

**THE INFLUENCE OF UTILIZATION OF PROJECT  
DOCUMENTS ON PERFORMANCE OF COUNTY  
GOVERNMENT PROJECTS IN KITUI COUNTY, KENYA**

**BY  
JAMES MULU**

**A Research report Submitted In Partial Fulfillment Of The Requirement For  
The Award Of The Degree Of Master Of Arts In Project Planning And  
Management Of The School Of Continuing And Distance Education, University  
Of Nairobi**

**2016**

## DECLARATION

I hereby declare that this Project Proposal is my own work and has not been submitted anywhere for any Award.

Signature ..... Date.....

James Mulu

L50/69306/2013

I declare that this Project report was submitted for examination with my approval as the University Supervisor.

Signature ..... Date.....

Dr. Ndunge Kyalo

Senior Lecturer

Department of extra mural studies

University of Nairobi

## **DEDICATION**

I dedicate this research project to my parents Mr and Mrs Mulu, my wife Risper and my children Charrin, Charnley and Chaziel. I thank them for the support and understanding they have extended to me throughout the study. I will forever remain grateful.

## **ACKNOWLEDGEMENT**

My gratitude goes to my supervisor Dr. Dorothy Kyalo for providing to me the able guidance that enabled me complete the proposal. My colleagues at University of Nairobi were instrumental in critiquing the proposal at every stage enabling me to refine the ideas that feature in this proposal. I thank them too. I would, finally, wish to thank my family for their moral support.

## TABLE OF CONTENT

<b>DECLARATION</b> .....	ii
<b>DEDICATION</b> .....	iii
<b>ACKNOWLEDGEMENT</b> .....	iv
<b>LIST OF TABLES</b> .....	viii
<b>LIST OF FIGURES</b> .....	ix
<b>ABBREVIATIONS AND ACRONYMS</b> .....	x
<b>ABSTRACT</b> .....	xi
<b>CHAPTER ONE: INTRODUCTION</b> .....	1
1.1 Background of the study .....	1
1.2 Statement of the Problem .....	5
1.3. Purpose of the Study .....	7
1.4. Research Objectives .....	7
1.5. Research Questions .....	7
1.6 Significance of the Study .....	8
1.7 Delimitation of the Study .....	9
1.8 Limitations of the Study .....	9
1.9 Assumptions of the study .....	9
1.10 Definition of significant terms .....	10
1.11 Organization of the study .....	11
<b>CHAPTER TWO: LITERATURE REVIEW</b> .....	12
2.1 Introduction .....	12
2.2 Communication Planning Documents and Performance of a Project .....	12
2.2.1 Procurement Planning Documents and Performance of a Project .....	13
2.2.2 Project Design Documents and Performance of a Project .....	14
2.2.3 Risk Management Documents and Performance of a Project .....	15
2.3 Theoretical framework .....	16
2.3.1 Five-Phase Project Model .....	16
2.3.2 Six-Phase Comprehensive Project Life Cycle Project Model .....	18
2.3.3 Project Performance .....	18

2.4 Conceptual Framework .....	19
2.5 Knowledge Gap.....	21
2.6 Summary of Literature Review .....	21
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>23</b>
3.1 Introduction .....	23
3.2 Research Design.....	23
3.3 Location of the Study .....	23
3.4 Target Population .....	24
3.5 Sampling procedure.....	24
3.6 Sampling technique .....	24
3.7 Sample Size.....	25
3.8 Research Instruments .....	25
3.8.1 Pilot study .....	26
3.8.2 Validity of the research instruments .....	26
3.8.3 Reliability of Research Instrument .....	26
3.9 Data Collection procedure.....	27
3.10 Data Analysis technique.....	27
3.11 Ethical Considerations.....	29
3.12 Operationalization and measurement of variables .....	30
<b>CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION .....</b>	<b>31</b>
4.1 Introduction .....	31
4.1.1 Response Rate.....	31
4.2 Demographic Information of the respondents.....	31
4.3 distribution of respondent by Level of Education.....	32
4.4 Trained Managers.....	33
4.5 Factors influencing utilization of project documents on performance.....	33
4.5.1 Communication Plans .....	34
4.5.2 Project Design.....	35
4.5.3 Risk Management Plans.....	36
4.5.4 Procurement Plans .....	37
4.5.5 Project performance .....	39

4.6 Regression Analysis .....	40
<b>CHAPTER FIVE : SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>43</b>
5.1 Introduction .....	43
5.2 Summary of the Findings .....	43
5.2.1 Communication plans .....	43
5.2.2 Project design.....	44
5.2.3 Risk management plans .....	44
5.2.4 Procurement plans.....	45
5.3 Discussion of the Findings .....	45
5.3.1 Communication plans .....	45
5.3.2 Project design.....	46
5.3.3 Risk management plans .....	46
5.3.4 Procurement plans.....	47
5.4 Conclusions .....	48
5.5 Recommendations .....	49
5.6 Suggestions for Further Studies .....	49
<b>REFERENCES.....</b>	<b>50</b>
<b>APPENDICES .....</b>	<b>54</b>
Appendix I: Letter of Introduction.....	54
Appendix II: Questionnaire.....	55
Appendix III: List of Government Projects in Kitui County .....	60
Appendix IV: Krejcie and Morgan Table Sample Size Determination .....	70
Appendix V: Research Permit .....	71

## LIST OF TABLES

Table 3.1: Operationalization and measurement of variables.....	30
Table 4.1 : Response Rate.....	31
Table 4.2: Age Group of the Respondents.....	32
Table 4.3: Level of education .....	32
Table 4. 4: Trained Manager.....	33
Table 4.5: Communication Plans.....	34
Table 4.6: Project Design.....	35
Table 4.7: Risk Management Plans .....	36
Table 4.8: Procurement Plans .....	38
Table 4.9: Project Performance.....	39
Table 4. 10: Coefficients <sup>a</sup> .....	40
Table 4.11: Model summary .....	41
Table 4. 12: Summary of One-Way ANOVA results.....	42

**LIST OF FIGURES**

Figure 2.1: Conceptual Framework ..... 20

## **ABBREVIATIONS AND ACRONYMS**

CIDP	County Integrated Development Plan
EIA	Environment Impact Assessment
HDI	Human Development Index
KPI	Key Performance Indicators
PID	Project Initiation Document
PMBOK	Project Management Body Of Knowledge
PRINCE	Projects In A Controlled Environment
UNICEF	United Nations Children's Fund

## ABSTRACT

The use of project management approach in management of organizations is gaining importance globally. Project management provides organizations with powerful tools at every project stage. Project initiation is the first stage in project management and is marked with the presence of communication plans, project design, risk management plans and project procurement plans. The aim of this research was to find out how these plans contribute to project performance with focus government projects in Kitui County in Kenya. The research was conducted through a survey. The target population of this study was the group of project managers of the 241 managers of the stalled and ongoing government projects in Kitui County. Stratified sampling basing on the 9 ministries and the county office was used to get the sample of 152 managers. Information about the projects was obtained by visiting the project site and a self-administered questionnaire completed by the respondent manager. The validity of the questionnaire was established by seeking expert opinion from my supervisor and expert opinion from scholars in the school of education and distance learning at University of Nairobi. Reliability was established through a test-retest in a pilot study with 10 managers responding to the questionnaire twice without expectation. Data collection was done by use of a self-administered questionnaire. Statistics like mean standard deviation and percentages were used to analyze the data. Regression analysis was used to establish the relationship between the dependent and the independent variables. The research culminated in a research project. The findings led to the provision of recommendation on how documents can be used to improve project performance in Kitui County. The study found that, lack of reviewing communication plan influenced the performance of government projects in Kitui County. Communication between the parties also influenced the performance of the project which was not effective in the County. The study further revealed that past experience and relevant data should be used in designing project and the standards to be achieved should be clear since they influence the performance of government projects in the County. The study recommends that the county governments should improve the current status of projects in the counties. The projects should attain any tangible and observable performance levels. The study further recommends that the regulatory and legal conditions should be clear to the project team and a clear plan outlining timeframes for acquiring the products should be in place since it also affects performance of government projects in the county.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the study**

The use of project management approach in management of organizations is gaining importance globally. Project management provides organizations with powerful tools at every project stage. The tools improve the ability to plan, implement, and control activities and the utilization of people and other resources. This rise of project management is due to the demand for the development of new methods of management to satisfy the needs of the contemporary society (Islam, Bhuiyan, and Hoque, 2011).

Lock (1989), defines a project as a collection of linked activities that are carried out in an organized manner and that has a clearly defined beginning and ending purposed to achieve some specific results desired to satisfy a clearly defined objective. The main features of a project include a clear scope and clear objectives. A project is also an ad hoc organizational arrangement with a clear start and completion schedule. A project can also entail one or several tasks, it can involve a few or many people, it can span one or several functions, and it can cover a short period or many years and vary in cost (Stager, 2002). All these depend on the expected technical challenges concerning the project.

Westland (2006) identifies the initiation phase as the first phase of a project. In this first phase, the problem or opportunity is identified and a case suggesting various solution options defined. Once the problem or opportunity is identified and a case built, a feasibility study is conducted to determine whether each suggested option addresses the problem and

final recommended solutions put forward. On approval, the project is initiated to deliver the approved solution. Terms of reference are completed in which objectives, scope and structure are outlined and the manager appointed. The project manager recruits the project team, establishes a project office and seeks approval for planning to begin. The consolidation of all the documents associated with every aspect of project initiation results in the project initiation document (PID).

According to Westland (2006) project initiation refers to the start of a project. There should be proper documentation as evidence that a project was properly initiated. Some of the documents that should be present after effective initiation process, and that was the focus of this research include: the communication plan, the procurement plan, the risk management plans and the project design. A project communications plans identifies who will receive information, what information is to be communicated, how the information will be disseminated, how often, and who will be responsible for delivering the information (Burris, 2004).

The project procurement plan defines the contracting arrangements to be established in order to deliver the project (Nicholas, 2001). It clearly spells out the procurement strategy, the market approach, the project brief and tendering method. A risk management plan identifies risk, assesses the risk, indicates how to respond to the risk, how monitor and control the risk, and how to report the risks. Project design is the document in which solutions to clearly identified problems are identified and structured in a way that makes them implementable by the project manager (Whelton, 2004).

Project performance is determined through measurement of various agreed aspects of the project. Walker and Nogeste (2007) identify four dimensions of performance of projects. These are project efficiency, impact on the customer or stakeholder, business success and preparing for the future. Project efficiency is a short term measure that focuses on meeting schedule and cost goals. Impact on the customer or stakeholders focuses on meeting technical specifications, functional performance, fulfilling customer's needs, utilization of the project's product, customer satisfaction etc. Business success is about the commercial success of the project and its enabling the organization to gain increased market share (Mosse and Sontheimer, 1996). Preparing for the future focuses on the ability of the project to develop new technology, new product or a new market.

In Kenya, project management approach is gaining momentum. Customers of products and the whole population at large are becoming increasingly sophisticated and are demanding high quality and timely products and services. However, unlike in the private sector, public projects fail sometimes even before they take off. They fail at the initiation stage. If effective measures are not taken, the Kenyan government and the county governments in the new devolved government dispensation will experience misuse of resources threatening the achievement of vision 2030 of Kenya's development program Gwaya, Masu, and Wanyona (2014).

