

**RISK MANAGEMENT STRATEGIES AND PERFORMANCE OF
NATIONAL GOVERNMENT CONSTITUENCY DEVELOPMENT FUNDS IN
KIAMBU COUNTY, KENYA**

BY

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DECLARATION

Declaration for the candidate

This project is my own work, and it has never been submitted for an award at another institution.

Signature

Date.....

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Supervisor's Declaration

I certify that this project was completed under my supervision by the candidate.

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DEDICATION

I dedicate this task to my wonderful son Jason for always encouraging me. You have been my best cheerleader and you inspire me to be a better version of myself.

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I want to express my greatest tanks to my both supervisors, the late Dr. Caleb Kirui and Dr. Josphat Kyallo for their consistent support and guidance. Additionally, I could not have completed this voyage without the assistance of my defence committee, who kindly contributed knowledge and experience to enable the project be refined.

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OPERATIONAL DEFINITION OF TERMS

Project	Fulfilling the project's goals in accordance with the necessary
Performance	standards for cost, time, quality, and scope
Risk Control	This process entails recognizing risks, avoiding them from affecting the project plan in the first place, and developing a risk management strategy to reduce the possibility that the risks would materialize.
Risk Management Practices	These are techniques employed to recognize, control, prevent, and minimize occurrences or actions that might have a negative impact a project's implementation or lifetime.
Risk Prevention	The procedure fostering the early detection of risk and coming up with techniques to increase employee competence, work schedules, in-depth inspection, and monitoring to make sure no dangers are present frustrates project management.
Risk Retention	The choice of a firm to bear its own risk rather than delegating it to a third party.
Risk Transfer	Describes a circumstance whereby the weight of loss is transferred to a different independent party who is financially secure at an affordable cost under a binding legal contract.

ABBREVIATIONS AND ACRONYMS

CDF	Constituency Development Fund
ERM	Enterprise Risk Management
IDO	International Development Organizations
ISO	International Organization for Standardization
NACOSTI	National commission for science technology and innovation
NG CDF	National Government Constituency Development Fund
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PRM	Project Risk Management
SPSS	Statistical Package for Social Science
TI	Transparency International
USA	United States of America

ABSTRACT

The performance of projects has grown in significance as a distinctive management concept that is used to advance both the firm's goals and the national economic agenda particularly for developing nations like Kenya. The modern corporate climate is characterized by a number of turbulences and fierce competing forces. These dynamics and competition are brought on by advancements in technology, globalization, the increase in demand from customers, and higher degrees of vulnerability, which have created more difficulties in organizational management than in the past. Risks are common in projects. Financial, strategic, dangerous, and operational risks are just a few of the many sorts of risks that could have an impact on a project. Uncertainty and unforeseen circumstances can have negative effects on projects. These hazards could make it difficult to complete the project if they are not appropriately managed. To completely realize the project's vision, project managers must successfully manage risks and uncertainties. As a result, risk analysis and management of hazards is a key component of project management. The main goal of this study was to ascertain the relationship between national government constituency development money projects and risk management methods in Juja Constituency in Kiambu County, Kenya. The following goals served as the study's direction; to ascertain the influence of risk retention, risk prevention, risk control and risk transfer on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. This research was anchored on the Prospect Theory, Enterprise Risk Management Theory and Uncertainty Theory. This study utilized a descriptive research design which was cross sectional in nature. The population of this study was drawn from all the CDF funded projects in Juja constituency these were the on-going and complete projects for the 2020/2021 financial year. Primary data was obtained through administration of semi structured questionnaires. Both closed-ended and open-ended questions were included in the questionnaire. According to the goals of the study, the field data was sorted, cleaned, and filtered. Following that, the data was coded, entered, and evaluated using statistics software (SPSS Version 25.0). Quantitative data was analysed utilizing descriptive statistics. Calculating the standard deviation, means, frequencies, and percentages were required. The development of themes related to the study's variables, based on the qualitative information provided by the questionnaire's open-ended sections, is a component of content analysis. The results were displayed utilizing tables. The study found that risk retention, risk prevention, risk control and risk transfer had a positive significant influence on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. The study conclude that risk-retention helps to avoid negligible risks while paying more interest to the project management tasks. Risk prevention measures aim to stop or reduce the likelihood of a building safety risk happening in a project. The important role of the project managers is to identify and control it and without any control, risks can become disasters, causing delay, unnecessary expenses and even bringing the project to an end. Risk transfer is a risk reduction method that shifts the risk from the project to another party. The study recommended that the organization should allocate funds for potential losses and any associated costs. The project managers should document each risk in detail, including their potential impacts and possible responses to mitigate the risk, then, assign a team member to monitor each risk as your project progresses and keep this risk log updated throughout the project. The project managers can accomplish risk transfer through non-insurance agreements such as contracts.

