).

Construction projects: Refers to an organized process of constructing, renovating, refurbishing, and so forth, a building, structure or infrastructure (Dungumaro & Madulu 2013).

1.11 Organization of the Study

The study will be organized into five chapters. Chapter One provided details on the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, limitations, and delimitations, basic assumptions of the study and definition of terms used. Chapter Two offers a review of the relevant literature on factors influencing sustainability of County Government funded construction projects, theoretical and conceptual framework. Chapter Three covered research methodology that was applied to source, process and requisite data. Chapter four covers data analysis, presentation and interpretation of the study findings. This was followed by Chapter Five, which contains summary of findings, conclusions and recommendations as well as further research. References and appendices are at the end of the document.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents literature review for the study. The chapter also discusses theoretical framework and empirical review of the study seeking to evaluate what other researchers have done in the past on factors influencing sustainability of County Government funded construction projects.

2.2 Sustainability of the Projects

Project sustainability is viewed as the continuous operation of resources in a way that it ensures the present and future generations continue enjoy their benefits. Sustainability measures the growth, maintenance and/or degradation of resources that affect ability to keep itself (Dungumaro & Madulu 2013). Studies conducted by Binder (2012) and Nikkhah and Redzuan (2010) agreed on the definition that; pointers and metrics of sustainability are endeavors to satisfy the service expectations and needs of communities in the long-term.

A study by Mutinda (2015) explained that county funded development projects are involved in a wide range of activities and programs at national and regional levels all aimed at improving the wellbeing of poor people. Nationwide, a great number of people are being positively impacted by county funded projects. The focus of county funded projects includes interventions in Education, Water, Agriculture, Livestock and Food Security, Transport and Infrastructure among others. County Funded Projects are designed and planned for a certain period of time called gestation period or life span after which they come to an end and the community is expected to take over and run the project and make it self-sustaining in the long run.

Research has shown that projects' implementation in sub-Saharan Africa often demonstrate low levels of sustainability (Gebrehiwot, 2012). The key causes for this include inappropriate policy or legislation; insufficient institutional support; unsustainable financing mechanisms; ineffective management systems; and lack of technical backstopping (Niyi, 2011). According to Mugambi (2014), County Governments in Kenya face serious challenges when preparing budgets. Though, County Governments adhere to the stipulated procedures during budget preparation and their technical teams have requisite capacity required in budget preparation process, political

interference and lack of adequate stakeholder involvements are key challenges and these highly affect the sustainability of the county funded projects in the county.

The factors influencing sustainability of county funded projects will be categorized under several main headings, namely: stakeholder participation and project sustainability, monitoring and evaluation (M&E) and project sustainability, competence of staff and sustainability, availability of resources and project sustainability and gaps in literature review.

2.3 Availability of Resources and Sustainability of County Funded Projects.

Successful sustainability projects require that an organization invests valuable resources, including money and people's time. At the earliest stage of designing a development project, key stakeholders must make a decision on whether the activity is worth pursuing given the expected use and costs. At least a rough budget for the activity is therefore needed as part of up-front planning. Baloyi and Bekker (2011) study notes that the availability and accessibility of materials influence the sustainability of projects. In the absence of these resources, the contractor needs to spend more time and resources to locate them. The appropriateness of allocated resources should be assessed to ensure that project runs without delays. If a project is carried out jointly with donors in the context there should be an agreement on resourcing modalities with potential donors or other counterparts at the outset.

Budget limitation is consistently one of the greatest constraints to effective sustainability of development projects. While projects can often compensate for a lack of technical capacity through training and/or outsourcing, they cannot compensate for the lack of money. Implementing project costs money and, depending on how ambitious project implementers are about their project, it can cost a lot of money as concluded by study done by Harris (2011). Gwadoya (2012) study observed that financial resources for development projects should be estimated realistically at the time of planning for the project.

While it is critical to plan for project execution together, resources for each function should be separate. In practice, each project should have two separate budget lines for example the project and for its monitoring and evaluation agreed in advance with partners. Monitoring and evaluation costs associated with projects can be identified relatively easily and be charged directly to the respective project budgets with prior agreement among partners through inclusion in the project budget or annual work plan signed by partners. Sourcing and securing financial resources for

County funded project or programs can pose additional challenges. It is important to allocate required funds for each development project. It is important that partners consider the resources needed for timely completion of projects and agree on a practical arrangement to finance the associated activities for sustainability purposes. According to Muli and Rotich (2016), poor financial management practices have significantly contributed to budget implementation crisis in County Governments in Kenya. It is stated that, financial management practices actually impact on implementation of budgets by County Governments.

From global perspectives, resources availability is one of the important challenges facing the construction industry characterized by shrinking workforce. Statistics Canada predicts that in Canada by 2016 there will no longer be enough new workers to replace retirees. In the US a Conference Board study, “Managing the Mature Workforce,” predicts that by 2010, the number of workers aged 35 to 44 will decline by 19%; aged 45 to 54 will increase 21%; and aged 55 to 64 will increase 52%. This is a world-wide phenomenon. The number of workers aged 35 to 44 is expected to decline by 27% in Germany, 19% in the U.K., 9% in Italy, 10% in Japan, and by 8% in China. A recent study from the American Public Power Association (APPA), Work Force Planning for the Public Power Utilities: Ensuring Resources to Meet Projected Needs reports that the loss of critical knowledge and the inability to find replacements with utility-specific skills are the two biggest challenges facing the industry. In the utility industry the average age of utility workers is close to 50 and by 2010, as many as 60 percent of today's experienced utility workers will retire. An important ingredient to achieving project success is exceptional design knowledge, skills and experience. Deficient professional capability, shortage of full understanding of scientific and technical requirements and improper decisions and overlooking specialists and stakeholder's consultation during the decision making process obstruct the development of development projects, especially in developing Countries (Mugo, 2018).

Research done by Mary & Enyinna & Ezinne (2015) concluded that training is one of the main human resource activities in order to have qualified, flexible and proactive employees (Singh and Mohanty, 2012). This is because even with the most effective selection process and the very important element of selection test that brings employees into an organization, the wave of advancement and application of such technology, complexity of operations, competition, need for growth and sustainability makes employee training critical. Employee training is a planned

activity carried out either within or outside the organization that equip employees (trainees) with relevant competencies that enable employees perform assigned tasks optimally. Employee training exists in the following dimensions: Orientation training, Skills training, Refresher training, Literacy training, Cross-functional training, Team Training, Creativity Training and Diversity Training (Rao, 2010).

Most importantly, all training efforts by employers are aimed at meeting the requirements of the organization (long-term) guided by organizational goals and employee objectives (short-term) via transmission of skills, knowledge, attitudes, etc. which are vehicles through which organizational goals and objectives are achieved. For any enterprise to function effectively, it must have money, materials, supplies, equipment, ideas about the services or product, to offer those who might use its output and finally people, which is the human resource, to run the enterprise (Sultana, Irum, Ammed and Mohmood, 2012). Human resources are the intellectual property of the firm; a good source of gaining competitive advantage (Nassazi, 2013) and training is the only way of developing organizational intellectual property through building employees' competencies. To develop a competitive advantage, it is important that organization leverage on the workforce as a competitive weapon. Simply hiring and placing employees in jobs does not ensure their success, hence the need for them to be trained.

2.4 Stakeholder Participation and Sustainability of County Funded Projects.

In the context of County Funded construction Projects, stakeholders play a major role when it comes to sustainability of those projects. As pointed out by several scholars, sustainability is hard to attain with no support and involvement of stakeholders (Koenig & Schultz, 2010). With their different roles to play, stakeholders' active engagement implies the chance to influence, and to some level, control the direction, design, detail as well as implementation of a project. In their book, Koenig and Schultz (2010) defined stakeholders as persons or organizations who are actively involved in, concerned with, or whose interests are affected by the implementation of a project, whether positively or negatively.

Stakeholders tend to have significant influence over project, its deliverables as well as the project members (Koenig & Schultz, 2010). Stakeholders of County Funded Projects may include: The County Government, the community or public, the project management committee or any other implementing agency, employees or workers, technocrats from Ministries of Water, Housing and

Health, and Public Works. In layman's terms, project stakeholders are the people who have a stake in the project or people with interest or concern in any aspect of the project (Mwanzia & Strathdee, 2010). The project staffs implement activities while the program managers supervise project implementation. The workers or employees interest is that they consider the project a source of income for them hence making them a major stakeholder group. The government happens to be a key stakeholder and for projects to succeed, good working relationships ought to be established with the government and its agencies at all levels. The Government, mainly for regulatory reasons, should also be informed of activities and likely impacts of projects.

In trying to explain the importance of stakeholder engagement, Akinsiku & Akinsulire (2012) illustrated how failure to consult and involve, right from the beginning of projects, government stakeholders from agricultural, health, fisheries, public works and forestry ministries may affect the sustainability of projects. [In order to increase chances of success, it is important to articulate the expectations of different stakeholders earlier in the process. Project execution as agreed among the major stakeholders at the end of the planning stage, is necessary so as to undertake implementation systematically (Sultana *et al.*, 2012). A plan acts as a tool for the successful implementation as it spells out effective and apt decision-making along with vital information from regular and implementation activities. Planning for implementation should occur during project design, where indicators for progress should also be established. Stakeholder participation in project implementation can result in effective communication hence increasing support from the key stakeholders (Halloum, M and Bajracharya, 2012).

Hofisi (2013) study has shown that stakeholders can be categorized into several groups such as primary, secondary and external stakeholders. Primary stakeholders are those people or groups who are ultimately affected by the project while secondary stakeholders are intermediaries who deliver aid to or affiliated to primary stakeholders. External stakeholders are those not formally engaged in a project, but who may impact or be impacted by its implementation or outcomes. In development projects, stakeholders usually include donor agencies, government, civil society organizations and the local community and beneficiaries. To identify stakeholders to a project, Hofisi (2013) recommends the use of Stakeholder analysis. Experiences in monitoring and evaluation of participation are still limited. Many academicians have concentrated more on identifying stakeholders and assessing the extent of their participation than on assessing the costs

and benefits of participation of the different stakeholder groups. To assess the extent and quality of participation, one will have to rely on both quantitative and qualitative indicators. Quantifiable indicators may be applicable in measuring the economic aspects of participation, extent of participation in project activities, and the development momentum. On the other hand, qualitative indicators measure processes like organizational growth, self-reliance and group behaviour. Wabwoba (2012), in a study that focused on factors affecting sustainability of projects in Kiambu County concluded that partners and stakeholder groups ought to be persuaded to partake in the evaluation process.