Kitui County is one of the 47 counties in Kenya. Just like the other counties, Kitui County is faced with problems of underdevelopment. In the Multiple Indicator Cluster Survey conducted by United Nations Children's Fund (UNICEF) (2008) several issues were raised about Kitui County. The survey reported a high rate of child mortality at 63 per every 1000

live births; immunization programs are not able to reach each and every child; provision of health care is troubled with poor staffing, financing and undersupply of medicine; not all children of school going age are in school; water and sanitation is a serious problem with only 40 percent using treated water and 16 percent of children aged between 5 and 14 are engaged in child labor.

Kitui County scores below the national average in most socio-economic indicators. For instance it scores a 0.53 on the Human Development Index (HDI) compared to the national score of 0.56. The HDI is a composite measure of development that combines indicators of life expectancy, educational attainment and income. Poverty is prevalent in the county and manifests itself in poor nutrition, health, and education and a lack of access to basic services. Unemployment is a major challenge in the county. The livelihoods of most residents of Kitui County depend on rain-fed small-scale farming. This makes them highly vulnerable to the effects of climate change and environmental degradation. Rapid population growth, with a fertility rate of 5.1 places enormous pressure on the natural resources of this county (Population Action International, 2014).

To localize the achievement of vision 2030 in Kitui County, there is need to put in place projects to ensure improved life expectancy, educational attainment, income, nutrition, health, access to basic services and employment. This can only be achieved if there is a change in the manner in which projects are initiated.

## **1.2 Statement of the Problem**

According to Avots (1969), project management provides an efficient way to handle novel or complex activities. He even suggested that it is more efficient than the traditional methods of management, such as the practice of functional divisions in a formal hierarchical organization. In effective project management Whelton (2004), acknowledges the importance of the initiation process which consists of determining project purposes, translating those purposes into criteria for assessing alternative designs or solutions, and generating alternative design concepts.

Gwaya, Masu, and Wanyona (2014), acknowledge that many projects in Kenya fail, meaning that they do not meet the expectations preset by stakeholders. Many projects do not meet predetermined targets set by the client and do not solve initially identified problem within the stipulated time, cost and quality standards. Kitui County also suffers project failure which the County Integrated Development Plan (CIDP) (2014) attributes to weak plans. If this continues, then Kitui County will still remain underdeveloped. Currently, the strategic plan of Kitui County indicates that 30 percent of the 241 project in 2015 started in the county have stalled. This indicates wastage of millions of shilling lost in the stalled projects.

The county government of Kitui County has allocated a larger share of its development budget to the development of infrastructure i.e. roads, water infrastructure, electricity distribution and other social infrastructure. All the funds rolled over from 2013-14 to 2014-15 and then 2015-16 was due to delay in implementation of the planned program and

projects. This delay in projects completion is a major risk to the outlook as benefits envisaged in the planned projects will be delayed or never realized. The proportion of local revenue to the total budget is very little (less than 8 per cent), monthly revenue collection cannot meet the wage bill for the county. A delay by the national government to release monthly allocation can easily plunge the county into crisis. Imprudent management of resources can result into financial crisis both for the employees and the suppliers of goods and services.

Inability to broaden the county revenue base to increase available resources for both recurrent and development may constrain implementation of some projects. This may be exacerbated by lack of appreciation and misinformation related to Finance Act 2016 as passed by the County Assembly may affect service delivery. Any reason for the merchant to delay payment for the services charged by the county government in the delivery of service, whether being political or apolitical has the risk of derailing the plans of the County. Delay in the release or non-release of equitable share and conditional grants provided through the National Government will affect timely implementation of planned projects and programmes.

To counter this research investigated the extent to which project initial documentation is used in the planning and initiation of projects in Kitui County. Further, the research established how the contents in the project initial documentation contributed to the performance of the projects in Kitui County.

### **1.3. Purpose of the Study**

The purpose of this study was to find out the influence of the utilization of the project documents on the project performance.

### **1.4. Research Objectives**

The study was guided by the following objectives;

1. To establish the influence of communication plans on the performance of government projects in Kitui County
2. To find out how project procurement plans influence the performance of government projects in Kitui County
3. To establish how risk management plans influence the performance of government projects in Kitui County
4. To assess how project design framework document influences the performance of government projects in Kitui County

### **1.5. Research Questions**

This research sought to answer the following questions:

1. What is the influence of communication plans on the performance of government projects in Kitui County?
2. How does project procurement plans influence the performance of government projects in Kitui County?

3. How does a risk management plan influence the performance of government projects in Kitui County?
4. How do project designs influence the performance of government projects in Kitui County?

### **1.6 Significance of the Study**

This study was significant to scholars and other researchers; to government policy makers and to investors. In the scholarly field the findings of this study provided research findings of how the planning procedure as evidenced by the presence of initial documentation affects performance of public projects in Kenya. The findings therefore provided input for further research or discussions that found the study relevant.

Government economic policy designers also found this study useful. It was the objective of the Kenyan government to stimulate double digit economic growth rate while improving the welfare of Kenyans. Policy designers need to have precise information to enable them come up with highly effective policies. The policies can produce the greatest results if their planning and implementation is effectively done. This study was significant for found out how the planning process contributed to project success in Kenya.

The managers and other stakeholders of projects in Kitui County came to appreciate the importance of proper project initiation as a key contributor to the success of projects initiated in their county. Most public projects in Kenya tend to collapse soon after takeoff indicating mismanagement during initiation. This research sensitized people in Kitui

County to be on the watch out for effective management that changed the manner in which projects are initiated so that the trend in project failure is changed for the good of the county.

### **1.7 Delimitation of the Study**

The study focused on the influence of utilization of project documents on performance of county government projects in Kitui County. This involved selected county projects in the eight ministries of county government of Kitui.

### **1.8 Limitations of the Study**

During the course of the study, the researcher encountered reluctance by respondents to fill questionnaires for fear that the information would be used against them. The researcher obtained an introductory letter from the university that assured the respondents that their information would be used for academic purposes and will be held in confidence.

### **1.9 Assumptions of the study**

The research project is based on the following assumptions: first, project managers of government projects in Kitui County use documents to initiate projects. Secondly, identified managers of projects will be willing to provide the required data to enable this research to be carried out and that the data was be accurate. Thirdly, the relationship between performance of projects and project documentation will be clear.

### **1.10 Definition of significant terms**

**Communications Plans:** A document which identifies who will receive information, what information is to be communicated, how the information will be disseminated, how often, and who will be responsible for delivering the information

**Performance :**The degree to which projects in Kitui county achieve the goals for which it was set up with regard to the short term and long term requirements of the stakeholders

**Procurement Plan:** A document that clearly spells out the procurement strategy, the market approach, the project brief and tendering method for a project

**Project:** A collection of linked activities that are carried out in an organized manner in Kitui County and that has a clearly defined beginning and ending purposed to achieve some specific results desired to satisfy a clearly defined objective.

**Project Design:** The document in which solutions to clearly identified problems are identified and structured in a way that makes them implementable

**Documents:** The bringing together of all the document that form the one logical document that brings together all the key information needed to start and sound run the project in Kitui County.

**Risk Management Plan:** A document identifies risk, assesses the risk, indicates how to respond to the risk, how monitor and control the risk, and how to report the risk.

### **1.11 Organization of the study**

The study was organized into five chapters. Chapter One introduced the concept and contained the background of the study; the statement of the problem; the research objectives; research questions; significance of the study; limitations and assumptions of the study. Chapter Two dwelled on the review on literature on influence of project documents on performance of government projects in Kitui County. And the various variables that influenced the performance of county projects; theoretical framework and the conceptual framework; knowledge gap as well as summary of the chapter. Chapter Three discussed research methodology that was used to conduct the study and it comprised of the research design; target population; sample size and sampling procedures; data collection instrument; data collection procedures; data analysis techniques; ethical considerations and operational definitions of the variables. Chapter Four presented and analysed data. Finally, Chapter Five comprised of summary of findings; discussions, conclusions and recommendations.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presented a review of literature related to the relationship between project documents and projects performance. The researcher specifically reviewed literature on the four project documents and their influence on performance of projects such as project communication plan, procurement plans, risk management plans and project design document. The review also established the influence of the utilization of project documents on performance of projects. Finally, this chapter also anchored the study on theoretical and conceptual framework.

#### **2.2 Communication Planning Documents and Performance of a Project**

Tipili, Ojeba and Ilyasu (2014) conducted a study in which they sought to evaluate the influence of communication in construction project delivery in Nigeria. The research was a survey on a sample 40 professionals working in the construction industry in Bauchi, Nigeria. The study established that within the Nigeria construction industry, project communication is a key success factor. However, there were numerous communication hindrances. These hindrances include; unclear communication objectives, unclear channels of communication, ineffective reporting system, ineffective communication between the parties on the project. The study established that poor communication led to project delays, cost overrun and eventual project abandonment. The study concluded that communication had a strong effect on project performance.

Bubshait, Siddiqui and Al-Buali (2014) a two-stage case study of construction phase delay control for an oil and gas industrial project. A process improvement methodology was carried out in the first stage of the research and the root causes for the delays identified. The results revealed piping dominated a large portion of delays. The piping packages were not processed smoothly due to four incomplete testing, frequent piping modifications, incomplete as-built drawings, and incomplete punch listing. The findings of the case study demonstrated the importance of communication and coordination in successful project management for complex projects.

### **2.2.1 Procurement Planning Documents and Performance of a Project**

Noor, Khalfan and Maqsood (2013) conducted a study whose purpose was to investigate the role of procurement practices in effective implementation of infrastructure projects in Pakistan. The research was carried out in two stages. In the first stage archival analysis was conducted on government documents, reports by international organizations, policy documents and literature. The second stage involved case studies basing on archival analysis. The research established that the major barriers and constraints to implementation of procurement were regulatory and legal issues, risks and contract management, principles of procurement, political, culture, inter and intra organizational issues, conditions of the country, lack of understanding, land acquisition, project revenue and finance issues. Procurement had a direct impact on the success of the outcomes of a project.

Ogunsanmi (2013) conducted another study to investigate the influence of procurement on project performance. Purpose of the study is to evaluate how factors related to procurement affected project performance. The study used the snowballing sampling technique and a sample of 40 construction organizations in Lagos metropolitan city participated in the study. 31 Architects, Builders, Engineers and Quantity Surveyors responded to the questionnaire used. The results indicated that procurement cost, time, quality, project characteristics and external environmental factors contributed to project performance. Competitive, open and selective tendering methods have high impacts on project performance.

Eriksson and Westerberg (2011) conducted another study in which they aimed at developing a testable procurement framework that would examine how a broad range of procurement related factors determine project performance. They established that cooperative procurement procedures of joint specification, selected tendering, soft parameters in bid evaluation, joint subcontractor selection, incentive-based payment, collaborative tools, and contractor self-control had positive influence on project performance measured in terms of cost, time, quality, environmental impact, work environment, and innovation.

### **2.2.2 Project Design Documents and Performance of a Project**

Amponsah (2012) conducted a study to identify the general reasons why projects fail in Ghana with focus on Accra and Kumasi. The study adopted the exploratory survey design. Using the purposive and convenience sampling methods, data was collected from 200

project managers and individuals from various cultural backgrounds and corporate organizations managing various projects. Data were collected in two phases. In the first phase, meetings and discussions with key personnel in project management areas on reasons why projects fail. In the second phase research instruments to both junior and senior staff of various organizations on the influence of culture on their daily work and subsequent impact on project failure were used. The study found that over 59% of the project managers had no knowledge of project management and did not even have designs of their projects. The study concluded that poor project design was a factor leading to project failure.