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

The Constituency Development Fund (CDF) was enacted in 2003 by a Parliament (CDF Act) enactment that was gazetted in Kenya Gazette Supplement No. 107. The CDF was intended to fight poverty at the local level by implementing community-based projects with the goal of enhancing the people's economic well-being and relieving parliamentary members of the onerous requirements for raising funds for projects that should be funded by the general budget (Baskin, 2010).

Nyaguthii & Oyugi (2013) claim that the CDF program specifically targeted development initiatives at the constituency level, especially those geared toward eradicating poverty at the local level. Up to now, the CDF has aided in the construction of new water, health, and educational facilities throughout the nation, particularly in distant places that, up until that point, frequently received little attention when monies were allocated in national budgets. Around the world, there has been a surge in legislative participation in local projects and community development in a number of countries, including Kenya, Pakistan, India, Uganda, Bhutan, Jamaica, and Papua New Guinea. One tool for this involvement is Constituency Development Monies (CDFs), which use public funds to support certain political subdivisions through funding decisions influenced by their representatives in the national legislature (Harold, 2014).

The CDF has supported a number of initiatives that mimic the member item, a congressional budgetary allotment used in the USA. One of the most challenging components of a manager's work appears to be successfully implementing a project,

which is frequently challenging and complex. Investing money in productive work is a stage of project management that it includes. Every project's implementation is based on a number of variables. Among these include effective stakeholder communication, good planning, sufficient funding, and organizational considerations (Pedro, 2014).

James (2016) claims that a variety of factors, including the project team's capacity to handle situations that could prevent it from accomplishing its goals or deliverables, affect the success rate of many projects. Globally, 30% of projects need to be redesigned, and 50% of them need to have their aims changed, which means they frequently run late, overspend, and have fewer performance requirements. The remainder 20% are terminated in the midway. The majority of organizations and institutions, according to Gray (2018), do not incorporate or recognize project management as a profession that is distinct from general management, which is among the primary explanations why the majority of these failures are consistently attributable to inadequate application of project management skills and techniques. This is founded on the idea that projects are one-of-a-kind, limited-time, limited-budget endeavours with performance specifications (quality) to meet client objectives. For project managers, it's equally crucial to have knowledge of risk management techniques.

According to Williams (2012), the majority of projects worldwide encounter unforeseen risks that have not been analyzed or planned for and must be dealt with immediately rather than being guarded against in an initial stages of preparation and planning so that prospective risks are discovered, classified, and analyzed. It is considerably more efficient to identify hazards, classify them into groups, or generate

a register or list of categories, then list potential risks, their effects, and likelihood within each category.

Risk management is given more emphasis nowadays than it was a few years ago, according to the Accenture 2011 Global Risk Management Study. The report reveals the difficulties risk management faces and investigates existing patterns in how risk is seen and dealt with, what problems lie ahead, and how different risk masters have different skills to promote strategic advantage. In terms of exceeding the three project pillars of cost, time, and quality, it is observed that risk masters and the skills required to manage risks result in great project performance. To put it mildly, many managers of organizations are aware of risk management, but they must acknowledge that they have not yet included this practice into their overall organizational structure or strategic management plan. Projects in public institutions are more vulnerable to risk exposure and its negative impacts (Munywoki, 2011).

Action is preferred above preparation in many nations, like the United States, in which the focus is on getting the task done and planning is seen as a time waster. This is likely the cause of the majority of projects being operated and managed by one professional project manager, which leads to a large number of projects failing to achieve their intended goals (James, 2016).