2.5 Monitoring and Evaluation and Sustainability of County Funded Projects

Project monitoring and evaluation happens to be a critical success factor when it comes to any kind of project. Monitoring is a continuous function that relies on the systematic collection of data on specified indicators, to provide management and the main stakeholders of an ongoing development intervention with indication of the extent of progress and achievement of objectives and progress in the use of allocated funds. Lack of adequate monitoring and evaluation expertise or capacity among the local NGOs is one area that has been highlighted by several scholars (Gwadoya, 2012). Successful monitoring and evaluation calls for particular skillfulness and knowledge like monitoring and evaluation design skills particularly log frame design, indicator setting: both qualitative and quantitative, design of data collecting instruments including questionnaires, focus group discussion guides.

A major problem experienced in many projects is the lack of adequate financial resources to carry out monitoring and evaluation. Majority of projects have inadequate funds meaning that the little resources available are channeled to actual implementation of project activities and monitoring and evaluation viewed as an expense not worth incurring (Baloyi & Bekker, 2011). Gwadoya (2012) stated that the need for effective monitoring and evaluation is increasingly recognized as an indispensable tool for project management. He acknowledged that the need to improve the performance of development assistance calls for close attention to the provision of management information, both to support the implementation of projects and programs and feed back into the design of new initiatives. M & E also provides a basis for accountability in the use of development resources, consequently leading to sustainability of County Funded Projects.

Tache (2011) carried out a study called developing an integrated Monitoring and Evaluation flow for Sustainable Investment Projects in Romania. The objective of the study was to develop a general integrated flow, encompassing both a project monitoring system and also a project evaluation system for the investment projects involving economic objectives, as well as cross-cutting social and environmental targets. The whole approach was being presented as a flowchart, which highlights the intimate relationship between the monitoring and evaluation processes, and provides a formal framework for performing a logical monitoring and evaluation process, taking into account simultaneously the economic, social and environmental perspectives, within an investment project. The study used critical analysis and found that both the estimated advantages and the disadvantages of such a managerial tool, opening new perspectives for developing further improved models and systems, where monitoring and evaluation affects positively the sustainability of the projects in Romania.

Paulinus and Iyenemi (2014) carried out a study called M&E rural water supply projects and sustainable development in Nigeria and Ghana. The study reviewed the sustainability issues that are associated with rural community water provision and some of the challenges experienced in the in Niger Delta region of Nigeria within the context of project benefits sustenance. The sustainability of this approach to water provision was assessed using a qualitative research methodology and undertaking a comparative review of Micro-Projects Programme (MPP3) in Nigeria with that of Volta Region Community Water Supply Programme (VRCWSP). The findings reveal the absence of sustainability in the current approach and the paper recommends that if community based hand pump operated rural water supply projects are to be sustainable; the sustainability factors must be given full consideration in its design and implementation.

Kimweli (2013) analyzed the role of monitoring and evaluation practices to the success of donor funded food security intervention projects in Kenya. The purpose of the study was to find out the role of monitoring and evaluation practices to the success of donor funded food security intervention projects. The study targeted residents of Kibwezi district who have benefited from donor funded food security projects. The study utilized a case study design because it was considered a robust research method particularly when a holistic and in-depth investigation is required. A sample of 40 respondents was selected from four Locations; Makindu, Nzambani, Masongaleni and Mtito Andei; from the larger Kibwezi district through purposive sampling.

Data was collected through a questionnaire with 10 questions where respondents indicated responses on statements in a Likert scale. Data from Semi structured interviews from key informants, focused discussion groups and the government officers who had been involved in these projects were used for triangulation. Quantitative data collected was analyzed using MS Excel 2010. The study established that the community was not involved in any monitoring and evaluation of the food security intervention projects. The findings of the study indicated that food security project implementing agencies to recognize the role played by participatory monitoring and evaluation (P M & E) practices in the success and sustainability of the projects.

Ochieng, Paul, Ruth and Kuto (2012) analyzed the effectiveness of monitoring and evaluation of Constituency Development Fund (CDF) projects in Kenya. a case of ainamoi constituency. The objective of the study was to look at the effectiveness of monitoring and evaluation process on CDF projects in Ainamoi constituency, Kenya. A case study research design methodology is used where the target population comprises of CDFC members, selected constituents, Project Management Committee (PMC), and District Development Officer (DDO). The results of the study showed that PMC, CDFC and external assessors are involved in monitoring and evaluation of projects with minimal participation of constituents.

Andove and Mike (2015) assessed how monitoring and evaluation affects the outcome of constituency development fund projects in Kenya. The aim of the study was to establish whether the project monitoring and control efforts of the contractors and project supervisors contribute to an improved project outcome. A field survey was conducted using a sample of 45 respondents who were selected by stratified random sampling. The data were collected using structured questionnaires and analyzed using Statistical Package for Social Sciences. The results of the study revealed that contractors and project supervisors apply monitoring tools to a certain level in their project operations consequently producing satisfactory levels of success. The findings further revealed that most constituency development fund projects in Kenya were completed within the stipulated time frame and budget and that majority of the respondents considered them a success.

Jackson, Joseph, and Ben (2015) analyzed factors affecting the effectiveness of monitoring and evaluation of constituency development fund projects in Kenya. The objective of the study was to establish the factors affecting monitoring and evaluation on the projects with reference to

technical capacity, political influence, stakeholders' participation, and budgetary allocation of Constituency Development Fund (CDF) projects in Kenya. Descriptive research design was used. The target population was all the Project Management Committee (PMC) and CDF members. Stratified random sampling was used to get the sample. Data was collected using questionnaires which were subjected to content, face and construct validity tests. Descriptive and inferential statistics were used. Mean, standard deviation, correlation, ANOVA and Multiple regression analysis was used to determine the effectiveness of Monitoring and evaluation for CDF projects. The model was able to explain 85.6% of the variances in effectiveness in monitoring and evaluation thus it's a significant tool on CDF projects at 5%.

In Kenya, Mibey (2011) researched factors affecting implementation of monitoring and evaluation programs in Kazi Kwa Vijana projects by government ministries in Kakamega Central District, Kenya. This scholar looked at the monitoring and evaluation element in the Kazi Kwa Vijana projects and the influence of funding and training on the implementation monitoring and evaluation programs. The research uncovered several inadequacies in the monitoring and evaluation of Kazi Kwa Vijana projects; like underfunding, lack of skilled manpower and a general negative attitude towards the process of monitoring and evaluation. The study recommends that these critical issues be addressed by up scaling funding for monitoring and evaluation activities, enhanced training of monitoring and evaluation personnel and the setting up of dedicated monitoring and evaluation teams at the District level across all ministries implementing Kazi Kwa Vijana projects. This will facilitate efficient implementation and sustainability of these projects so as to maximize the benefits of this huge investment in the youth of this country.

Gwadoya (2012) also conducted a study on the factors influencing effective implementation of monitoring and evaluation practices in donor funded projects in Kenya: a case of Turkana District. The academician found that staff competency; resource adequacy, technology adoption and donor policies play a pivotal role in determining the performance and success of donor funded project. However, the study found that there is a share need for proper understanding of M & E practices in donor funded project. On the other hand, Abdisalan (2012) did a study on the factors influencing the application of participatory monitoring and evaluation (PME) in community based projects: a case of IDPs in Mogadishu Somalia. He observed that sufficient

time was needed to design, adapt and implement the agreed process of PME. Training was also found to be very important in PME and it needed a lot of time to be built into the stakeholders (Mwanzia & Strathdee, 2010).

Abdisalan (2012) also concluded that resources like finances and human resource were really essential in PME for various activities such as planning, implementation, monitoring and mobilizing the community among other activities. Skills were also found to be necessary in the following area, planning, implementing, assessing and monitoring and for numeracy, literacy, interviewing and monitoring in qualitative and quantitative methods, for Management Information Systems (MIS) and for follow ups, adequacy, technology adoption and donor policies play a pivotal role in determining the performance and success of donor funded project hence their sustainability. However, the study found that there is a shared need for proper understanding of M & E practices in donor funded project.

2.6 Competence of Staff and Sustainability of County Funded Projects.

Globally from a resource-based point of view, superior performance of projects is linked to the resources and capabilities possessed by a particular project staff. Even though conceptualizing and or measuring these capabilities is not straight- forward, an in-depth analysis of employees' competences and their development is inevitable because they form a key source for competitive advantage in implementing projects.

As attested by several scholars, successful project sustainability is influenced by accumulated knowledge and individual and collective competence (Harris, 2011). Based on the wide body of literature, there are several approaches to defining and measuring the level of staff competency, capacity and the effectiveness of agencies tasked with projects. The effectiveness of the project team tasked with project's implementation depends to a large extent on the project staff capacity relative to the demands placed upon them. To be sustainable, projects need to have sufficient and capable staff with the appropriate mix of skills and expertise, the motivation and will to act, and the incentives and resources necessary to achieve their mandate. Projects require people to carry out laid down work since the projects cannot implement themselves. This increases the need to understand, who will work on the systems, what skills and knowledge they have and the overall level of human resources on hand to suit the project 21 execution plan (Harris, 2011).

A study done by Kyalimpa (2017) on leadership competencies and sustainable funding in Uganda explained that successful staffs build strong teams through what is termed as a “team-based approach to leadership”. The “team-based approach to leadership” is supported by the concept of “distributed leadership” in which there is a shared sense of purpose, ownership of issues, shared decision-making and delegated authority at all levels of the organization. By creating a sense of ownership, the leader builds social and human capital and enables county staff to interact and work together in cordial and productive way and hence leading to sustainability of the projects.