### **2.2.3 Risk Management Documents and Performance of a Project**

Kishk and Ukaga (2008) did a study to investigate and establish the impact of effective risk management processes on project success. The study used two case studies of already executed projects. One of the projects had no visible risk management process set during the planning stage. The other project had some risk management process implemented but the project still overran schedule due to lack of continuity in the risk management. Both projects incurred huge amounts of lost earnings for the organizations due to their schedule overrun. It has been concluded that the cause of the projects failure can be directly related to the extent of risk management undertaken. It was concluded that effective and continuous risk management should be undertaken throughout the project lifecycle to enhance project success.

In another study De Carvalho and Junio (2015), aimed to establish the relationship between risk management and project success. The methodology involved a survey of 263 projects distributed among eight industries. The fieldwork involved interviews with project managers and risk managers and an analysis of internal company documents about the projects' performance. The study found a strong relationship between risk management and the performance of projects.

## **2.3 Theoretical framework**

This research is guided by the five phase project model and the six phase project model. The models are discussed below.

### **2.3.1 Five-Phase Project Model**

The classical project life cycle presented by the Project Management Body of Knowledge (PMBOK) consists of five phases, namely, initiating, planning, executing, controlling and monitoring, and closing (Project Management Institute, 2008). The initiation phase is the beginning of the project. It is the phase where the idea for the project is explored and elaborated. The focus here is to examine the feasibility of the project and decisions are made concerning who is to carry out the project, which parties will be involved and whether the project has an adequate base of support among those involved (Barkley, 2007). In the project planning stage, activities and resources concerning the project are defined and arranged in an orderly manner to deliver a unique product or service. The deliverable of the project planning phase is the project plan. The plan communicates project activities in terms of: what tasks will be performed; who will perform the tasks; when will the tasks

be performed; what resources will be applied to accomplish the tasks; and how the tasks will be sequenced (Baars, 2006).

The project plan execution process ensures effective and efficient carrying out of planned activities of a project. The execution has to be done according to measurements against project plans, specifications and the original project feasibility concept. Without a defined project execution process each team in the project would execute projects using their own best practices, experience, and methods making it harder to control, track and take corrective action (Anbari, 2003).

The Monitoring and Controlling phase oversees and ensures that all the tasks and metrics necessary for the project's scope, timeliness, and on budget are in order so that the project proceeds with minimal risk. Monitoring involves comparing actual performance with planned performance and taking corrective action. Monitoring and Controlling are continuously performed throughout the project life (Anbari, 2003).

The Project Closing Phase is the last phase in the project lifecycle. This process begins when the user accepts the project deliverables and the project oversight authority concludes that the project has met the goals established. The aim of project closure is to end administration and logistics. Closing the project includes turning over of project deliverables to operations, redeploying the resources and staff, closing out financial accounts, completing, collecting, and archiving project records, documenting the successes of the project, Documenting learned lessons and planning for Post Implementation Review (Baars, 2006).

### **2.3.2 Six-Phase Comprehensive Project Life Cycle Project Model**

The six phase project model is an extension of the five-phase model. In addition to initiating, planning, executing, controlling and monitoring, and closing, this model includes post-project evaluation (Archibald, 2003). The aims of the post-project review are three. First, post-project review assesses the extent to which objectives of the project have been met, the environmental and economic impact of the project. Secondly the review is meant to comment on the extent to which the project contributes to ensuring compliance with standards set by various bodies in the country. It is, finally, done to set out the direct employment impact of the project in man-years, in terms of contract and supervision/consultancy, and the number of jobs created in the ongoing operation of the project (Delanger, 1998).

### **2.3.3 Project Performance**

Kishk and Ukaga (2008) argue that successful project management is analyzed on the criteria of performance, budget and time of completion, utilization of resources and acceptance by the customer. Though measurement of project success varies from project to project, Sadeh et al., (2000) summarize them in to four dimensions. These dimensions are: meeting design goals, benefit to the end user, benefit to the developing organization, and benefit to the national infrastructure.

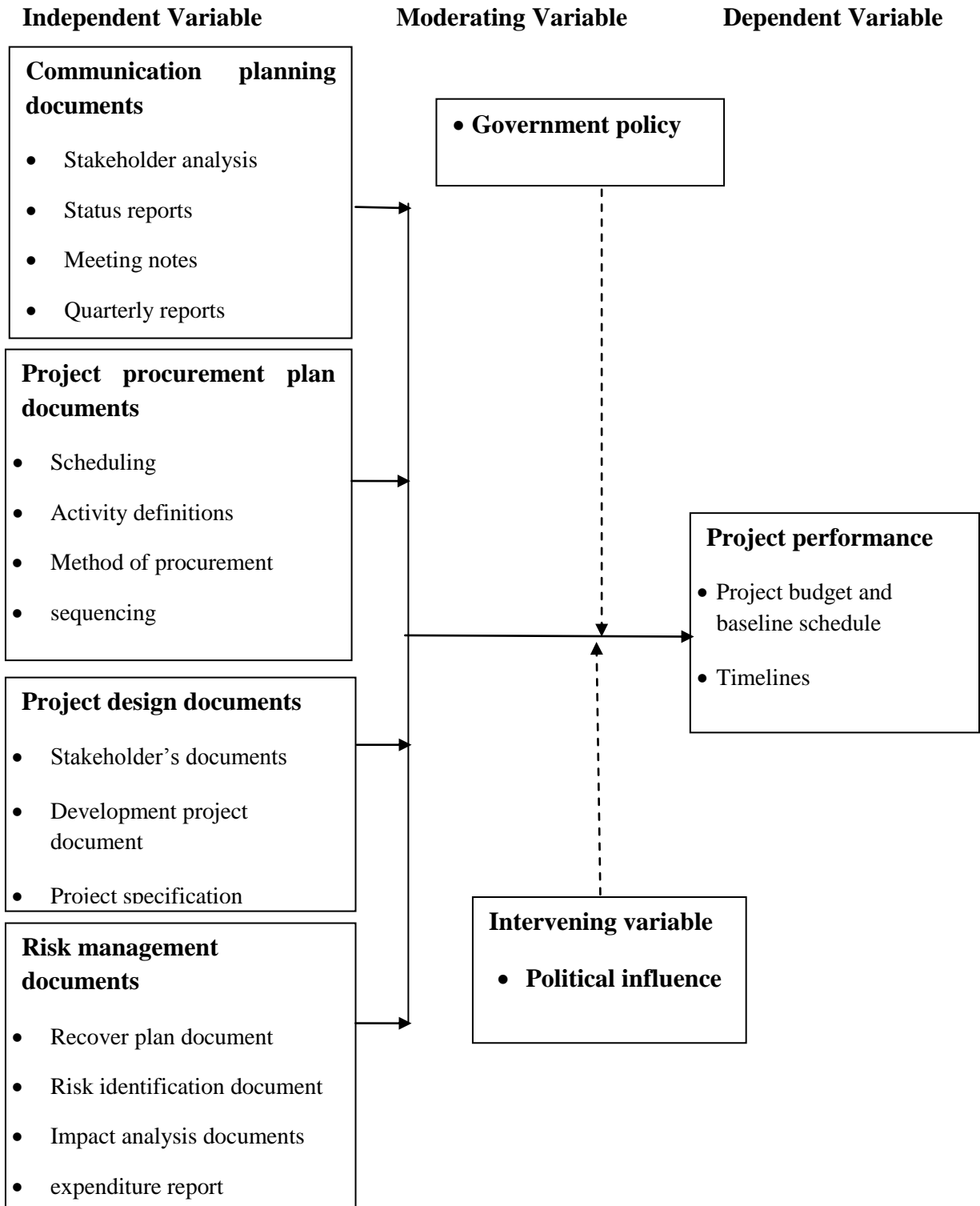
In the research by Sadeh et al., (2000), meeting design goals focuses on functional specifications, technical specifications, schedule goals and budget goals. Benefits to the end user include: meeting acquisition goals, answering the operational needs, product entered service, reaching the end user on time, product having a substantial time for use,

meaningful improvement of user operational level and satisfaction of the user with product of the project. Benefit to the developing organization focuses on things such as: having relatively high profits, opening a new market, creating a new product line, developing a new technological capability and increased positive reputation (Chiesa et al., 2009). The Benefit to the national infrastructure involves contributing to critical subjects, maintaining a flow of updated generations of the project, decreased dependence on outside sources and the contribution to other projects (Brown, 2008).

Collin (2002) advocate for the use of Key Performance Indicators (KPI) to measure performance of a project. The KPI are divided into: objective measures and subjective measures, objective measures include, time, speed, time variance, unit cost, cost variance, the net present value of project, accident and Environment Impact Assessment (EIA) Scores. The subjective measures include quality, functionality, end-user's satisfaction, client's satisfaction, design team's satisfaction and contractors' satisfaction (Baker, Gibbons and Murphy, 1994).

## **2.4 Conceptual Framework**

The conceptual framework is a diagrammatical presentation of variables in the study. The framework illustrates the interrelationship between dependent and independent variables. The independent variables for the study are communication planning documents, project procurement plan documents, project design documents and risk management documents while the dependent variable is project performance.



**Figure 2.1: Conceptual Framework**

## **2.5 Knowledge Gap**

The project management models discussed in the literature review demonstrates the importance of the project initiation stage. The various empirical literature reviewed have shown the importance of the various aspects of project initiation towards the performance of projects. However, as shown in the list of projects in Appendix II a third of the projects in Kitui County have totally stalled while the level of success of the other two thirds is not ascertained. Some of the factors that lead to such failure in projects can be traced right to the initiation phase of the projects. This research seeks to establish how project initiation in Kitui County contributes to the success of the projects by looking into the documents.

## **2.6 Summary of Literature Review**

It can be concluded that project documents influence on performance of projects such as project communication plan, procurement plans, risk management plans and project design document. The current study acknowledges that a great deal of studies has been carried out as far as project documents and projects performance is concerned. However, there seems to be a scarcity of literature on the direct relationship between project documents and performance of smaller projects that are likely to be initiated at village or county levels. The studies so far carried out appear to operate on assumptions that project teams are composed of professionals in various capacities such as financial control.

Ogunsanmi (2013) in his study on the influence of procurement on project performance established that procurement cost, time, quality, project characteristics and external environmental factors contributed to project performance. Competitive, open and selective tendering methods have high impacts on project performance. Eriksson and Westerberg (2011), established that cooperative procurement procedures of joint specification, selected tendering, soft parameters in bid evaluation, joint subcontractor selection, incentive-based payment, collaborative tools, and contractor self-control had positive influence on project performance measured in terms of cost, time, quality, environmental impact, work environment, and innovation.

Kishk and Ukaga (2008) investigated on the impact of effective risk management processes on project success. The study established that the cause of the projects failure can be directly related to the extent of risk management undertaken. It was concluded that effective and continuous risk management should be undertaken throughout the project lifecycle to enhance project success. Muhia (2011) on her study on factors influencing performance of constituency development funded projects in Kenya found that project initiation, analyzing of needs in measurable goals, stakeholder analysis, users and support personnel, financial analysis of the cost and benefits including a budget and reviewing of current operations as the factors affecting negatively the performance of projects.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter described the methods that were used when collecting and analyzing the data for this proposed research. It presented the research design, location of the study, the target population, the sampling techniques, the research instrument, data collection techniques and data analysis methods.

#### **3.2 Research Design**

The study applied a descriptive survey research design. In this design the researcher applied concurrent, but separate, collection and analysis of quantitative and qualitative data to bring about the true understanding of the research problem which is the influence of initiation documents on the performance of projects in Kitui County (Creswell et al, 2012). The qualitative and the quantitative data were merged by bringing the separate results together in the interpretation and by transforming data to facilitate integrating the two data types during the analysis. This, therefore, provides a justification for using survey for conducting this research.