Government-funded projects in Nigeria frequently fail and need to be redone because of poor quality (Forcada, Gangoellés, Casals, and Macarulla, 2017). Reworking a project has been proven to have a considerable impact on its overall cost and completion time. Obeng-Ahenkora and Danso (2020) identify the main underlying issues that prevent projects from succeeding in Nigeria as the failure of agencies to pay contractors on time and changes in the costs of materials, labour, and plant.

Rwanda, according to reports, is a country where prospective and continuing projects are frequently stalled or rescheduled (Nyasetia et al., 2016). The construction of the new airport, Bugesera International Airport, requested by the Rwandan government in 2011 for \$600 million, was not even started as of this writing but was scheduled to be finished by 2016. The \$300 million Kigali Convention Center, whose completion was originally planned for 2011 but has since been delayed until 2016.

In Kenya, the administration and implementation of the CDF have drawn a great deal of criticism from a variety of sources. Transparency International (TI) (2018) raised concerns in a report about whether the CDF has achieved its declared goals. For illustration, it has been claimed that the allocation of cash for development initiatives lacks accountability; it is unclear how decisions about which projects to implement are made; and the establishment of the constituency development committees, which is where decisions are made, is marked by political favouritism. According to a report by the Kenya Taxpayers Association for 2016–17, only 5% of the projects had been completely completed, 20% of the CDF was unrecoverable, 40% of them couldn't have been finished adequately.

About 48% of Kenyan construction projects, according to Muchungu (2012), exhibit subpar performance when it comes to client satisfaction, cost overruns, and finish date. According to Ochieng and Tubey's (2013) research in the Ainamoi Constituency, just 29.73% of the projects were finished, and 100% of them were not finished on time for the years 2011 and 2012. With barely 17% behind schedule, 83% of the education CDF projects in the Kikuyu Constituency that were started between 2012 and 2015 were finished. The majority of these projects were started during the 2014 and 2015 fiscal years.

1.1.1 Project Performance

A project is a relatively brief endeavour intended to provide a distinctive product, service, or outcome. Project management is further described as the utilization of information, skills, tools, and processes in project operations to fulfill project specifications (PMI, 2013). If a project is finished on schedule, within the allotted budget, and meets the client's requirements, it is considered to have been effectively delivered. Project management needs specific tools, such as social media tools, in order to successfully complete projects (Kraushaar & Akumu, 2013).

Project performance measurement is essential for managing projects because it allows the project manager to identify issues with scope and budget early on and create appropriate solutions (Dissanayaka & Kumaraswamy, 2013). McFarlan (2011), argues that project failure arises due to failure to pay strict attention to each project risk separately, the total risk in projects, or realizing the different types of projects require a variety of risk management practices. In this aspect, a disregard for potential risk typically results in project delays and budget overruns.

The overall character of a project is taken into account while evaluating its impact, receivers' respect, the execution's suitability, efficiency, and sustainability. Making a well-planned project timeline and understanding the crucial venture success elements are necessary for project success. It assists the project manager and the partners in making the appropriate choices and taking action to complete the task. Delicate elements must be taken into consideration in order to achieve execution in endeavour conveyance. The development of a series of delicate skills focusing on utmost client delight is one of the sensitive aspects (Gemuenden & Lechler, 2010).

According to Stevens (2016), a project's success is determined by how well it performs, and project performance is determined by the scope of the project, the agreements established in the contracts, the relationships between the parties involved, the skills of the project manager, and the competencies of the other stakeholders. The performance of a project is typically assessed and evaluated on the basis of the measurements based on its performance, about its inputs, project efficacy, and project efficiency (Takim, Akintoye, & Kelly 2013). Therefore, the success of a project can be determined by how much money was spent, how long it took, how well it was done, and whether it met the needs of the users.

1.1.2 Risk Management Strategies

Berg (2012) defines risk as the vagueness that surrounds upcoming events and results that may have an impact on whether or not organizational needs are met. Njagi (2016) assert that a risk is a perception with a potential impact on some significant features it could be caused by certain past, current, or hypothetical events. Consequently, risk management is a crucial component of project management's strategic planning that is a procedure that is performed over the entire project's lifecycle.