Several authors, however, do conclude a central role of the project staffs with regards to sustainability (Turner, 2010). Maltzman and Shirley (2013) even talk about “a pivotal role” of the staffs and also Goedknecht and Silvius (2012) conclude that the project staff has a lot of influence on the application of sustainability principles in or to the project. What these studies have in common is that they highlight the opportunity that the role of the project manager or staffs offers. The project manager or staff has a central position in the project and that provides the opportunity to influence many aspects of the project. This influence is not limited to the process of executing the project but, by the ‘power of agenda’, extends to the deliverable and objectives of the project. The ‘power of agenda that the project manager has, provides him or her with the opportunity to discuss sustainability aspects, concerns or issues with the project sponsor, within the project team or with other stakeholders in the county.

Further studies done also attribute that integrating sustainability of the project requires that staff or managers realizes their unique position in realizing (sustainable) change and act as partner of, and peer to, stakeholders (Crawford, 2013; Tam, 2010). In this mind shift, the change a project realizes is no longer a given fact, nor exclusively the responsibility of the project sponsor, but also the professional responsibility of the project manager, with sustainability, ethics, transparency and accountability as underlying values.

Silvius *et al.* (2012) study explained that project staff or manager need to understand more about the sustainability issues related to current business models, patterns of consumption and production and resource usage in the project. The project manager also needs to be able to understand cause-effect relationships and long term effects of short term actions. Several authors also conclude that integrating sustainability requires a scope shift in the management of projects;

from managing time, budget and quality, to managing social, environmental and economic impact (Haugan, 2012). However, considering the sustainability impact of projects does not just require knowledge. As skills elements, staffs or project managers need to be able to engage with different and non-traditional groups of stakeholders, often with different interests and cultural backgrounds, using participatory methods.

Hueman (2016) elaborates on this aspect in their recently published a study “Rethink! Project Stakeholder Management,” in which a more holistic project stakeholder management approaches are developed in the context of sustainable development. This approach includes innovative stakeholder management methods, such as focus groups and systemic constellation methods, to aid project teams in clarifying roles, visualizing relationships and identifying stakeholders and their interests. This approach prepares project managers and teams to better position themselves with diverse stakeholder groups in complex stakeholder situations, in order to support the creation of shared project benefits. Studies done by Silvius & Schipper (2014) and Silvius *et al* (2012) concluded that sustainable project required a ‘mind shift’ of the staffs and managers involved in the project. Sustainability competences refer to the attitude that the project manager has with regards to sustainability and his/her role in considering sustainability in the project.

2.7 Theoretical Review

The study is anchored on two theories; stakeholder Theory by Miles and Friedman (2006) and sustainability theory whose concept is founded on economic theory known as theory of environmental limit whose brain child was Thomas Malthus (1766-1834)

2.7.1 Stakeholder Theory

This theory is illustrated through two principles, the organization legitimacy and stakeholder fiduciary principles. The principle of organization legitimacy which argued for the management of the organization by considering the benefit of the stakeholders, the rights of various groups are considered as well as their participation in decisions that substantially affect their welfare. On the other hand, the stakeholder fiduciary principal proposed that managers were to act in the interests of the stakeholders as well as the corporate while safeguarding the long-term stakes of each party. Jensen (2012) considers the linkage of objective function and stakeholder theory as enlightened value maximization: implying that whenever managers make trade-offs, they consider how the value gets created.

According to the stakeholder theory, organizations run their activities through constituency concepts and propositions (Wicks, and Harrison, 2015). The idea is that; stakeholders who have a stake interact with the organization and thus make its operation possible (Eid, 2009). Each firm faces a different set of stakeholders, which aggregate into unique patterns of influence. Firms do not simply respond to each stakeholder individually, they respond rather to the interaction of multiple influences from the entire stakeholders set (Gwadoya, 2012). Thus, organizations response to their stakeholders requires an analysis of the complex array of multiple, interdependent relationships existing within the stakeholder environment. The conceptual competition within stakeholder theory, between legitimacy and power, is reflected in virtually every major theory of the firm particularly in agency, behavioral, institutional, population, ecology, resource dependence and transaction cost theories.

This theory was relevant in this study as it explained the importance of engaging stakeholders in project implementation as the kind of involvement determines project sustainability. From the study, it is evident that stakeholders need to be involved in project implementation as they can provide their views and opinions in relation to project activities, and can as well help in identification and selection of most important projects in counties. However, literature has shown that stakeholders in most cases are never involved in project selection, planning and implementation, and this has resulted in failure of some projects. Hence; this theory is very important as it shows the relevance of stakeholders' involvement in project sustainability issues.

2.7.2 Sustainability Theory

The concept sustainability can be traced back to 1970 and later popularized by world commission on environment development (WCED) a branch of United Nations. The argument in the theory is that resource in the environment that we live in is finite (White, 1996 & WCED, 1987). In the WCED report namely our common future, the concept sustainable development and sustainability began to take shape and later became popular with environmental conservation. According to WCED, sustainable development is a development that meets the needs of current generation without compromising the ability of future generation to meet their own needs (WCED, 1987). In the context of this study therefore, the concept sustainability is about people being able to maintain and sustain the project or program outcome by their own assets or resources while not compromising the needs of future generation.

The theory of sustainable development indicates that the concern of Sustainable development is management of the process of change, not on setting an end goal with fixed outcomes. It recognizes that uncertainties exist, necessitating flexible and ongoing processes. It also supports diversity and differences within the local setting. Inherent in this concept is consideration of the social, political, economic, and cultural relationships fundamental to development agenda. In this theory, sustainable development requires a broad picture view global thinking and local action of communities, while constantly thinking critically about and fine-tuning the small intricacies of the relationships that ultimately shape the county. Management of projects requires three key competencies namely; contextual, behavioral and technical skills. In regard to sustainability approach to community development project leaders and team require contextual competence to a larger extent and not excluding behavioral and technical competence (Beata, 2014).

Sustainable development theory was relevant in this study as it suggested that human and social capital should be treated much like natural resources. Efficient and effective use of these resources provides long-term, sustainable benefit to local communities (CEC, 2006). The investigation in this study borrowed from sustainable development theorist emphasis that capacity assessment is crucial foundation for community participation in development projects funded by the County Government.

2.8 Conceptual Framework

The conceptual framework presented the relationship between the study variables as illustrated in the figure 2.1.

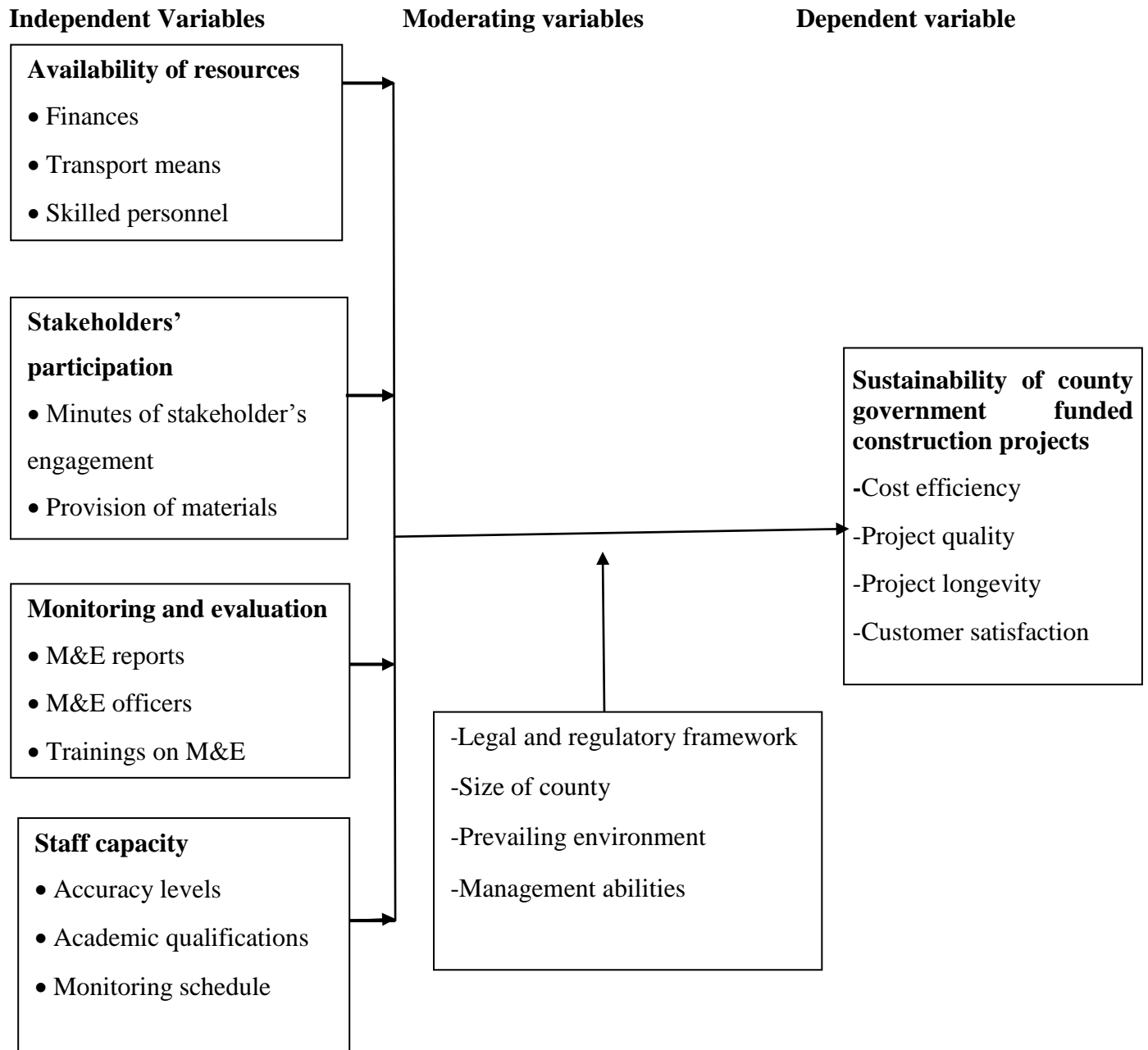


Figure 1; Conceptual Framework

2.9 Knowledge Gaps

The literature reviewed brought to light the fact that sustainability of County Funded Projects involves giving stakeholders an active role in the implementation and management of projects because in the current situations there is low stakeholder involvement. Despite this, gaps were identified in the literature of some authors. For example, Koenig and Schultz (2010) said that sustainability is hard to achieve with no support and involvement of stakeholders. This is due to their influence on design and implementation of County Funded Projects. They considered the positive side of the matter only and assumed all stakeholders were honest and cooperative. The fact that some stakeholders misuse project resources leading to lack of sustainability was not taken into consideration. Most authors in general failed to note that culture was also a factor influencing sustainability of projects at both national and local levels and not just at individual level. Therefore, in order to close the existing research gap, this study will seek to establish the factors influencing sustainability of County Government funded construction projects in Laikipia County, Kenya.