#### **3.3 Location of the Study**

This study was carried out in Kitui County in Kenya which is in the former Eastern Province of Kenya. It borders Tana River County to the East and South East, Taita Taveta County to the South, Makueni and Machakos Counties to the West, Embu County to the North West, and Tharaka and Meru Counties to the North. Kitui County receives funding

from the central government just like the other 46 counties to manage its development projects. Studying the initiation of projects in Kitui County will be an eye opener to the initiation of projects across Kenya.

### **3.4 Target Population**

A target population refers to the total of all possible elements fitting a given set of specification (Borg and Gall, 1998). This study was carried out on projects in Kitui County. This included 175 ongoing and 66 stalled projects. Table 3.1 presents the distribution of the projects. In total there are 241 projects. The total of the managers of each of the 241 project makes the population of the study which translates to 241 project managers.

### **3.5 Sampling procedure**

This research used proportional stratified random sampling. The strata were according to the projects in the governor's office and the projects in the 9 ministries in Kitui County Government. The stratification is done to cater for the variations in project management issues in each type of projects.

### **3.6 Sampling technique**

Ngechu (2004) underscores the importance of selecting a representative sample through making a sampling frame. From the population frame the required number of subjects, respondents, elements or firms were selected in order to make a sample. Stratified proportionate random sampling technique was used to select the sample. According to Deming (1990), stratified proportionate random sampling technique produce estimates of

overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population.

### **3.7 Sample Size**

The sample size was determined by using Krejcie and Morgan's method of determination of a sample size for a given population size. If the target population is finite, the following formula (Krejcie & Morgan, 1970) may be used to determine the sample size.

$$n = \frac{\chi^2 * N * P * (1 - P)}{d^2 * (N - 1) + \chi^2 * P * (1 - P)}$$

Where:

$\chi^2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum Sample size).

d = the degree of accuracy (the margin of error) expressed as a proportion (.05).

The target population had 241 potential participants, therefore by use of Krejcie and Morgan's method of determination of a sample size the eventual sample size obtained was composed of 152 respondents as per Appendix iv.

### **3.8 Research Instruments**

The proposed study used a questionnaire to obtain the qualitative data required for this research. The questionnaire was used to collect data from the project managers. The

questionnaire used mainly closed ended questions but with few open ended questions. The questionnaire was divided into six sections. Section A was used to obtain demographic information about the project managers. Section B captured information concerning communication plan. Section C focused on procurement plans while Section D focused on risk management plans. Section E of the questionnaire captured information on project design while F was captured information on performance of government projects.

### **3.8.1 Pilot study**

The researcher carried out a pilot test to find out how well the questionnaire would work in practice. The study administered 10 questionnaires to respondents out of the target population. The researcher was able to identify and correct problems with the length of the questions, wording, structure, coding and instructions. The refined questionnaire was then tested for validity and reliability.

### **3.8.2 Validity of the research instruments**

Validity is the extent to which an instrument measures what it purports to measure (Saunders, 2007). Content validity is the key type of validity for this study. Content validity focuses on the degree to which the instrument fully assesses or measures the construct of interest. The validity of the questionnaire was ascertained by seeking expert opinion from my supervisor and other scholars in the school of distance learning and extra mural studies at University of Nairobi.

### **3.8.3 Reliability of Research Instrument**

Reliability of a questionnaire is the extent to which the questionnaire produces the same results on repeated trials (Barnett, 2000). It is the stability or consistency of scores over

time or across raters. To establish reliability of the questionnaire to be used in this research the test-retest approach was used. 10 project managers were randomly selected to respond to the questionnaire in a pilot data collection program. The project managers responded to the questionnaire on two occasions without their expectation. By using the split-half method (Gakuu, 2013), the researcher scored two halves of the test separately of 10 selected respondents from sample. SPSS was used to compute the reliability coefficients. The Cronbach's alpha obtained was 0.745 and the Spearman-Brown's coefficient was 0.802, indicating high internal consistency of the questionnaire items. A measure of 0.7 or higher is considered acceptable.

### **3.9 Data Collection procedure**

Data from identified project managers was collected by means of the self-administered questionnaire. The researcher delivered the questionnaire in person to the managers and provided guidelines on the way to complete the questionnaire. The managers were allowed one week to complete the questionnaire after which the researcher collected the completed questionnaires. The questionnaires were completed by way of filling in blank spaces or ticking from a set of options in a Likert scale.

### **3.10 Data Analysis technique**

Collected data was first coded, sorted and organized for analysis. Summary statistics like the mean and standard deviation was used to analyze the data. The mean, for instance, was used to find the average response of a respondent concerning a given item on a variable.

The standard deviation was used to measure the variability of responses about a variable determining the effectiveness of the administration.

Graphical presentations like pie charts, bar graphs and line graphs were used to describe the nature of the distribution of the data obtained from respondents. Pie charts were used, for instance, to display how the project managers responded to various questions in the questionnaire.

To analyze the influence of initiation documents on project performance, a regression analysis was conducted. The regression method is used since there are data collected by use of the Likert Scales concerning the dependent variable and independent variables in this research. The regression model took the form below.

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

Where

$Y$	=	Performance of Government Projects
$\beta_0$	=	Intercept term
$X_1$	=	Communication Plan
$X_2$	=	Procurement Plans
$X_3$	=	Risk Management Plans
$X_4$	=	Project Design
$\beta_i$	=	Sensitivity of performance to the independent variable $i$
$\varepsilon$	=	Error term

To test the statistical significance of each of the regression variables  $\beta_0$  and the  $\beta_i$  the T-tests at 95 % confidence level was used. The F-Test at 95 % was used to test the statistical significance of the whole regression. The F-test was also be used to test the significance of the effect of each variable on the performance of projects. The coefficient of determination  $R^2$  and the adjusted  $R^2$  was used to determine the strength at which the variation in the independent variables explained the variation in the dependent variable.

### **3.11 Ethical Considerations**

The capture of information required was done using legally accepted ways. No respondent was coerced by force or by reward into giving out information. The information obtained was used specifically for research purposes and was not used in any manner detrimental to the well-being of the responding project managers. In addition the researcher was conducted with utmost confidentiality.

### 3.12 Operationalization and measurement of variables

**Table 3.1: Operationalization and measurement of variables**

<b>Objectives</b>	<b>Independent variables</b>	<b>Indicators</b>	<b>Measurement scale</b>	<b>Data analysis method</b>	<b>Tools of analysis</b>	<b>Specific tool</b>
Influence of communication plans on the performance of projects	Communication plans	Stakeholder analysis Status reports Meeting notes	-nominal -interval	Descriptive and explanatory	Central tendency, dispersion and association relationship	Mean, standard deviation, correlation and regression analysis
Find out how project procurement plans influence the Performance of projects.	project Procurement plans	- Government documents - Policy documents	-nominal -interval	Descriptive and explanatory	Central tendency, dispersion and association/relationship	Mean, standard deviation, correlation and regression analysis
To establish how risk management plans influence the performance of a projects	Risk management plans	Recover plan document Risk identification document	-nominal -interval	Descriptive and explanatory	Central tendency, dispersion and association/relationship	Mean, standard deviation, correlation and regression analysis
To assess how project design document influences the performance of projects.	Project design documents	Stakeholders documents Development document	-nominal -interval	Descriptive and explanatory	Central tendency, dispersion and association/relationship	Mean, standard deviation, correlation and regression analysis
	Dependent variable					
To determine influence of project documents on project performance	Project performance	Project budget and baseline schedule Timelines	-nominal -interval	Descriptive and explanatory	Central tendency, dispersion and association/relationship	Mean, standard deviation, correlation and regression analysis

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter presents data analysis of the findings obtained from the field. It presents the background information of the respondents, findings of the analysis based on the objectives of the study.

##### 4.1.1 Response Rate

The study targeted a sample size of 152 respondents from which 120 responded which constituted 79%. This response rate was satisfactory to make conclusions for the study. The response rate was representative because its above the 50% statistical significance, according to Mugenda and Mugenda (2003).

**Table 4.1 : Response Rate**

	Questionnaires Administered	Questionnaires filled & Returned	Percentage
Respondents	152	120	79

#### 4.2 Demographic Information of the respondents

The study sought to establish the demographic information of the respondents in terms of gender distribution, level of education and period of service.

**Table 4.2: Age Group of the Respondents**

<b>Age</b>	<b>Frequency</b>	<b>Percentage</b>
21-30 years	53	44.1
31-40 years	45	37.5
41-50 years	22	18.3
Total	120	100

On respondent's age category, the study revealed that majority of the respondents as shown by 44.1% were aged between 21-30 years, 37.5% of the respondents were aged between 31-40 years whereas 18.3% of the respondents were aged between 41-50 years.

This implies that respondents were well distributed in terms of their age.

#### **4.3 distribution of respondent by Level of Education**

The study sought to establish to what level the respondents were educated

**Table 4.3: Level of education**

<b>Education level</b>	<b>Frequency</b>	<b>Percentage</b>
Certificate	28	23.3
Diploma	33	27.5
Bachelors	26	21.7
Masters	23	19.2
PHD	10	8.3
Total	120	100

The study sought to determine the respondent's highest level of education, from the research findings, the study established that most of the respondents as shown by 27.5% of the respondents had attained diplomas, 23.3% had college certificates, whereas 21.7% of the respondents indicated to have attained bachelors, 19.2% of the respondents indicated to have attained masters level whereas 8.3% of the respondents indicated to have attained PHD level of education. This findings implies that majority of the respondents were literate. Therefore, they were in a position to respond to the research questions with ease and accurateness.

#### **4.4 Trained Managers**

The study sought to establish how the project managers were trained.

**Table 4. 4: Trained Manager**

<b>Project</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	80	100
No	40	100
Total	120	100

The study sought to determine whether respondents were trained, from the research findings, the respondents as shown by 80% response rate agreed that they were trained managers whereas 40% indicated that they were not trained managers. This this implies that respondents were well trained and they would answer the questions correctly because they were experienced.

#### **4.5 Factors influencing utilization of project documents on performance**

The research sought to establish how the respondents responded to the statements under each variable under study.

#### 4.5.1 Communication Plans

The project managers gave the following responses on communication plan as shown by Table 4.6

**Table 4.5: Communication Plans**

<b>Statements</b>	<b>Mean</b>	<b>Std Deviation</b>
There were clear communication objectives	4.13	0.20
The project had clear channels of communication	4.11	0.20
The reporting system put in place was effective	4.12	0.22
The communication between the parties on the project was effective	4.20	0.21
All required information was sent to the relevant receiver	4.10	0.23
It was clear who is who is responsible for which communication	4.21	0.22
Information was shared in a timely manner	4.23	0.23
Communication plan was regularly reviewed to match changes	4.22	0.23
There were frequent site meetings to review project progress	4.10	0.24
Effective communication media were in place	4.11	0.28

The study sought to establish the extent to which respondents agreed with the above statements relating to communication plans. From the research findings, majority of the respondents agreed that; information was shared in a timely manner as shown by a mean of 4.23, communication plan was regularly reviewed to match changes as shown by a mean of 4.22, All required information was sent to the relevant receiver and there were frequent site meetings to review project progress as shown by a mean of 4.10. The study findings are in line with Oliver (2002), who states that the engagement and

communication plan helps to promote the planning and minimizing effects of the surrounding environment and the local community. Often the methods and technologies used to communicate are just as important a consideration as the information being communicated.

#### 4.5.2 Project Design

The study sought to establish how the respondents responded to the statements on variable under study.

**Table 4.6: Project Design**

Statements	Mean	Std Deviation
The project had clear specifications	4.48	0.29
Standards to be achieved were clearly defined	4.22	0.24
Past experience and relevant data were used in designing project	4.24	0.23
Only qualified resources were specified in the design	4.27	0.27
Impartial reviews were conducted to ensure specifications are met	4.06	0.23
The design had effective change control	4.25	0.26
Designing the project involved a team with multiple stakeholders	4.20	0.24
Clear basic schedules and budgets developed	4.21	0.23
Problems and needs were identified and solutions strategized	4.17	0.26
There were clear and measurable indicators of project progress	4.38	0.25

The research sought to establish the level at which respondents agreed on the above statements relating to project design, from the research findings majority of the respondents strongly agreed that; the project had clear specifications as shown by a mean of 4.48, Others stated that designing the project involved a team with multiple stakeholders as shown by a mean of 4.20, problems and needs were identified and

solutions strategized as shown by a mean of 4.17 and impartial reviews were conducted to ensure specifications are met as shown by a mean of 4.06. The findings are in line with Amponsah (2012), who stated that poor project design is a factor that can lead to project failure. All projects, whether successful or otherwise, revolve around the people involved at all levels. Relatively, few projects fail for technical reasons. Most fail because they are not effectively managed. The most important and complex aspect of the management task is managing relationships amongst the people involved.

#### 4.5.3 Risk Management Plans

The research sought to establish how project managers responded to risk management plan as per Table 4.8

**Table 4.7: Risk Management Plans**

<b>Statements</b>	<b>Mean</b>	<b>Std Deviation</b>
The project had a risk management team	4.26	0.25
Problems facing similar projects were discussed	4.17	0.28
There were brainstorming sessions on any unplanned occurrence	4.33	0.21
It was clear what stakeholders could do if something went wrong	4.12	0.22
The project team had the skills and competencies for risk management	4.13	0.22
The Project manager had the skills and experience for risk management	4.31	0.24
Roles and responsibilities in the project were clearly defined	4.16	0.22
There was effective allocation of time and other resources	4.18	0.21
Commitment to the project was quite high	4.28	0.24

The study sought to establish the level at which respondents agreed on the above statements relating risk management plans, from the research findings majority of the respondents agreed that; there were brainstorming sessions on any unplanned occurrence as shown by a mean of 4.33, the project manager had the skills and experience for risk management as shown by a mean of 4.31, and it was clear what stakeholders could do if something went wrong as shown by a mean of 4.12. The study findings are in line with Kishk and Ukaga (2008), who stated that the cause of the projects failure can be directly related to the extent of risk management undertaken. They further stated that identifying a risk is both a creative and a disciplined process and the creative process includes brainstorming sessions where the team should be asked to create a list of everything that could go wrong. Effective and continuous risk management should be undertaken throughout the project lifecycle in order to enhance project success.

#### **4.5.4 Procurement Plans**

The study sought to establish the extent to which respondents agreed with the statements below on procurement plans. The following statements were presented to respondents in order to gauge their extent of agreement. The results are tabulated in Table 4.8

**Table 4.8: Procurement Plans**

<b>Statements</b>	<b>Mean</b>	<b>Std Deviation</b>
The regulatory and legal conditions were clear to the project team	4.25	0.26
There were effective procurement risks and contract management plans	4.35	0.26
The project team was aware of the basic principles of procurement	4.28	0.24
There were no organizational issues that hindered procurement	4.08	0.21
All members of the project team understood the role in procurement	4.33	0.25
There was a tender process describing how to choose preferred suppliers	4.19	0.22
A clear plan outlining timeframes for acquiring the products was in place	4.27	0.24
There was procurement process describing how to acquire products from supplier.	4.36	0.27

The research sought to establish the level at which respondents agreed on the above statements relating to procurement plans, from the research findings majority of the respondents agreed that; there was procurement process describing how to acquire products from supplier as shown by a mean of 4.36, there were effective procurement risks and contract management plans as shown by a mean of 4.35, all members of the project team understood the role in procurement as shown by a mean of 4.33,. Others agreed that the project team was aware of the basic principles of procurement as shown by a mean of 4.28, a clear plan outlining timeframes for acquiring the products was in place as shown by a mean of 4.27, the regulatory and legal conditions were clear to the project team as shown by a mean of 4.25 and there was a tender process describing how to choose preferred suppliers as shown by a mean of 4.19.

The findings are in line with Ogunsanmi (2013), who stated that procurement has a direct impact on the success of the outcomes of a project. He further indicated that procurement cost, time, quality, project characteristics and external environmental factors contribute to project performance.

#### 4.5.5 Project performance

The study sought to establish the extent to which respondents agreed with the statements below on project performance. The following statements were presented to respondents in order to gauge their extent of agreement. The results are tabulated below:

**Table 4.9: Project Performance**

Statements	Mean	Std Deviation
The project was completed on time	4.28	0.25
The cost of completing was approximately as budgeted	4.21	0.21
The project does not have adverse effect on the environment	4.32	0.24
The project is functioning very well	4.17	0.21
The users of the project are satisfied with the project	4.35	0.29
The financiers of the project are satisfied with the project	4.13	0.23
The contractors were satisfied with the project	4.43	0.27
The design team was satisfied with the project	4.18	0.25

The study sought to establish the level at which respondents agreed on the above statements relating to project performance, from the research findings majority of the respondents agreed that; the users of the project are satisfied with the project as shown by a mean of 4.35, the project does not have adverse effect on the environment as shown by a mean of 4.32, the project was completed on time all members as shown by a mean of 4.28, the cost of completing was approximately as budgeted as shown by a mean of 4.21,

the design team was satisfied with the project as shown by a mean of 4.18, the project is functioning very well as shown by a mean of 4.17, and the financiers of the project are satisfied with the project as shown by 4.13.

The findings are in line with Kishk and Ukaga (2008), who argue that successful project management is analyzed on the criteria of performance, budget and time of completion, utilization of resources and acceptance by the customer. The impact on the customer or stakeholders focuses on meeting technical specifications, functional performance, fulfilling customer's needs, utilization of the project's product, customer satisfaction.

#### 4.6 Regression Analysis

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions.

**Table 4. 10: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.721	.241		2.992	.000
	Communication Plan	.481	.101	.357	4.762	.000
	Procurement Plans	.347	.104	.376	3.336	.000
	Risk Management Plans	.231	.128	.333	1.804	.001
	Project Design	.117	0.111	0.345	1.054	.000

**Source: Author, 2016**

From the data in the above table the established regression equation was

$$Y = 0.721 + 0.481X_1 + 0.347 X_2 + 0.231X_3 + 0.117X_4$$

From the above regression equation it was revealed that holding communication plans, procurement plans, risk management plans and project design to a constant zero, the performance of Government projects in Kitui County would be at 0.721, a unit increase in communication plan would enhance performance of Government projects in Kitui County by a factors of 0.481, a unit increase in procurement plans would enhance performance of Government projects in Kitui County by factors of 0.347, a unit increase in risk management plans would enhance performance of Government projects in Kitui County by factors of 0.231 and a unit increase in project design would enhance performance of Government projects in Kitui County by a factor of 0.117. All the variables were significant as their significant value was less than ( $p < 0.05$ ).

The model summary is presented in Table 4.12.

**Table 4.11: Model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889	.790	.736	.22462

**Source: Author, 2014**

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the above table the value of adjusted R squared was 0.736 an indication that there was variation of 73.6 percent on performance of Government projects in Kitui County due to poor of communication plan, procurement plans, risk management plans and project design at 95 percent confidence interval. This shows that 73.6 percent changes in Government projects in Kitui County could be accounted to poor communication plans, procurement plans, risk management plans and project design. R is the correlation coefficient which shows the relationship between the variables in the study. From the

findings shown in the table above it is notable that there exists strong positive relationship between the study variables as shown by 0.899.

The study further tested the significance of the model by use of ANOVA technique. The findings are tabulated in Table 4.13.

**Table 4. 12: Summary of One-Way ANOVA results**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.293	3	0.431	3.814	.001 <sup>b</sup>
Residual	13.108	116	0.113		
Total	14.401	119			

**Source: Author, 2016**

Critical value =1.997

From the ANOVA statistics, the study established the regression model had a significance level of 0.3% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ( $3.814 > 1.997$ ) an indication that communication plans, procurement plans, risk management plans and project design all affect the performance of Government projects in Kitui County. The significance value was less than 0.05 indicating that the model was significant.

**CHAPTER FIVE**  
**SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND**  
**RECOMMENDATIONS**

**5.1 Introduction**

From the analysis and data collected, the following discussions, conclusion and recommendations were made. The responses were based on the objectives of the study. The sought to determine the factors influencing utilization of documents on the performance of county government projects in Kenya, to establish the influence of communication plans on the performance of government projects in Kitui County, to find out how project procurement plans influence the performance of government projects in Kitui County, to establish how risk management plans influence the performance of government projects in Kitui County and to assess how project design framework document influences the performance of government projects in Kitui County.

**5.2 Summary of the Findings**

This section presents the key findings as considered under each objective in the study.

**5.2.1 Communication plans**

From the findings, it was established that lack of reviewing communication plan influenced the performance of government projects in Kitui County. Communication between the parties also influenced the performance of the project which was not effective in the County. It was further revealed that the reporting system put in place was effective and communication media were in place. In addition, it was discovered that lack

of frequent site meetings to review project progress influenced the performance of government projects in Kitui County.

### **5.2.2 Project design**

The study found that a project should have clear specifications and that there should be clear and measurable indicators of project progress. Only qualified resources were specified in the design which had effective change control. The study found that past experience and relevant data should be used in designing project and the standards to be achieved should be clear since they influence the performance of government projects in the County. Designing the project should also involve a team with multiple stakeholders who can identify problems and needs of the projects and strategize their solutions.

### **5.2.3 Risk management plans**

On the influence of risk management plans, the study found that the project manager should have had skills and experience for risk management. The people's commitment to the project should be high and so as to get positive results. It further stated that the project team should have the skills and competencies for risk management and there should be effective allocation of time and other resources. The roles and responsibilities in the projects should be clearly defined. Skills and competencies influence the performance of government projects and hence the project team should acquire them for risk management.

#### **5.2.4 Procurement plans**

On the influence of procurement plans, the study indicated that procurement process describes how to acquire products from supplier since it influences project performance. Also, achieved plans should be clear since they influence the performance of government projects in the County. It further found that all members of the project team should understand the role in procurement and that the team should be aware of the basic principles of procurement. The regulatory and legal conditions should be clear to the project team and a clear plan outlining timeframes for acquiring the products should be in place since it also affects performance of government projects in the county.

### **5.3 Discussion of the Findings**

This section discusses the key findings as considered under each objective.

#### **5.3.1 Communication plans**

On the effects of communication plans, the study established that communication plan was regularly reviewed to match changes. Communication between the parties on the project was effective. It further revealed that the reporting system put in place was effective and communication media were in place. In addition, all required information was sent to the relevant receiver and there were frequent site meetings to review project progress.

The study findings are in line with Oliver (2002), who states that the engagement and communication plan helps to promote the planning and minimizing effects of the surrounding environment and the local community. Often the methods and technologies used to communicate are just as important a consideration as the information being communicated.