2.10 Summary of Literature Review

This chapter has presented a review of literature related to the area under study. The literature reviewed vividly indicated that various factors contributed to the sustainability of County Funded Projects. Most authors on development projects have not sufficiently addressed the factors influencing the sustainability of County Funded Projects. Due to this, there is need for further research to document ways and means of maintaining and improving County Funded Projects for the purposes of sustainability. This study sought to provide new knowledge to guide County Government employees, stakeholders, project management committees and project beneficiaries to achieve and maintain sustainability of the County Funded Projects.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology of the study. It describes and justifies the methods and processes that were used to collect data used in answering the research questions. The chapter consists of research design, target population, sample & size and sampling procedure, research instruments, validity & reliability of research instruments, data collection procedure, data analysis techniques and the ethical considerations.

3.2 Research Design

Orodho (2004) defines research design as the scheme outline or plan that is used to generate answers to research problems. The design is used to enable researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho, 2002). This study adopted a descriptive survey research design. A descriptive survey study is one which information is collected without changing the environment. Cooper and Schindler (2006) further explain that a descriptive survey design is one of the best since it is accurate and current facts are exhibited through data collection in human contexts. The use of descriptive research survey design enabled this study to establish facts without manipulation of data. The study therefore considered descriptive research survey design the most appropriate in establishing the factors influencing sustainability of County Funded Projects in the study area. According to Mugenda and Mugenda (2003), a survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables.

3.3 Pilot Study

A Pilot survey is the replica and rehearsal of the main survey and brings to the light the weaknesses (if any) of the questionnaires and also of the survey techniques (Kothari, 2004). Pilot testing is a small-scale trial, where a few examinees take the test and comment on the mechanics of the test. In testing, development projects of all kinds; the trialling of new items is typically taken into Pilot Testing. Mugenda and Mugenda (2003) explain that pre-testing allows errors to be discovered before the actual collection of data begins. This helps in revealing questions that might be vague, and allow for their review until they convey the same meaning to all the subjects. The pilot study was done in Laikipia County ministry of Transport and infrastructure.

Where 15 respondents were issued with the questionnaires and requested to fill them in the presence of the researcher.

3.4 Target Population

Mugenda & Mugenda (2003) state that target population as a group or category of human beings, animals and objects which have one or more characteristic in common and has been selected as a focus of the study. The population of this study was drawn from the Laikipia County Government. As this study mainly focuses in sustainability of County Funded Construction projects, it singled out the Ministry of Transport and Infrastructure within the County. This is because the researcher believed that since they are the people who oversee construction and maintenance activities within the county, they were in a position to provide the required information in the study. The study as well dealt with only the top management as they are the ones who were likely to be familiar with the items of research in this study, hence; the study reached the Minister, the Chief Officer, the Director, twenty Technical Officers and forty two field supervisors. Therefore, the population of this study was 65 individuals. The population of the study was presented as in Table 1 below;

Table 3.1 Target Population

Category	Population	Percentage
The Minister	1	2%
County chief officer	1	2%
County director	1	2%
County technical officers	20	31%
Field Supervisors	42	63%
Total	65	100%

Source: Laikipia County CIDP

3.5. Sample Size Selection and Sampling Procedure

The section was used to explain how the study's sample size was determined and the procedure that as applied in the sampling process.

3.5. 1 Sample Size

The study applies census method to reach the targeted respondents. Table. 2 presents the strata that were used to guide the researcher in the data collection.

Table 3.2 Sample Size

Category	Population	Sample size	Percentage
Minister	1	1	100%
County chief officer	1	1	100%
County director	1	1	100%
County technical officers	20	20	100%
Field supervisors	42	42	100%
Total	65	65	100%

Source: Laikipia County CIDP-2018-2022

3.5.2. Sampling Procedure

As stated above, this study employed census method of sampling. A census is a survey conducted on the full set of observation objects belonging to a given population. The census method involved study of every unit, everything or everyone, involved in the population. It is mostly employed in a study when the population size is small and hence; it is easy for the researcher to meet all the respondents. It is of benefit as it gives the true measure of the population since there is no sampling errors in the study and the benchmark data may be obtained for future studies. Kothari (2004) argues that when all items are covered, no element of chance is left and highest accuracy is obtained. It also provides correct information in regards to the research study because it targets those people with the relevant knowledge regarding the area of study. As shown in table 3.2 above, the study targeted one county chief officer, one county director and twenty county technical officers who engage directly in enhancing the sustainability of County Government funded construction projects in Laikipia County, Kenya. Therefore, the sample size of this study was 65 respondents.

3.6 Data Collection Instruments

The main tool for data collection in this study was a questionnaire, which was used for collection of primary data from the sampled respondents. The questionnaire consisted of closed-ended questions. The questionnaires were dropped and picked later by the researcher from respondents. Using questionnaires in the study provided room for response and feedback from the respondents that can be collected in a short period of time and in an easier manner.

3.6.1 Validity of the Instruments

Validity refers to the appropriateness of an instrument. It is the degree to which results obtained from the analysis of data actually represent the phenomena under study. Orodho (2004) says that a valid instrument should accurately measure what it is supposed to measure. Kothari (2008) says that validity of the instrument refers to the degree to which the instrument measures or describes what is supposed to measure or describe. Content validity was used to ascertain the validity of the questionnaire in this study. Validity in this study was as well established through consulting an expert in the field of research, who is the assigned project supervisor from the university. The study also engaged five more experts who took place in implementation of construction projects in the County Government to acquire enough knowledge in the field of study. The reason for conducting a validity test was in order to determine the suitability, clarity and relevance of the instruments for the final study. Ambiguous and inadequate items were revised in order to elicit the required information and improve the quality of the instruments.

3.6.3 Reliability of the Study

Reliability is a measure to which a research instrument yields consistent results or data after repeated trials (Mugenda and Mugenda 2003). Reliability is the degree of consistency and precision in which the measuring of the instrument demonstrates under same circumstances. Same research respondents using the same instrument should generate the same results under identical conditions (Amin, 2005). In determining reliability of the instrument, the researcher carried out a pretest by issuing questionnaires to employees of the Laikipia County. To measure the reliability of the data to be gathered, Cronbach's alpha was applied. Cronbach's alpha method was used for checking internal consistency in the questionnaire items, and a correct coefficient was obtained, which is a true reflection of how reliable the questionnaire is. Gliem and Gliem (2003) have indicated a value of 0.7 to be an acceptable reliability coefficient but lower thresholds are sometimes used in literature. Therefore, the Cronbach's alpha value that

was obtained provided an analysis of the reliability level of the research instrument, of which an appropriate value must be 0.7 and above.

3.7 Data Collection Procedure

Data collection began with the researcher obtaining a letter of introduction from the University of Nairobi. The researcher made appointments with officers in the County Government in order to get permission to carry out the study. After permission grant, the administration of the questionnaires began. The study used drop and pick method to administer the questionnaires to the sample population.

3.8 Data Analysis Technique

According to Mugenda and Mugenda (2003), data analysis is the processing of data to obtain answers to research questions. The purpose of descriptive statistics is to allow for meaningful description of a distribution of scores or measurements using a few indices or statistics. The primary data was then be analyzed through Statistical package for Social Sciences (SPSS) as the most suitable analysis tool. The statistics derived mean, standard deviation and variance. The findings were presented in form of tables, graphs and narratives. Durrheim and Painter (2006) point out that the purpose of analysis is to generate meaning from raw data collected. This provided information on factors influencing sustainability of County Government funded construction projects in in Laikipia County Kenya.

3.9 Ethical Considerations

According to Mugenda and Mugenda (2003), ethical considerations are important for any research. Ethical issues that were taken into consideration in this study include proper conduct of the researcher and confidentiality of the information obtained from the respondents. A consent letter to meet the respondents was obtained from the University. This helped in eliminating any kind of conflicts that may have arisen from the respondents. Respondents were also encouraged to participate voluntarily and before administering the questionnaire, the researcher sought informed consent from respondents. The researcher also ensured anonymity and confidentiality of all the information collected.

CHAPTER FOUR:

DATA ANALYSIS,PRESENTATION,INTERPRETATION AND DISCUSSION.

4.1 Introduction

This chapter presents analysis and interpretation of data that was collected in relation to factors influencing sustainability of County Government funded construction projects in Laikipia County, Kenya. This data was analyzed using descriptive statistics by the researcher and presented in the form of frequency tables and bars. Data was analyzed on four research objectives that included; to establish the extent to which availability of resources influences sustainability of County Government funded construction projects in Laikipia County, Kenya; to establish the stakeholders' participation influences sustainability of County Government funded construction projects in Laikipia County, Kenya; to establish the influence of monitoring and evaluation on sustainability of County Government funded construction projects in Laikipia County, Kenya; and to determine the influence of staff competence on sustainability of County Government funded construction projects in Laikipia County, Kenya. The areas presented in this chapter include the response rate as well as a comprehensive analysis of information collected in relation to the specific objectives of the study.