### **5.3.2 Project design**

On the influence of project design on performance of the projects, the study established that the project had clear specifications and there were clear and measurable indicators of project progress. It further revealed that only qualified resources were specified in the design and the design had effective change control. The research indicated that past experience and relevant data were used in designing project and the standards to be achieved were clear. Designing the project involved a team with multiple stakeholders who identified problems and needs of the projects and strategized their solutions.

The findings are in line with Amponsah (2012), who stated that poor project design is a factor that can lead to project failure. All projects, whether successful or otherwise, revolve around the people involved at all levels. Relatively, few projects fail for technical reasons. Most fail because they are not effectively managed. The most important and complex aspect of the management task is managing relationships amongst the people involved.

### **5.3.3 Risk management plans**

The study revealed that the project manager had the skills and experience for risk management and commitment to the project was quite high. It further stated that the project team had the skills and competencies for risk management and there was effective allocation of time and other resources. The roles and responsibilities in the projects were clearly defined. The research stated that the project team had the skills and competencies for risk management.

The study findings are in line with Kishk and Ukaga (2008), who stated that the cause of the projects failure can be directly related to the extent of risk management undertaken. They further stated that effective and continuous risk management should be undertaken throughout the project lifecycle to enhance project success.

#### **5.3.4 Procurement plans**

On the influence of procurement plans, the research indicated that there was procurement process describing how to acquire products from supplier. Also, there were effective procurement risks and contract management plans. It further stated that all members of the project team understood the role in procurement and that the team was aware of the basic principles of procurement. The regulatory and legal conditions were clear to the project team and a clear plan outlining timeframes for acquiring the products was in place. The findings are in line with Ogunsanmi (2013), who stated that procurement has a direct impact on the success of the outcomes of a project. He further indicated that procurement cost, time, quality, project characteristics and external environmental factors contribute to project performance.

## **5.4 Conclusions**

From the analysis and summary, the study established that risk management plans is considered to be among the problems that negatively affects the performance of government projects in Kitui county. The people in the county are not committed to the projects. They also lack skills and competencies in performing the projects. The project manager does not have skills and experience for risk management.

On the influence of communication plans on the performance of government projects in Kitui County, the study concludes that lack of reviewing communication plan influences the performance of government projects in mostly in Counties. The study further concluded that that lack of frequent site meetings to review project progress influenced the performance of government projects in Kitui County.

On the influence of project design, the study concludes that there should be clear and measurable indicators of project progress. The study found that past experience and relevant data should be used in designing project and the standards to be achieved should be clear since they influence the performance of government projects in the County. In addition, the achieved plans should be clear since they influence the performance of government projects in the County. The study further concludes that the regulatory and legal conditions should be clear to the project team and a clear plan outlining timeframes for acquiring the products should be in place since it also affects performance of government projects in the county.

## **5.5 Recommendations**

This study makes the following recommendations.

1. The study recommends that effective communication methods are applied to county government project and communication plans be used to the later.
2. The study suggests that project managers are supposed to be trained on risk management related cases because risk management plans significantly influenced project performance.
3. Communication plans document has the highest influence on performance of county project thus communication objectives, channels and framework should be effectively put in place.
4. The study recommends that specifications given in project design should be followed to ensure that projects meet the standards set by the stakeholders.

## **5.6 Suggestions for Further Studies**

1. This study focused on the influence of utilization of documents on the performance of Kitui county government projects, this research recommends that future research should look into factors influencing completion of other government projects in specific areas such as hospitals and schools. Further,
2. The study recommends for more research to be conducted comparison the project management functions in other Counties in Kenya so as to provide more information on how various counties are implementing the project management function in Kenya.

## REFERENCES

- Amponsah, R. (2012). *The real project failure factors and the effect of culture on project management in Ghana*. Ghana Institute of Management and Public Administration.
- Anbari, F. T. (2003). Earned value project management method and extensions. *Project Management Journal*, 34 (4), 12-23.
- Archibald, R. D. (2003). *Managing High-Technology Programs and Projects*, 3rd ed. 2003, NY: Wiley.
- Avots, I. (1969). *Why does project management fail?*, California Management Book Review, 12, 77-82
- Baars, W. (2006). *Project Management Handbook, Data Archiving and Networked Services*, The Hague.
- Baker, G., Gibbons, R. and Murphy, K. J. (1994). Subjective Performance Measures in Optimal Incentive Contracts. *Quarterly Journal of Economics*, 109(4), 1125-1156.
- Barkley, B. T. (2007). *Project Management in New Product Development*, McGraw-Hill Professional Publishing, USA.
- Bentley, C. (2010). *PRINCE 2: A Handbook*, Elsevier/Butterworth-Heinemann, USA.
- Brown, C. J. (2008). A Comprehensive Organizational Model for the Effective Management of Project Management, *South African Journal of Business Management*, 39(3), pp. 1-10.
- Bubshait, A., Siddiqui, M., and Al-Buali, A. (2014). *Role of Communication and Coordination in Project Success: Case Study*. J. Perform. Constr. Facil.
- Burris, T. (2004). *Five Steps in a Project Communications Plan in Project Management*, Demand Media.

- Chan, A. P. C. (2001). *Framework For Measuring Success Of Construction Projects*. School of Construction Management and Property, Queensland University of Technology, Brisbane, Australia.
- Chiesa, V., Frattini, F., Lazzarotti, V. and Manzini, R. (2009). Performance measurement of research and development activities. *European Journal of Innovation Management*, 12(1), 25-61.
- Collin, J. (2002). *Measuring the success of building projects – improved project delivery initiatives*. Work in progress, available at john.collin@publicworks.qld.gov.au.
- County Integrated Development Plan (2014). County Integrated Development Plan 2013-2017, County Government of Kitui.
- De Carvalho, M. M. and Junio, R. R. (2015). Impact of Risk Management on Project Performance: The Importance of Soft Skills. *International Journal of Production Research*, 53(2), 321-340
- Delanger, T. C. (1998). *Choosing the Project Life Cycle, Field Guide to Project Management*. Edited by David I. Cleland. New York: Wiley.
- Deru, M. and Torcellini, P. (2005). *Performance Metrics Research Project: Final Report*, Technical Report NREL/TP-550-38700.
- Eriksson, P. E. and Westerberg, M. (2011). Effects of Cooperative Procurement Procedures on Construction Project Performance: A Conceptual Framework. *International Journal of Project Management*, 29, 197–208.
- Gwaya, A. O., Masu, S. M. and Wanyona, G. (2014). A Critical Analysis of the Causes of Project Management Failures in Kenya. *International Journal of Soft Computing and Engineering (IJSCE)*, 4(1), 64-69.
- Islam, S., Bhuiyan, N. U. and Hoque, M. (2011). The Association between Project Success and Project Initiation Phase: A Study on Some Selected Projects in Bangladesh, *European Journal of Business and Management*, 3(12), 60-69.

- Javed, M. S., Mahmood, A. K. and Sulaiman, S. B. (2012). Project Variables in Performance of the Project Planning, Implementation and Controlling Processes, *International Journal of Engineering and Innovative Technology (IJEIT)*, 1(3), 254-267.
- Kishk, M. and Ukaga, C. (2008). *The Impact of Effective Risk Management on Project Success*. Association of Researchers in Construction Management, 799-808.
- Lock, D. (1989). *Project Management*. Edited by Gower. Macmillan Publishing, Toronto, Canada.
- Mosse, R. and Sontheimer, L. E. (1996). Performance Monitoring. Indicators Handbook, *World Bank Technical Papers*, Paper No. 334.
- Nicholas, J. M., (2004). *Project Management for Business and Engineering: Principles and Practice*, Elsevier Butterworth-Heinemann, Oxford, UK.
- Noor, M. A., Khalfan, M. M. A. and Maqsood, T. (2013). The Role of Procurement Practices in Effective Implementation of Infrastructure Projects in Pakistan. *International Journal of Managing Projects in Business*, 6(4), 802 - 826.
- Ogunsanmi, O. E. (2013). Effects of Procurement Related Factors on Construction Project Performance in Nigeria. *Ethiopian Journal of Environmental Studies and Management*, 6(2), 215-222.
- Population Action International (2014). Population Dynamics, Environment, And Sustainable Development In Kitui County, Population Action International.
- Project Management Institute (2008). *A Guide to the Project Management Body of Knowledge (PMBOK Guide) Fourth Edition*, Newtown Square: Project Management Institute.
- Project Management Institute (2015), *What is Project Management?* Retrieved on 23rd April from <http://www.pmi.org/About-Us/About-Us>

- Sadeh, A, Dvir, D. and Shenhar, A. (2000). The Role of Contract Type in the Success of R&D Defense Projects Under Increasing Uncertainty. *Project Management Journal*, 31(3), 14-21.
- Stager, G. (2002). *What Makes a Good Project?*, The Creative Educator, USA.
- Tipili, L. G., Ojeba, O. P. and Ilyasu, M. S. (2014). Evaluating the Effects of Communication in Construction Project Delivery in Nigeria. *Global Journal of Environmental Science and Technology*, 2(5), 048-054.
- United Nations Children Fund (2008). Multiple Indicator Cluster Survey, UNICEF.
- Walker, D. H. T. and Nogeste, K (2008). *Performance Measures and Project Procurement In Procurement Systems – A Cross Industry Project Management Perspective*, Walker, D. H. T. and Rowlinson, S., Eds. Taylor & Francis, London
- Westland, J. (2006). *The Project Management Life Cycle*, Kogan Page, London
- Whelton, M. G. (2004). *The Development of Purpose in the Project Definition Phase of Construction Projects - Implications for Project Management*, University of California, Berkeley, USA.

## APPENDICES

### Appendix I: Letter of Introduction

University of Nairobi,  
School of Distance learning and extra mural studies,  
P. O. Box 30197,  
Nairobi.

Dear Respondent,

#### **RE: COLLECTION OF RESEARCH DATA**

I am Masters Student at the University of Nairobi, conducting a research study to establish the influence of utilization of documents on performance of county government projects in Kitui County, Kenya.

I am glad to inform you that you have been selected as a respondent to this questionnaire. Your objective and honest response to these questions will assist me meet the objective of this study. To provide the needed information please fill this questionnaire. The information provided is for academic purposes and will be held confidential. The result of this study can be obtained on request. Do not write your name.

Thanking you in advance.

Yours Faithfully,

James Mulu

Sign \_\_\_\_\_

Date \_\_\_\_\_

Student, University of Nairobi

## Appendix II: Questionnaire

Please answer all questions honestly according to the given instructions

### SECTION A

#### General Information

Complete this section by filling in the spaces

1. What was your age in years when you took over management of this project?

2. What is the highest education level you have attained?

PhD	
Master's Degree	
Bachelor's Degree	
Diploma	
Certificate	
Secondary	
Primary	

3. Are you a trained project manager? YES \_\_\_\_\_ NO \_\_\_\_\_

Indicate the status of the project you managed

Complete	
Ongoing	
Stalled	

**SECTION B**

**COMMUNICATION PLANS**

Indicate using a tick (✓) the extent to which you agree that each of the following statement about communication plans affected the performance of the project you were in charge of.

(1 = Totally Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Totally Agree)

	1	2	3	4	5
There were clear communication objectives					
The project had clear channels of communication					
The reporting system put in place was effective					
The communication between the parties on the project was effective					
All required information was sent to the relevant receiver					
It is clear who is who is responsible for which communication					
Information was shared in a timely manner					
Communication plan was regularly reviewed to match changes					
There were frequent site meetings to review project progress					
Effective communication media were in place					

Other communication issues (specify)

---

**SECTION C: PROJECT DESIGN**

Indicate using a tick (✓) the extent to which you agree that each of the following statement about project design affected the performance of the project you were in charge of.

(1 = Totally Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Totally Agree)

	1	2	3	4	5
The project had clear specifications					
Standards to be achieved were clearly defined					
Past experience and relevant data were used in designing project					
Only qualified resources were specified in the design					
Impartial reviews were conducted to ensure specifications are met					
The design had effective change control					
Designing the project involved a team with multiple stakeholders					
Clear basic schedules and budgets developed					
Problems and needs were identified and solutions strategized					
There were clear and measurable indicators of project progress					

Other project design issues (specify)

---

**SECTION D: RISK MANAGEMENT PLANS**

Indicate using a tick (✓) the extent to which you agree that each of the following statement about risk management plans affected the performance of the project you were in charge of.

(1 = Totally Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Totally Agree)

	1	2	3	4	5
The project had a risk management team					
Problems facing similar projects were discussed					
There were brainstorming sessions on any unplanned occurrence					
It was clear what will happen to the project if something goes wrong					
It was clear what stakeholders could do if something went wrong					
The project team had the skills and competencies for risk management					
The Project manager had the skills and experience for risk management					
Roles and responsibilities in the project were clearly defined					
There was effective allocation of time and other resources					
Commitment to the project was quite high					
Changes in legal or regulatory requirements					

Other risk management issues (specify)

---

**SECTION E: PROCUREMENT PLANS**

Indicate using a tick (✓) the extent to which you agree that each of the following statement about procurement plans affected the performance of the project you were in charge of.

(1 = Totally Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Totally Agree)

	1	2	3	4	5
The regulatory and legal conditions were clear to the project team					
There were effective procurement risks and contract management plans					
The project team was aware of the basic principles of procurement					
There were no organizational issues that hindered procurement					
Conditions of the country					
All members of the project team understood the role in procurement					
A thorough overview of the external supply market was conducted					
A clear plan outlining timeframes for acquiring the products was in place					
There was a tender process describing how to choose preferred suppliers					
There was procurement process describing how to acquire products from supplier.					

Other procurement issues (specify)

---

## SECTION F: PROJECT PERFORMANCE

Indicate using a tick (✓) the extent to which you agree with each of the following statement about performance of the project you were in charge of.

(1 = Totally Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Totally Agree)

	1	2	3	4	5
The project was completed on time					
The cost of completing was approximately as budgeted					
The project does not have adverse effect on the environment					
The project is functioning very well					
The users of the project are satisfied with the project					
The financiers of the project are satisfied with the project					
The contractors were satisfied with the project					
The design team was satisfied with the project					

### Appendix III: List of Government Projects in Kitui County

(Source: County Integrated Development Plan 2013- 2017)

**Table: 2**

PROJECT	IMPACT	TIME FRAME
<b>OFFICE OF GOVERNOR</b>		
Construction of ECDE Classroom	40 wards	Ongoing
Construction of County headquarters	County headquarters	Ongoing
County headquarter cafeteria	County headquarters	Ongoing
Construction of Governor Residence	Kitui Central	Ongoing
Disaster Management and Emergency Response Program	County wide	Ongoing
Setting up and equipping a County functions and a County Reception Office	2 Offices	Ongoing
County Branding	All 40 wards	Ongoing
Sensitization on Drugs and substance abuse	All 40 wards	Ongoing
Performance Management Systems	All 40 wards	Ongoing
County Publicity and Advocacy Program	All 40 wards	Ongoing
HIV/AIDS and pornography control Program	All 40 wards	Ongoing
Integrity Assurance Program		Ongoing
Civic Education and Public Participation Program		Ongoing
Intra and Intergovernmental Relations Program		Ongoing
Kitui West sub County (Kabati) headquarters	Kitui West Constituency	Stalled
Office block construction	Lower Yatta	Stalled
Office block construction	Mwingi west	Stalled
Office block construction	Kitui west	Stalled
Office block construction	Kyuso	Stalled
Office complex, & VIP latrines construction /AMS Kitui	Kitui town	Stalled
<b>AGRICULTURE, WATER AND IRRIGATION</b>		
Umaa dam	Kitui town-	Stalled
Ilika water Project	Kitui Rural	Stalled
Capped boreholes (approx. 50)	County Wide	Stalled

Subsidized Farm inputs support Program	County Wide	Ongoing
Kitchen gardening program		Ongoing
Construction of Agricultural Training Centre Administrative Block and conference hall	Kitui Town	Ongoing
Purchase of tractors	Kitui Town	Ongoing
Purchase of a crawler	County HQ (AMS)	Ongoing
Purchase of low loader	County HQ (AMS)	Ongoing
Hammer mill project	Kitui Town	Ongoing
Planning and Design County Wide	County Wide	Ongoing
Purchase borehole drilling rig	County HQ (AMS)	Ongoing
Kamula Earth dam	Mwingi North Sub County, Kyuso ward, Kyuso Villag	Ongoing
Ndalani Earth dam Rehabilitation	Mwingi West Sub County , Migwani Ward, Kyamboo/Kaliluni Village	Ongoing
Yalatani Earth dam	Kitui West Sub County, Mutonguni ward, Kakumuti/Yalatani Village	Ongoing
Malalani Earth dam	Kitui East Sub County Endau/Malalani Ward., Malalani/Syou Village	Ongoing
Kawelu (itava ngungi) Earth dam	Mwingi Central Sub County, Nuu ward, Malawa village	Ongoing
Winzyei Earthdam	Mwingi West Sub County, Kyome/Thaana, Winzyiie/Kavaini Village	Ongoing
Kwa Ngindu Earth dam	Mwingi Central, Mui ward, Ngoo/Ngungi Village	Ongoing
Muini Earth dam	Kitui East Sub county, Nzambani ward, Kangweni/Ithumula Village	Ongoing
Kwa Kyondo Earth dam	Kitui West sub County, Kauwi ward, Mutanda/Sangala village	Ongoing
Ngomano Earth dam	Kitui South, Mutomo/Kibwea Ward , Kawelu village	Ongoing
Ndegea Earth dam	Mwingi North Sub county, Tharaka Ward, Kanyangia village	Ongoing
Mbangwani earth dam	Mwingi North, Kyuso ward, Kimangao village	Ongoing

Kitulani Borehole	Mwingi West Sub County, Kyome/Thaana Ward Kasanga/Kanyaa/Kitulani Village	Ongoing
Athi Borehole	Kitui South Sub County, Athi Ward, Kituti Village	Ongoing
Kavoo Borehole	Kitui Rural Sub County, Kanyangi Ward, Mandongoi/Ngomoni village	Ongoing
Imumba Borehole	Kitui East Sub County, Voo/Kyamatu Ward, Muthungue Village	Ongoing
Kalisasi Borehole	Mwingi Central Sub County, Mwingi Ward, Kalisasi Village	Ongoing
Kavililo/kaikungu Borehole	Mwingi West Sub County, Nguutani /Nzauni Ward, Nzauni/Kikiini Villag	Ongoing
Mitamisyi Borehole	Mwingi North Sub County, Ngomeni Ward , Mitamisyii/Kamusiliu Village	Ongoing
Mulinduko borehole	Kitui West, Mutonguni Ward, Kaimu village	Ongoing
Mbooni borehole	Kitui Central, Kyangwithya West Ward , Tungutu village	Ongoing
Kawambemba Borehole	Kitui south, Mutha ward , Kalambani/Kaatene Village	Ongoing
Syongila Mulutu Pipeline extension	Kitui East Sub County, Voo/Kyamatu ward, Kyamatu Village	Ongoing
Nguuni - Kanyaa Pipeline extension	Mwingi West Sub County, Thaana/Kyome Ward Kasanga/Kanyaa/Katulani Village	Ongoing
Kanduti Pipeline extension	Kitui East Sub County, Chuluni Ward, Ndunga/Katumbo Village	Ongoing
Kasaaala Pipeline extension	Kitui South Sub County ,Ikutha Ward, Uiini/Kasaala Village	Ongoing
Mukelenzuni Pipeline extension	Kitui Rural Sub County, Kwa Vonza/ Yatta Ward, Makusya Village	Ongoing
Maseki Pipeline Extension	Kitui west, Matinyani ward, Mutulu Village	Ongoing
Katumbi pipeline extension	Kitui East Sub County,Endau/Malalani ward, Katumbi Village	Ongoing

Iiani – Nzawa pipeline extension	Mwingi West sub county, Nguutani/Nzauni ward, Nzawa Village	Ongoing
Katse Kyoera (Nyama Nzei ) pipeline extension	Mwingi North Sub County, Mumoni ward, Katse Village	Ongoing
Kakululo Pipeline Extension	Mwingi West Sub County, Nguutani ward, Kakululo/Nzalae Village	Ongoing
Kitamaa pipeline extension	Kitui Central Sub County, Mulango Ward, Kathungi /Mulutu Village	Ongoing
Kakeani Nzau pipeline extension	Kitui West Sub County, Mutonguni ward, Kakeani Village	Ongoing
Nzanzeni pipeline extension	Mwingi North Sub County, Tseikuru ward, Tseikuru Village	Ongoing
Thua- Zombe Pipeline extension	Kitui East Sub County Zombe/Mwitika ward, Ngungi/Thua village	Ongoing
Ngelani pipeline extension	Kitui south, Ikutha ward , Kyoani/kyangu Village	Ongoing
Iiani pipeline extension	Mwingi Central Sub County, Nuu ward, Ngaani Village	Ongoing
Mosa – Kilivi pipeline extension	Kitui Rural Sub County, Kisasi ward, Maluku/Mosa Village	Ongoing
Ikuyuni Pipeline extension	Kitui East Sub County ,Nzambani ward, Ikuyuni Village	Ongoing
Katana pipeline extension	Kitui south Sub county, Ikutha ward , Kyoani/kyangu Village	Ongoing
Ithengeli – Kilulu-Kisovo pipeline extension	Mwingi West Sub County, Migwani ward, Nzaluni/Kisovo Village	Ongoing
Kivui pipeline extension	Mwingi central Sub County, Nguni Ward	Ongoing
Ikuuni-Kivou pipeline extension	Mwingi Central Sub County, Kivou ward, Kivou Village	Ongoing
Electricity/ Chemicals Subsidy to water companies	KITWASCO and Kiambere Mwingi WSP's	Ongoing
Rehabilitation of boreholes	County wide	Ongoing

Kyanika Horticultural And Cereals Project	Kitui East Sub county, Nzambani Ward Kilonzo/Kavalula Village	Ongoing
Wingoo Irrigation Project	Kitui Central Sub county, Miambani Ward, Munganga Village	Ongoing
Kilimo Irrigation Project	Kitui West Sub county, Kwa Mutonga/Kithumula Ward, Kithumula Village	Ongoing
Mbusyani Irrigation Project	Kitui Rural Sub county, Kisasi Ward, Mbusyani/Ngiluni Village	Ongoing
Ikanga/ Koome Irrigation Project	Kitui South Sub County, Ikanga/Kyatune Ward, Ilusya/Makele/Nduu Ndune Village	Ongoing
Nzama Kuu Irrigation Project	Mwingi West Sub county, Kiomo/Kyethani Ward, Etawa Village	Ongoing
Thunguthu (Ithui ) Open Drip	Mwingi North Sub County, Kyuso Ward, Kyuso Village	Ongoing
Kalikuvu Irrigation Project	Kitui Central Sub county, Kyangwithya West Ward,	Ongoing
Kamulambani Irrigation Project	Kitui West, Matinyani Ward, Kavole Village	Ongoing
Anna Villa Demonstration Irrigation Farm	Mwingi West Sub County, Nguutani/Nzauni Ward, Nzalae Village	Ongoing
St. Ursula Girls Secondary School Demonstration Farm	Kitui Central Sub county, Kyangyithya West Ward, Ithokwe Village	Ongoing
Open Drip For Katoteni Secondary School Demonstration Farm	Mwingi West, Nguutani Ward, Katoteni Village	Ongoing
Open Drip For Kiomo Secondary School Demonstration farm	Mwingi West Sub County, Kiomo/Kyethani Ward, Kiomo Village	Ongoing
Open Drip For Masavi Girls Secondary School Demonstration Farm	Mwingi Central Sub County, Nguni Ward, Kyavyuka Village	Ongoing
Open Drip For Thitani Girls Secondary School Demonstration Farm	Mwingi West Sub County, Thaana/Kyome Ward, Kasanga/kanyaa/ Kitulani Village	Ongoing
Ititu Vijana Self Help Group	Mwingi Central Sub County, Kiomo/Kyethani Ward, Wimbondo Village	Ongoing