4.2 Response Rate

Questionnaires were distributed to 65 respondents from the County Government of Laikipia, who formed the sample of the study. However, out of the 65 questionnaires distributed to the respondents, 55 questionnaires were collected back fully completed, and were the only ones considered viable for the study, making the response rate to be at 85%. 15% were not well completed, hence; they were considered as non-response because the respondents that were issued with them did not fill them up, and some were incompletely filled. Mugenda and Mugenda (2003) posit that; a response rate of 70% is considered to be good or excellent for analysis and reporting. The response rate for the study was considered to be excellent based on the aforementioned assertion. The response rate of the study was presented in table 4.1 below;

Table 4.1 Response Rate

Response	Frequency	Percentage %
Responded	55	85
Not responded	10	15
Total	65	100

4.3 Sustainability of County Government Funded Construction Projects

The study sought to establish how sustainability of projects in the target county was rated in relation to various indicators construction projects' sustainability.

Table 4.2 Sustainability of County Government Funded Construction Projects

Project performance		Excellent	High	Average	Poor	Very Poor	Mean	Std. Dev
Appropriate Project Design	F.	2	6	34	8	5	3.418	1.702
	%	4	11	61	15	9		
Stakeholders supported projects	F.	3	11	25	9	7	3.120	1.557
	%	5	20	45	16	14		
locally available resources and competencies	F.	5	12	23	8	7	2.847	1.390
	%	9	22	41	15	13		
Financial, technical managerial resources	F.	6	11	17	13	8	2.226	1.042
	%	11	20	31	23	15		
Quality achieved	F.	3	10	14	19	9	2.013	0.869
	%	5	18	25	36	16		

The findings of the study showed that the majority of the respondents rated appropriate project design as an indicator of sustainability of projects as average as shown by 61% and a mean score of 3.418. 45% of the respondents at a mean of 3.120 indicated that sustainability in terms of the fact that project structures are owned and supported by the stakeholders was average. Sustainability of projects in the target county was rated as average as shown by the majority of the respondents at 41% and at a mean of 2.847 in relation to projects being supported on an ongoing basis with locally available resources and competencies. In relation to stakeholders providing appropriate level of financial, technical and managerial resources, the findings of the study showed that the majority of the respondents as shown by 31% and a mean of 2.226 indicated that projects' sustainability was rated as average. Lastly, the majority of the respondents indicated that project sustainability in terms of project quality achieved was average

as shown by 25% of the respondents at a mean of 2.013. These findings concur with the study of Nikkhah and Redzuan (2010), which posits that pointers and metrics of sustainability like project quality, implementation and stakeholders' involvement are endeavors to satisfy the service expectations and needs of communities in the long-term.

4.4 Resources.

The study sought to establish the rate at which the level of funds allocated by the government affects the sustainability of County Government funded construction projects.

4.4.1 Funds.

From the study findings, it was evident that the effect of the level of funds allocated to projects was exceptional as shown by 67% of the respondents. 21% of the respondents indicated that the level of funds affected sustainability of county funded construction projects on average, 9% of the respondents indicated that the effect is below average, while 3% of the respondents indicated that the effect is very minimal. The findings of the study were as shown in the table 4.1 below;

Table 4.3 Funds Allocated

Fund allocation	exceptional	Average	Below average	Very minimal
%	67	21	9	3

4.4.2 Amounts allocated for M&E on construction projects

The study sought to find out what amount of funds was allocated for monitoring and evaluation of projects in the county, out of the total budget amount. The findings were as in the table below;

Table 4.4 Budgetary allocation for Monitoring and Evaluation.

Allocation for M &E (%)	0	5-10	10-15	15- 20
Response (%)	6	52	27	15

The findings of the study showed that the majority of the respondents indicated that the monitoring and evaluation was allocated 5-10% of the total amount of funds allocated to projects in the county. 27% of the respondents indicated that 10-15% of projects' funds were allocated to monitoring and evaluation, 15% of the respondents indicated that monitoring and evaluation was

allocated 15-20% of total projects' funds, while 6% of the respondents indicated that none of the funds were allocated to monitoring and evaluation in the county.

4.4.3 Availability of Resources

The researcher intended to find out from the respondents, the extent to which they agreed with the various statements regarding the effects of resources' availability and sustainability of County Government funded construction projects in the county. The findings were presented in the table below;

Table 4.5 Availability of Resources

Availability of Resources		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std Dev
Significant of Sources of funds	F	7	38	5	3	2	2.823	1.691
	%	13	69	9	5	4		
Restrictive Budgeting process.	F	8	32	8	4	3	2.712	1.360
	%	15	58	15	7	5		
Budgetary processes vis M&E	F	11	29	9	3	3	2.654	1.256
	%	20	53	17	3	5		
limited resources for M&E.	F	13	25	12	4	1	2.395	0.921
	%	24	45	22	7	2		
Clear and adequate provision for projects sustainability	F	16	22	9	5	3	2.302	0.831
	%	29	41	18	7	5		
Funds are remitted in a timely manner	F	8	18	6	21	2	2.241	0.734
	%	15	32	11	38	4		
Money channeled to the right purpose	F	3	14	11	24	3	2.220	0.713
	%	5	26	20	44	5		
A realistic estimation undertaken.	F	8	11	7	27	2	2.178	0.652
	%	15	20	13	48	4		

Table 4.3 presents the findings of the study. It is evident from the study findings that the majority of the respondents agreed with the fact that sources of funds have a significant influence on sustainability of county funded construction projects as shown by 69% and a mean of 2.823. The majority of the respondents also agreed that budget allocation process for construction projects in the County is restrictive as shown by 58% and a mean of 2.712. 53% of the respondents at a 2.654 agreed that budgetary processes are bureaucratic; affecting M&E of projects. It is as well evident from the findings that the amounts of resources allocated for the implementation of M&E strategy are limited as agreed on by 45% of the respondents and a mean of 2.395. 41% of the respondents at a mean of 2.302 agreed that the budget of construction projects undertaken usually provide a clear and adequate provision for projects sustainability. Only 32% of the respondents at a mean of 2.241 of the respondents agreed that funds for are remitted in a timely manner. In addition, the respondents agreed that money for construction projects is usually channeled to the right purpose as shown by 26% and a mean of 2.220. Lastly, the respondents agreed that a realistic estimation of costs for all construction is usually undertaken when planning for projects as shown by 2.178.

4.6. Stakeholder Participation

The study intended to establish the level of respondents' agreement with the fact that stakeholder participation has a significant effect on sustainability of County Government funded construction projects in the county. The findings of the study were as in the table below;

Table: 2.6 Stakeholders' participation

Stakeholder's participation	Strongly agree	Agree	Moderately agree	Disagree	Strongly Agree
%	9	72	15	4	0

From table 4.6, it is evident that the majority of the respondents agreed that that stakeholder participation has a significant effect on sustainability of County Government funded construction projects in the county. 15% of the respondents agreed, 9% agreed, while 4% disagreed that that stakeholder participation has a significant effect on sustainability of County Government funded construction projects in the county.

4.6.1 Stakeholder Participation and Sustainability of Projects

The study sought to find out the extent to which the respondents agreed with various statements relating to how stakeholders' participation affects sustainability of County Government funded construction projects in the county. The findings of the study were as in the table below;

Table 4.7 Stakeholders' participation

Disagree	Ratings	Strongly Agree	Agree	Neutral		Strongly Disagree	Mean	Std Dev
Community needs and priority Assessment.	F	2	36	5	7	5	2.900	1.665
	%	4	65	9	13	9		
Stakeholders project design involvement.	F	1	31	5	10	9	2.764	1.521
	%	2	55	9	18	16		
Stakeholders participate.	F	2	28	7	12	6	2.731	1.439
	%	4	51	13	22	10		
Stakeholders' partnership.	F	4	24	11	9	7	2.554	1.211
	%	7	44	20	16	13		
Stakeholders involvement in project planning	F	3	22	9	13	8	2.439	1.009
	%	5	40	16	24	15		
Community engagement.	F	2	21	7	22	3	2.311	0.876
	%	4	38	13	40	5		
Stakeholders' views visa vis M& E.	F	6	18	20	6	5	2.256	0.652

	%	10	35	36	10	9		
Stakeholders & implementation	F	4	17	20	12	2	2.125	0.551
	%	7	31	36	22	4		
Transparency in project committee selection.	F	7	14	17	12	5	2.006	0.498
	%	13	25	31	22	9		

From table 4.7, the study findings have shown the majority of the respondents agreed that there is usually a thorough assessment of community needs and priority requirements when identifying projects as shown by 65% and a mean of 2.900. The majority of the respondents agreed that stakeholders are often involved in project identification processes in the county as shown by 55% and a mean of 2.764. The findings also showed that stakeholders participate in needs analysis procedures as shown by 51% of the respondents at a mean of 2.731, and that construction projects are carried out in partnership with stakeholders as shown by 44% of the respondents and a mean of 2.554. The study as well established that stakeholders are involved in project planning as shown by 40% of the respondents and a mean of 2.439. 38% of the respondents agreed that the community is engaged in project design at a mean of 2.311, 35% of the respondents agreed that stakeholders' views are usually cooperated in monitoring and evaluation of construction projects at mean of 2.256, 31% of the respondents agreed that stakeholders are involved in project implementation at a mean of 2.125, while 25% of the respondents at a mean of 2.006 agreed that there is transparency in selection of project committee members in the county during implementation of construction projects.

4.7 Monitoring And Evaluation (M&E)

The study sought to get information from the respondents in relation to how well the monitoring and evaluation functions are institutionalized in the county. The findings of the study were presented in the table below;

Table 4.8: Institutionalization of Monitoring and Evaluation.

Monitoring and evaluation	Averagely	Excellently	Poorly
%	70	19	2

From the study findings, it is evident that the majority of the respondents indicated that monitoring and evaluation functions are institutionalized in the county averagely as shown by 79% of the respondents. 19% of the respondents indicated that monitoring and evaluation functions are institutionalized in the county excellently, while only 2% of the respondents indicated that monitoring and evaluation functions are institutionalized in the county poorly.