Mingaani Farm Women Group	Mwingi Central Sub County, Waita Ward, Mutwangombe Village	Ongoing
Kavalyani Youthful Venture SHG	Mwingi West sub county, Migwani ward, Migwani/ Itoloni village	Ongoing
<b>BASIC EDUCATION AND SKILLS DEVELOPMENT</b>		
Build and equip ECDE model classroom	Across the county	Ongoing
Construction of village polytechnic workshops	All 40 Wards	Ongoing
Tools and equipment for Village polytechnics	In all 8 sub counties	Ongoing
Katse Primary School model centre of excellence	Mwingi North constituency	Stalled
Mwitika Primary School model centre of excellence	Kitui East Constituency	Stalled
Kitui High School model centre of excellence	Kitui Central Constituency	Stalled
Schools Masaani, Tanganyika and St Pauls kwa Vonza	Kwa Vonza Location	Stalled
Polytechnic Construction of Ndilili Maria Ikutha polytechnic and equipping of St. Anthony Polytechnic, Kwa Vonza Location	Mivuni Ndilili Maria Ikutha Kauwi location, Kwa Vonza Location	Stalled
Kaliwa polytechnic	Mumoni	Stalled
Kauwi Muungano Vocational Centre	Kauwi Ward	Stalled
Kaivisi Village Polytechnic	Athi Ward	Stalled
Ngungi Village Polytechnic	Sombe /Mwitika	Stalled
Kamayagi Village Polytechnic	Tharaka Ward	Stalled
Yolumuni Village Polytechnic	Athi Ward	Stalled
Kalivu Polytechnic	Athi Ward	Stalled
Equipping of Library	Kanzau Sub-location Mbitini Sub-location	Stalled
<b>LAND, INFRASTRUCTURE AND URBAN DEVELOPMENT</b>		
Adjudication of land	County wide	Ongoing
D 506 Mutomo -Mutha	Kitui South	Ongoing
D 508 Ikutha -Kisyuni	Kitui South	Ongoing
E 1907 Yongela-Kisayani	Kitui South	Ongoing
E722 Kivyuni-Kanziku	Kitui South	Ongoing
D478 Kandwia - Kyuso - Tseikuru - Usueni/DB Tharaka (River Tana)	Mwingi North	Ongoing

Bridge construction	Kyethani-Wikithuki (TyaaRiver), Mutomo -Tiva Bridge	Bridge	Ongoing
Road C93: DB Mwingi at Kamuwongo - Katse - Irira (River Thuthi) Road	Mwingi North		Ongoing
County Development Plans	Kitui rural -Kwa Vonza; Kitui South – Mutomo; Mwingi Central – Mwingi; Kitui Central- Kitui; Kitui West –Kabati; Kitui East – Mutito; Mwingi North – Kyuso; Kitui West- Tulia; Mwingi West-Migwani; Kitui Rural –Kanyonyoo; Kitui South - Ikutha		Ongoing
Geodetic Control for towns	Kitui Rural - Kwa Vonza; Kitui South- Mutomo; Mwingi Central-Mwingi Town; Kitui Central - Kitui town; Kitui West – Kabati; Kitui East- Mutito; Mwingi North– Kyuso; Kitui West- Tulia; Mwingi West- Migwani; Kitui Rural- Kanyonyoo; Kitui South-Ikutha		Ongoing
Uniports	All adjudication areas		Ongoing
<b>HEALTH AND SANITATION</b>			
Hospital Water supply	Kitui General Hospital		Stalled
Theatre renovation	Katulani SDH		Stalled
Completion of Health centres and Dispensaries in Kitui Central Subcounty	Miambani Health centre, Township, Mwanyani, waluku, mwanyani, Kisekini, Masoka, Kisyoka, Tiva, Kalikakya, Kavuta, Kyandui dispensaries and health centres		Stalled
Completion of hospital Construction	Mutomo Healthcentre		Stalled
Completion of general wards	Ikutha Health Centre		Stalled
Mortuary Construction	Ikanga General Hospital - Mutomo		Stalled

Completion of Dispensaries and health Centres in Kitui South	Mukuanima, Mutha, Ndatani, Kiati, Yaathi, Nduundune, Syamatani, Katyethoka, Ngawuni, Kituvwi, Mwanianga, Katulu, Kalivu, Kamutei, Katilini, mwengea, Kanziku dispensarie and health centres	Stalled
Completion of General wards and operation theatre	Mutito General Hospital	Stalled
Completion of Maternity wing	Malalani, Endau	Stalled
Completion of Dispensaries and health Centres in Kitui East	Kaliku, Nzangathi, Kilonzo, Kyamatu, Katumbu ,Kwa amutei ,Kanzauwu, Mwitika, Katumbu, Ikuyuni Kiongwe, Inyuu dispensaries and health centres	Stalled
Completion of hospital wards	Kanyangi Hospital	Stalled
Completion of Dispensaries and Health Centres in Kitui rural	Yatta, Kyusyani, Kalulini dispensary, Nthongoni, Kisasi, Mbitini, Health centres and dispensaries.	Stalled
Completion of Dispensaries and Construction of maternity wings in Kitui west	Ndiuni, Kathuma, Kiseveni, Kauma, Kwamutonga, Mutanda and Mithikwani Kilimu, Kyaani, Kiseveni, Katutu, Kivani, Kakaeani, Nzinia, Tulia Syanthani health centres and dispensaries.	Stalled
Completion of a General ward	Kyuso General Hospital	Stalled
Completion of a maternity block	Tseikuru General Hospital	Stalled
Completion of Operating theatre	Tseikuru General Hospital	Stalled
Completion of Pediatrics ward	Tseikuru general Hospital	Stalled
Completion of Staff House	Tseikuru General Hospital	Stalled
Completion of Health centres and Dispensaries in Mwingi North	Maseki, Kalole, Kwaamuucia, Kaliwa, Matooni, Kanzinwa, Ngaaka Yakwa, Ndatani Dispensary, Nthangani, Nzaneni, Siveta, Kyenini, Katumbi, Nthangani and Kavaani Dispensaries	Stalled
Renovation and Completion of Kitchen, Laundry, Mortuary, Radiology room, Model Garden, Theatre, Generator and water harvesting system	Migwani SDH	Stalled
Completion of Health centres and Dispensaries in Mwingi West	Kyethani,, Mbondoni, Kiomo, Kairungu, Karura, Itongolani, Wikithuki, Muliluni, Ithengeli, Kavuvwani, Kilulu, Mumbuni, Katalwa, Kisovo, Itendeu,	Stalled
Completion of Mortuaries	Thitani and Nzeluni	Stalled

Completion of Amenity Ward Project	Mwingi General Hospital	Stalled
Hospital Completion	Nuu Hospital	Stalled
Mortuary completion	Nuu Hospital	Stalled
Completion of Health centres and Dispensaries in Mwingi Central	Kanyunga, waita, Kalisasi, Mathyakani, Musukini, Muono, Enziu, Thitha, Kanzui, Ithumbi, Mutuangombe, Katinga, Malioni, Maongoa	Stalled
Completion of Health centres and Dispensaries Mwingi East	Nguni, Ukasi, Mathuki, Nyaani, Kalanga, Yatwa, Maai, Mulinde, Yumbu, Kamulewa, Kalwa, Muangeni, Nzouni, Kavisuni,	Stalled
<b>TRADE, INDUSTRY, IT AND COOPERATIVES</b>		
Structured cabled LAN/WAN at County headquarters and sub counties	County Headquarters	Ongoing
County Integrated Management Information System	County Headquarters	Ongoing
Expansion of mobile telephony network in the County	County wide	Ongoing
Establishment of digital villages/ICT resource centers	County Headquarter, three Sub-County Headquarters (Kitui, Mutomo and Mwingi towns)	Ongoing
Kitui Trade Development Joint Loans Board	County Headquarters	Ongoing
Capacity building and training program for youth and women	County wide	Ongoing
Conduct trade fairs and exhibitions	County wide	Ongoing
Protection of open market areas	County wide	Ongoing
Construction of waste disposal facilities in all markets	County wide	Ongoing
Migwani Jua Kali Sheds	Mwingi West Constituency	Stalled
Construction of Markets & Trading Centres	Ikutha, Kisasi, and Kanyangi markets	Stalled
<b>CULTURE, YOUTH, SPORTS AND SOCIAL SERVICES</b>		
Establishment of Cultural Resource Centers	Ikutha (Kyoani), Kitui Central (Township), Kitui west (Mutonguni), Mwingi Central (Mwingi central)	Ongoing
Development/Upgrading of Kitui town Stadium	Kitui town Stadium	Ongoing
Rehabilitation of Kitui Recreation Park	Kitui central	Ongoing
Implementation of local Infrastructure savings and investment program for youth	All wards	Ongoing
Hosting of Kitui 7s Rugby Tournament	Kitui county	Ongoing

Holding Kitui County Football and Volleyball Tournament	All wards	Ongoing
Conducting clinics for referees and coaches for Kitui County	All wards	Ongoing
Hosting County games for children with special needs and special Olympics	All wards	Ongoing
<b>ENVIRONMENT, ENERGY AND MINERAL INVESTMENTS DEVELOPMENT</b>		
Capacity building program (energy and mining)	County wide	Ongoing
Environmental education	County wide	Ongoing
Environmental research program	County wide	Ongoing
Protection of water catchment areas	County wide	Ongoing
Rehabilitation of Matinga Ecosystem	Kauwi, Mutonguni & Nguutani wards	Ongoing
Waste management project	All urban centre and towns in the county	Ongoing
Enforcement and compliance	County wide	Ongoing
Mutomo Kanziku power line	Kitui South	Stalled
Musukini dispensary powerline	Mwingi Central	Stalled
Ikutha – Kasala powerline	Kitui South	Stalled
Nzeluni borehole electrification	Mwingi West	Stalled
Ndaluni borehole electrification	Mwingi West	Stalled
<b>TOURISM AND NATURAL RESOURCES</b>		
Feasibility study for development of tourism in Kitui county	County wide	Ongoing
Kibuka Grand falls	Tharaka ward	Ongoing
<b>FINANCE AND ECONOMIC PLANNING</b>		
County development coordination and M&E program	County wide	Ongoing
Community Empowerment Institutional Support Program (CEISP)	Kitui Central, Mwingi West (Migwani) Mwingi North (Tseikuru)	Ongoing

## Appendix IV: Krejcie and Morgan Table Sample Size Determination

TABLE 1  
Table for Determining Sample Size from a Given Population

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size.  
*S* is sample size.