4.7.1 Performance of construction projects in relation to M&E

The researcher intended to find out from the respondents concerning the performance of construction project in your county in terms M&E level of achievement of the project objectives. The study findings were as shown in the table below;

Table 4.9: Performance of Construction Projects in Relation to Monitoring and Evaluation.

Project performance in relation to M&E	Fully achieved	Partially achieved	Not achieved
%	3	66	31

From the findings of the study, it was evident that the majority of the respondents indicated that performance of construction project in your county in terms M&E level of achievement of the project objectives was partial as shown by 66%, 31% of the respondents indicated that project monitoring and evaluation was not achieved, while 3% of the respondents indicated that there was full achievement of projects' objectives.

4.7.2 Stakeholders' Participation and Sustainability of Projects

The study sought to establish the respondents' agreement with various statements relating to the effect of monitoring and evaluation on sustainability of projects. The findings of the study were as in the table below;

Table 4.10 Monitoring and Evaluation and Sustainability

Statements		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std Dev
use M&E in projects' implementation	F	5	41	3	4	2	2.952	1.887
	%	9	75	5	7	4		
Budgetary allocation for M&E.	F	4	37	7	6	1	2.777	1.634
	%	7	67	13	11	2		
M&E activities schedule.	F	4	33	8	9	1	2.684	1.560
	%	7	60	15	16	2		
Adequate resources for M&E	F	9	31	10	3	2	2.431	1.467
	%	16	57	18	5	4		
Budget vote for M&E.	F	7	27	9	7	5	2.210	1.379
	%	13	49	16	13	9		
Policy framework for M&E.	F	9	23	8	9	6	2.007	1.276
	%	16	42	15	16	11		
Competent M& E team.	F	11	22	7	12	3	1.773	1.225
	%	20	40	13	22	5		
Achievement of M&E objectives.	F	22	19	5	7	2	1.532	1.113
	%	40	34	9	13	4		

From the findings of the study, it was evident that the majority of the respondents agreed that the County Government uses M&E in projects' implementation as shown by 75% of the respondents, at a mean of 2.952. The majority of the respondents also agreed that budgeting for M&E of construction projects is usually undertaken to provide a clear and adequate provision for monitoring and evaluation activities as shown by 67%, at a mean of 2.777. The study findings as well showed that the majority of the respondents agreed that the M&E activities are carried out within schedule to enhance projects' success and sustainability as shown by 60%, at a mean of 2.684. It was also agreed among the respondents that adequate resources are allocated for monitoring and evaluation of projects in order to enhance their sustainability as shown by 57% at a mean of 2.431. The study also showed that the respondents agreed that the cost of M&E activities is always within the budget as shown by 49%, at a mean of 2.210, the County's policy

supports M&E for projects as shown by 42% and a mean of 2.007, there is a strong monitoring and evaluation team in the County Government as shown by 40% of respondents and a mean of 1.773, and that M&E objectives are largely achieved in project implementation as was shown by 34%, at a mean of 1.532.

4.8 Staff Capacity

The study intended to find out the extent to which the professional capacity of monitoring and evaluation staff in your county been emphasized as a significant component for sustainability county funded construction projects in the county. The findings of the study were presented in the table below;

Table 4.11: Staff Capacity

Staff capacity	Very great extent	Great extent	Moderate extent	Little extent	No extent at all
Percentage (%)	5	75	17	2	1

From the study findings, it is evident that the majority of the respondents indicated that professional capacity of monitoring and evaluation staff in the county been emphasized as a significant component for sustainability county funded construction projects in the county to a great extent as shown by 75%. 17% of the respondents indicated the effect was to a moderate extent, 5% to a very great extent, 2% to a little extent, while 1% indicated that professional capacity of monitoring and evaluation staff in the county has not been emphasized as a significant component for Sustainability County funded construction projects in the county.

4.8.1 Staff Capacity and Sustainability of Projects

The study sought to establish the extent to which the respondents agreed with various staffs' professional capacity parameters in relation to sustainability county funded construction projects. The findings of the study were presented in the table below;

Table 4.12 Staff Capacity and Sustainability of Projects

Staff professional capacity		Very Great extent	Great Extent	Moderate extent	Little extent	No extent at all	Mean	Std Dev
No. of staff implementing projects	F	4	45	3	2	1	2.996	1.874
	%	7	82	5	4	2		
Unskilled project implementers.	F	2	42	6	4	1	2.761	1.602
	%	4	76	11	7	2		
Training levels.	F	7	39	5	2	2	2.489	1.412
	%	13	70	9	4	4		
Staff competence.	F	8	35	7	3	2	2.219	1.394
	%	15	63	13	5	4		
Incompetent staffs	F	6	30	9	7	3	2.007	1.195
	%	11	55	16	13	5		
Low remuneration.	F	11	28	6	7	3	1.782	1.058
	%	20	51	11	13	5		
M& E Experiences.	F	12	25	9	5	4	1.690	0.879
	%	22	46	16	9	7		

From the study findings displayed in table 4.12, it is evident that the majority of the respondents agreed to a great extent that the number of county staff implementing the construction projects influences sustainability County funded construction projects as shown by 82% and a mean of 2.996. The study also showed that the majority of the respondents agreed to a great extent that dominance of the unskilled implementing construction projects in the county construction influences sustainability county funded construction projects as shown by 76% and a mean of 2.761. It was also the finding of the study that training levels of the staff involved in construction projects project sustainability as shown by 70% and a mean of 2.489, the projects' staff in the county are competent enough, so, we have had great sustainability of construction projects as shown by 63% and a mean of 2.219, the county does not have We do not have competent staff in the County for implementing construction, hence; most of the projects are not properly monitored as shown by 55% and a mean of 2.007, and that Low remuneration of staff has

resulted in recruitment of under qualified staff who have low capacity for carrying out projects as shown by 51% and a mean of 1.782. The study also showed that experiences of the monitoring staff influences the performance of public funded healthcare facilities construction projects in the County as was shown by 46% of the respondents and a mean of 1.690.

4.9 Discussion of Findings

The findings of the study showed that the majority of the respondents rated appropriate project design as an indicator of sustainability of projects as average as shown by 61% and a mean score of 3.418. 45% of the respondents at a mean of 3.120 indicated that sustainability in terms of the fact that project structures are owned and supported by the stakeholders was average. Sustainability of projects in the target county was rated as average as shown by the majority of the respondents at 41% and at a mean of 2.847 in relation to projects being supported on an ongoing basis with locally available resources and competencies. In relation to stakeholders providing appropriate level of financial, technical and managerial resources, the findings of the study showed that the majority of the respondents as shown by 31% and a mean of 2.226 indicated that projects' sustainability was rated as average. Lastly, the majority of the respondents indicated that project sustainability in terms of project quality achieved was average as shown by 25% of the respondents at a mean of 2.013. These findings concur with the study of Nikkhah and Redzuan (2010), which posits that pointers and metrics of sustainability like project quality, implementation and stakeholders' involvement are endeavors to satisfy the service expectations and needs of communities in the long-term.

From the study findings, it was evident that the effect of the level of funds allocated to projects was exceptional as shown by 67% of the respondents. 21% of the respondents indicated that the level of funds affected sustainability of county funded construction projects on average, 9% of the respondents indicated that the effect is below average, while 3% of the respondents indicated that the effect is very minimal. The findings of the study also showed that the majority of the respondents indicated that the monitoring and evaluation was allocated 5-10% of the total amount of funds allocated to projects in the county. 27% of the respondents indicated that 10-15% of projects' funds were allocated to monitoring and evaluation, 15% of the respondents indicated that monitoring and evaluation was allocated 15-20% of total projects' funds, while 6%

of the respondents indicated that none of the funds were allocated to monitoring and evaluation in the county.

It is evident from the study findings that the majority of the respondents agreed with the fact that sources of funds have a significant influence on sustainability of county funded construction projects as shown by 69% and a mean of 2.823. The majority of the respondents also agreed that budget allocation process for construction projects in the County is restrictive as shown by 58% and a mean of 2.712. 53% of the respondents at a 2.654 agreed that budgetary processes are bureaucratic; affecting M&E of projects. Also, 51% of the respondents at a mean of 2.476 agreed that sources of funds have a significant influence on sustainability of county funded construction projects. It is as well evident from the findings that the amounts of resources allocated for the implementation of M&E strategy are limited as agreed on by 45% of the respondents and a mean of 2.395. 41% of the respondents at a mean of 2.302 agreed that the budget of construction projects undertaken usually provide a clear and adequate provision for projects sustainability. Only 32% of the respondents at a mean of 2.241 of the respondents agreed that funds for are remitted in a timely manner. In addition, the respondents agreed that money for construction projects is usually channeled to the right purpose as shown by 26% and a mean of 2.220. Lastly, the respondents agreed that a realistic estimation of costs for all construction is usually undertaken when planning for projects as shown by 2.178.

In addition, the findings showed that that the majority of the respondents agreed that stakeholder participation has a significant effect on sustainability of County Government funded construction projects in the county. 15% of the respondents agreed, 9% agreed, while 4% disagreed that stakeholder participation has a significant effect on sustainability of County Government funded construction projects in the county.

The study findings have shown the majority of the respondents agreed that there is usually a thorough assessment of community needs and priority requirements when identifying projects as shown by 65% and a mean of 2.900. The majority of the respondents agreed that stakeholders are often is involved in project identification processes in the county as shown by 55% and a mean of 2.764. The findings also showed that stakeholders participate in needs analysis procedures as shown by 51% of the respondents at a mean of 2.731, and that construction projects are carried out in partnership with stakeholders as shown by 44% of the respondents and a mean of 2.554.

The study as well established that stakeholders are involved in project planning as shown by 40% of the respondents and a mean of 2.439. 38% of the respondents agreed that the community is engaged in project design at a mean of 2.311, 35% of the respondents agreed that stakeholders' views are usually in cooperated in monitoring and evaluation of construction projects at mean of 2.256, 31% of the respondents agreed that stakeholders are involved in project implementation at a mean of 2.125, while 25% of the respondents at a mean of 2.006 agreed that there is transparency in selection of project committee members in the county during implementation of construction projects.

From the study findings, it is evident that the majority of the respondents indicated that monitoring and evaluation functions are institutionalized in the county averagely as shown by 79% of the respondents. 19% of the respondents indicated that monitoring and evaluation functions are institutionalized in the county excellently, while only 2% of the respondents indicated that monitoring and evaluation functions are institutionalized in the county poorly. It was also evident that the majority of the respondents indicated that performance of construction project in your county in terms M&E level of achievement of the project objectives was partial as shown by 66%, 31% of the respondents indicated that project monitoring and evaluation was not achieved, while 3% of the respondents indicated that there was full achievement of projects' objectives.

From the findings of the study, it was true that the majority of the respondents agreed that the County Government uses M&E in projects' implementation as shown by 75% of the respondents, at a mean of 2.952. The majority of the respondents also agreed that budgeting for M&E of construction projects is usually undertaken to provide a clear and adequate provision for monitoring and evaluation activities as shown by 67%, at a mean of 2.777. The study findings as well showed that the majority of the respondents agreed that the M&E activities are carried out within schedule to enhance projects' success and sustainability as shown by 60%, at a mean of 2.684. It was also agreed among the respondents that adequate resources are allocated for monitoring and evaluation of projects in order to enhance their sustainability as shown by 57% at a mean of 2.431. The study also showed that the respondents agreed that the cost of M&E activities is always within the budget as shown by 49%, at a mean of 2.210, the County's policy supports M&E for projects as shown by 42% and a mean of 2.007, there is a strong monitoring

and evaluation team in the County Government as shown by 40% of respondents and a mean of 1.773, and that M&E objectives are largely achieved in project implementation as was shown by 34%, at a mean of 1.532.

Further, the study findings showed that the majority of the respondents indicated that professional capacity of monitoring and evaluation staff in the county been emphasized as a significant component for sustainability county funded construction projects in the county to a great extent as shown by 75%. 17% of the respondents indicated the effect was to a moderate extent, 5% to a very great extent, 2% to a little extent, while 1% indicated that professional capacity of monitoring and evaluation staff in the county has not been emphasized as a significant component for Sustainability County funded construction projects in the county.

It was also revealed in the study that the majority of the respondents agreed to a great extent that the number of county staff implementing the construction projects influences sustainability county funded construction projects as shown by 82% and a mean of 2.996. The study also showed that the majority of the respondents agreed to a great extent that dominance of the unskilled implementing construction projects in the county construction influences sustainability county funded construction projects as shown by 76% and a mean of 2.761. It was also the finding of the study that training levels of the staff involved in construction projects project sustainability as shown by 70% and a mean of 2.489, the projects' staff in the county are competent enough, so, we have had great sustainability of construction projects as shown by 63% and a mean of 2.219, the county does not have We do not have competent staff in the County for implementing construction, hence; most of the projects are not properly monitored as shown by 55% and a mean of 2.007, and that Low remuneration of staff has resulted in recruitment of under qualified staff who have low capacity for carrying out projects as shown by 51% and a mean of 1.782. The study also showed that experiences of the monitoring staff influences the performance of public funded healthcare facilities construction projects in the County as was shown by 46% of the respondents and a mean of 1.690.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study findings, conclusions and recommendations. It also makes suggestions for further research. The findings are summarized in line with the objectives of the study which was to examine factors influencing sustainability of County Government funded construction projects in Laikipia County, Kenya.

5.2 Summary of Findings

The findings of the study showed that appropriate project design was powerful indicator of sustainability of projects as average as shown by 61% and a mean score of 3.418. 45% and a mean of 3.120 indicated that sustainability in terms of the fact that project structures are owned and supported by the stakeholders was average. Sustainability of projects in the target county was rated as average as shown by the majority of the respondents at 41% and at a mean of 2.847 in relation to projects being supported on an ongoing basis with locally available resources and competencies. In relation to stakeholders providing appropriate level of financial, technical and managerial resources, the findings of the study showed by 31% and a mean of 2.226 indicated that projects' sustainability was rated as average. Lastly, the findings showed that project sustainability in terms of project quality achieved was average as shown by 25% of the respondents at a mean of 2.013.

On the first objective (availability of resources), the study found out that the effect of the level of funds allocated to projects was exceptional as shown by 67% of the respondents. The findings of the study also showed that the majority of the respondents indicated that the monitoring and evaluation was allocated 5-10% of the total amount of funds allocated to projects in the county. It is evident from the study findings that the majority of the respondents agreed with the fact that sources of funds have a significant influence on sustainability of county funded construction projects as shown by 69% and a mean of 2.823. The majority of the respondents also agreed that budget allocation process for construction projects in the County is restrictive as shown by 58% and a mean of 2.712. 53% of the respondents at a 2.654 agreed that budgetary processes are bureaucratic; affecting M&E of projects. Also, 51% of the respondents at a mean of 2.476 agreed

that sources of funds have a significant influence on sustainability of county funded construction projects. It is as well evident from the findings that the amounts of resources allocated for the implementation of M&E strategy are limited as agreed on by 45% of the respondents and a mean of 2.395. 41% of the respondents at a mean of 2.302 agreed that the budget of construction projects undertaken usually provide a clear and adequate provision for projects sustainability. Only 32% of the respondents at a mean of 2.241 of the respondents agreed that funds for are remitted in a timely manner. In addition, the respondents agreed that money for construction projects is usually channeled to the right purpose as shown by 26% and a mean of 2.220. Lastly, the respondents agreed that a realistic estimation of costs for all construction is usually undertaken when planning for projects as shown by 2.178.

On the second objective (Stakeholders' participation), the findings showed that the majority of the respondents agreed that stakeholder participation has a significant effect on sustainability of County Government funded construction projects in the county. The study findings have shown the majority of the respondents agreed that there is usually a thorough assessment of community needs and priority requirements when identifying projects as shown by 65% and a mean of 2.900. The majority of the respondents agreed that stakeholders are often involved in project identification processes in the county as shown by 55% and a mean of 2.764. The findings also showed that stakeholders participate in needs analysis procedures as shown by 51% of the respondents at a mean of 2.731, and that construction projects are carried out in partnership with stakeholders as shown by 44% of the respondents and a mean of 2.554. The study as well established that stakeholders are involved in project planning as shown by 40% of the respondents and a mean of 2.439. 38% of the respondents agreed that the community is engaged in project design at a mean of 2.311, 35% of the respondents agreed that stakeholders' views are usually cooperated in monitoring and evaluation of construction projects at mean of 2.256, 31% of the respondents agreed that stakeholders are involved in project implementation at a mean of 2.125, while 25% of the respondents at a mean of 2.006 agreed that there is transparency in selection of project committee members in the county during implementation of construction projects.

From the analysis of the third objective (Monitoring and evaluation), it is evident that the majority of the respondents indicated that monitoring and evaluation functions are

institutionalized in the county averagely as shown by 79% of the respondents. From the findings of the study, it was true that the majority of the respondents agreed that the County Government uses M&E in projects' implementation as shown by 75% of the respondents, at a mean of 2.952. The majority of the respondents also agreed that budgeting for M&E of construction projects is usually undertaken to provide a clear and adequate provision for monitoring and evaluation activities as shown by 67%, at a mean of 2.777. The study findings as well showed that the majority of the respondents agreed that the M&E activities are carried out within schedule to enhance projects' success and sustainability as shown by 60%, at a mean of 2.684. It was also agreed among the respondents that adequate resources are allocated for monitoring and evaluation of projects in order to enhance their sustainability as shown by 57% at a mean of 2.431. The study also showed that the respondents agreed that the cost of M&E activities is always within the budget as shown by 49%, at a mean of 2.210, the County's policy supports M&E for projects as shown by 42% and a mean of 2.007, there is a strong monitoring and evaluation team in the County Government as shown by 40% of respondents and a mean of 1.773, and that M&E objectives are largely achieved in project implementation as was shown by 34%, at a mean of 1.532.

In regard to staff capacity, the study findings showed that the majority of the respondents indicated that professional capacity of monitoring and evaluation staff in the county been emphasized as a significant component for sustainability county funded construction projects in the county to a great extent as shown by 75%. It was also revealed in the study that the majority of the respondents agreed to a great extent that the number of county staff implementing the construction projects influences sustainability county funded construction projects as shown by 82% and a mean of 2.996. The study also showed that the majority of the respondents agreed to a great extent that dominance of the unskilled implementing construction projects in the county construction influences sustainability county funded construction projects as shown by 76% and a mean of 2.761. It was also the finding of the study that training levels of the staff involved in construction projects project sustainability as shown by 70% and a mean of 2.489, the projects' staff in the county are competent enough, so, we have had great sustainability of construction projects as shown by 63% and a mean of 2.219, the county does not have We do not have competent staff in the County for implementing construction, hence; most of the projects are not properly monitored as shown by 55% and a mean of 2.007, and that Low remuneration of staff

has resulted in recruitment of under qualified staff who have low capacity for carrying out projects as shown by 51% and a mean of 1.782. The study also showed that experiences of the monitoring staff influences the performance of public funded healthcare facilities construction projects in the County as was shown by 46% of the respondents and a mean of 1.690.

5.3 Conclusions

This study concludes that project design, project structures being owned and supported by the stakeholders, projects being supported on an ongoing basis with locally available resources and competencies, stakeholders providing appropriate level of financial, technical and managerial resources and project quality are strong indicators of projects' sustainability.

On availability of resources, the study concludes that the effect of the level of funds allocated to projects was exceptional. The study also concludes that the monitoring and evaluation was allocated 5-10% of the total amount of funds allocated to projects in the county, and that sources of funds have a significant influence on sustainability of county funded construction projects. Budget allocation process for construction projects in the County is restrictive, budgetary processes are bureaucratic; affecting M&E of projects, sources of funds have a significant influence on sustainability of county funded construction projects, and that the amounts of resources allocated for the implementation of M&E strategy are limited, and that the budget of construction projects undertaken usually provide a clear and adequate provision for projects sustainability. The study as well concluded that funds for are remitted in a timely manner, money for construction projects is usually channeled to the right purpose, and that a realistic estimation of costs for all construction is usually undertaken when planning for projects.

On stakeholders' participation, the study concludes that stakeholder participation has a significant effect on sustainability of County Government funded construction projects in the county. The study as well concludes that there is usually a thorough assessment of community needs and priority requirements when identifying projects, stakeholders are often is involved in project identification processes in the county, stakeholders participate in needs analysis procedures, construction projects are carried out in partnership with stakeholders, stakeholders are involved in project planning, the community is engaged in project design, stakeholders' views are usually in cooperated in monitoring and evaluation of construction projects,

stakeholders are involved in project implementation , and that there is transparency in selection of project committee members in the county during implementation of construction projects.

On monitoring and evaluation, the study concludes that the monitoring and evaluation functions are institutionalized in the county. It also concludes that the County Government uses M&E in projects' implementation, budgeting for M&E of construction projects is usually undertaken to provide a clear and adequate provision for monitoring and evaluation activities, M&E activities are carried out within schedule to enhance projects' success and sustainability, resources are allocated for monitoring and evaluation of projects in order to enhance their sustainability, the cost of M&E activities is always within the budget, the County's policy supports M&E for projects, there is a strong monitoring and evaluation team in the County Government, and that M&E objectives are largely achieved in project implementation.

In regard to staff capacity, the study concludes that professional capacity of monitoring and evaluation staff in the county been emphasized as a significant component for sustainability county funded construction projects in the county. The study also concludes that the number of county staff implementing the construction projects influences sustainability county funded construction projects. It also concludes that training levels of the staff involved in construction affects project sustainability, the county does not have competent staff in the County for implementing construction, hence; most of the projects are not properly monitored. The study's conclusion is also that low remuneration of staff has resulted in recruitment of under qualified staff who have low capacity for carrying out projects, and also that the experiences of the monitoring staff influences the performance of public funded healthcare facilities construction projects in the county.

5.4 Recommendations

Based on the findings from the study, the most significant factors affecting the sustainability of county-funded construction projects in Laikipia County are: group resources' availability, stakeholders' participation, monitoring and evaluation as well as staff capacity. The study recommends that for the community to benefit from county funded construction projects, the following measures should be adopted: involve stakeholders in project design, implementation, resource contribution, and monitoring and evaluation in order to ensure ownership of projects, and hence; there will be enhanced projects' sustainability. Community members also need to be

educated on sustainability of County Funded Projects to ensure that they are able to push them forward after withdrawal of county funding.

This study also recommends that Government of Laikipia County should adequately plan on effective M&E. Adequate financial resources should be allocated for M&E during implementation of County Funded construction projects to ensure all areas that need remedial measures are taken care of in advance to ensure sustainability.

It is as well recommended in this study that the County Government should engage competent staff and agencies to implement and monitor all County Funded construction Projects.

Finally, the Government of Laikipia County should ensure that it implements County Funded construction projects where there are necessary resources as this will ensure sustainability of all the projects. In a nutshell, the results of this study gives a basis for the recommendation that the Government of Laikipia County should improve on stakeholder involvement and M&E in order to increase sustainability of County Funded construction Projects.

5.5 Suggestions for Further Studies

Building on this study, it may be fruitful for future research to explore the area of sustainability from the perspectives of project design utilized in implementing projects in Laikipia as well as other counties. The researcher also recommends that similar studies be conducted in other counties so as to assess whether similar factors influence sustainability of County Funded construction Projects. Other studies should be conducted on the challenges facing sustainability of County Funded Projects in Laikipia County as well as other counties in Kenya.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Miriam Muthoni Gichuki

Email;mirribless@gmail.com

I am a student, currently undertaking a Master's degree of Arts in Project Management at the University of Nairobi. As part of the requirement for the completion of my studies, I'm undertaking a research to establish the factors influencing sustainability of County Government funded construction projects in Laikipia County, Kenya. In this regard, I am kindly requesting for your support in my study by offering to spend some time in responding to the attached questionnaire. Your accuracy and candid response will be critical in ensuring objective research. It will not be necessary to write your name on this questionnaire, and it will be ensured by the researcher that, all information received will be treated in strict confidence.

In addition, the findings of the study will solely be used for academic research purposes and to enhance knowledge in the field of construction projects performance in the County. On request, the research report may be presented to the County for information and record.

Thank you for your valuable time.

Yours faithfully

Miriam Muthoni Gichuki

L50/89023/2016

APPENDIX II: QUESTIONNAIRE

PART A: RESPONDENT’S PROFILE

Personal Details

Name (optional).....

Gender

Designation.....

PART B: SUSTAINABILITY OF COUNTY GOVERNMENT FUNDED CONSTRUCTION PROJECTS

1. In a scale of 1-5, please indicate your rating on the following indicators of construction projects’ sustainability in your County. Use **1- Excellent (E)**, **2- Very High (VH)**, **3- Average (A)** **4- Poor (P)** **5- Very Poor (VP)**

Project performance	1-E	2-VH	3-A	4. P	5-VP
Appropriate Project Design					
Project Structures owned and supported by the stakeholders					
Project supported on an ongoing basis with locally available resources and competencies					
Stakeholders provide appropriate level of financial, technical managerial resources					
Project quality achieved					

PART C: AVAILABILITY OF RESOURCES

2. How would you rate the level at which funds allocated by the government affects the sustainability of County Government funded construction projects in your county?

- Exceptional []
- Average []
- Below average []
- Very minimal []

3. What amounts of funds are allocated for M&E on construction projects in your county?

- 5-10% of total project funds []
- 10-15% of total project funds []
- 15-20% of total project funds []
- None []

4. In a scale of 1-5, please indicate the extent to which you agree with the following statements regarding resources' availability and sustainability of County Government funded construction projects in your county? Use **1- Strongly Agree (SA)**, **2- Agree (A)**, **3- Neutral (N)** **4- Disagree (D)** **5- Strongly disagree (SD)**

Availability of Resources	1-SA	2-A	3-N	4-D	5-SD
Sources of funds have a significant influence on sustainability of county funded construction projects					
Money for construction projects is usually channeled to the right purpose					
Funds for are remitted in a timely manner					

Amount of resources allocated for the implementation of M&E strategy are limited.					
Budget allocation process for construction projects in the County is restrictive					
Budgetary processes are bureaucratic; affecting M&E of projects					
The budget of construction projects undertaken usually provide a clear and adequate provision for projects sustainability					
A realistic estimation of costs for all construction is usually undertaken when planning for projects					

PART D: STAKEHOLDER PARTICIPATION

5. Kindly indicate your level of agreement with the fact that stakeholder participation has a significant effect on sustainability of County Government funded construction projects in your county?

Strongly agree { }

Agree { }

Moderately agree { }

Disagree { }

Strongly disagree { }

6. In a scale of 1-5, please indicate the extent to which you agree that stakeholders’ participation affects sustainability of County Government funded construction projects in your county? Use 1- Strongly Agree (SA), 2- Agree (A), 3- Neutral (N) 4- Disagree (D) 5- Strongly disagree (SD)

Stakeholders' participation	1-SA	2-A	3-N	4. D	5-SD
Stakeholders are often is involved in project identification processes in my county					
Stakeholders participates in needs analysis procedures					
Construction projects are carried out in partnership with stakeholders					
Stakeholders are involved in project planning					
The community is engaged in project design					
Stakeholders' views are usually in cooperated in monitoring and evaluation of construction projects					
Stakeholders are involved in project implementation					
There is transparency in selection of project committee members in the county during implementation of construction projects					
There is usually a thorough assessment of community needs and priority requirements when identifying projects					

PART E: MONITORING AND EVALUATION

7. How well is the Monitoring and Evaluation function instituted for enhancing sustainability of County Government funded construction projects in your county?

Excellently []

Averagely []

Poorly []

8. How can you rate the performance of construction project in your county in terms M&E level of achievement of the project objectives

Fully Achieved { }

Partially achieved { }

Not achieved { }

9. The statements presented in the table below relate to the effect of monitoring and evaluation on sustainability of projects. Please indicate the extent to which you agree with the statements in relation to how monitoring and evaluation affects sustainability of County Government funded construction projects in your county.

Stakeholders' participation	1-SA	2-A	3-N	4. D	5-SD
The County Government uses M&E in projects' implementation					
Adequate resources are allocated for monitoring and evaluation of projects in order to enhance their sustainability					
The County's policy supports M&E for projects					
The M&E activities are carried out within schedule to enhance projects' success and sustainability					
The cost of M&E activities is always within the budget					
M&E objectives are largely achieved in project implementation					
There is a strong monitoring and evaluation team in the County Government					
Budgeting for M&E of construction projects is usually undertaken to provide a clear and adequate provision for monitoring and evaluation activities					

PART F: STAFF CAPACITY

10. To what extent has professional capacity of monitoring and evaluation staff in your county been emphasized as a significant component for sustainability county funded construction projects in the county?

Great extent { }

Very great extent { }

Moderate extent { }

Little extent { }

No extent at all { }

11. In a scale of 1-5, please indicate the extent to which you agree that the following staffs' professional capacity parameters in relation to sustainability county funded construction projects? Use **1- Strongly Agree (SA)**, **2- Agree (A)**, **3- Neutral (N)** **4- Disagree (D)** **5- Strongly disagree (SD)**

Staff professional capacity		1- SA	2- A	3- N	4-D	5- SD
Number of county staff implementing the construction projects influences sustainability county funded construction projects						
Dominance of the unskilled implementing construction projects in the county construction influences sustainability county funded construction projects						
Training levels of the staff involved in construction projects project sustainability						
The projects' staff in the county are competent enough, so, we have had great sustainability of construction						

projects						
We do not have competent staff in the County for implementing construction, hence; most of the projects are not properly monitored						
Low remuneration of staff has resulted in recruitment of under qualified staff who have low capacity for carrying out projects						
Experiences of the monitoring staff influences the performance of public funded healthcare facilities construction projects in the County						