Project managers employ a variety of techniques to detect and manage risks to their projects in order to reduce their negative effects. These techniques are referred to as "risk management methods" (Cooper, 2015). Risk management, according to Smith, Merna, and Jobbling (2016), entails utilizing executive procedures, processes, and techniques to the tasks of establishing the specific scenario, differentiating, deconstructing, analyzing, treating, observing, and communicating risks in a methodical manner. To increase risk management effectiveness, to have a clear understanding of the possible risks in projects, and to improve control of the entire

project, risk management methods should be continually improved throughout the entire project.

The goal of risk management strategies, according to Nyakundi (2011), is to decrease, control, and minimize the likelihood of threats and increase the likelihood of possibilities in projects. As a result, organizations deal with the risks associated with their occurrences in an effort to increase the value of each event throughout the portfolio of events. Risk avoidance, risk transfer, risk retention, and risk reduction are listed as the four components of risk management by Ropel & Gajewska (2011). Risk management techniques include avoidance, retention, transfer, and risk reduction, according to Kinyua, Ogollah, and Mburu (2015). Risk avoidance, risk transfer, risk retention, and risk reduction are only a few of the risk management techniques included in (PMBOK, 2008). As risk management strategy indicators, this study will utilize risk transfer, risk control, risk prevention, and risk retention.

Risk retention, as defined by Strelnick (2016), is the act of acknowledging the existence of a threat yet choosing to accept the corresponding amount of risk without taking any steps to reduce it. When hazards cannot be avoided or shifted, the party involved is left with little choice except to assume the risk and enjoy the results that come with it. Additionally, Anca, Cezar, and Adrian (2015) propose that the tactic can be either inactive or active. Other than the team members recording and regularly evaluating the risk to make sure it has not caused any substantial change, passive acceptance requires no action. On the other hand, active retention entails the creation of emergency reserves that include cash, time, and resources to deal with the risk.

By altering the initial project plans in order to prevent or eliminate problematic parts, a company uses the risk prevention strategy. This can entail choosing not to carry out

a specific risky activity, changing the project's scope in the process. Typically, the parts of a project that are more risky are also the parts that are more valuable or valuable in the first place. This means that avoiding them can mean cutting off the project's most lucrative components. Soderlind (2017) advises that you should adopt a plan that can keep such risky behaviours going.

Nyakundi (2011) defines risk control as the mix of factors taken into account with the potential to reduce vulnerabilities across society, to prevent, limit, and generate readiness for hazards' effects and its relationship to sustainable development in general. Furthermore, according to Twigg (2015), certain programs to lessen risks have efficient information methods, insurance plans, and highly developed emergency response systems. Risks are minimized in projects to a tolerable level that is durable if the initiatives are performed successfully.

Transferring a share or all of the risk to a different party is the act of transferring risk. Risky events that are less probable to occur yet could have a significant financial impact are now handled by this third party. To prevent delays, cost overruns, and design flaws, risks can also be moved from one stage of the project to the next. Clear regulations, transparency, and effective communication between the parties involved are necessary for risk transfer to be efficient and effective (Bhoola, Hiremath, and Mallik, 2014).

1.1.3 Constituency Development Fund projects in Juja Constituency

Juja is an electoral constituency in Kenya. It is amongst the four seats in the former Thika District and one of the twelve in Kiambu County. The district was created in time for the 1969 elections. The constituency was divided into the Juja, Ruiru, and Thika Town seats before to the 2013 elections. The area of the constituency is square

kilometres (Approx. 326.60). The town is situated between Thika and Ruiru town, around 30 kilometres north of Nairobi. According to Kenya's Vision 2030, Juja is a part of the Nairobi Metropolitan Authority. The estimated population of Juja Constituency is 272,737. Out of 290 constituencies in Kenya, this one is number 113.

In 2017, Juja National Government Constituency Development Fund (NG CDF) was ranked the best performing in the Central region and 7th countrywide out of the 290 constituencies. Its achievements were attributed by its effective awarding of tenders for implementation and completion of projects in the financial year 2017/2018. Juja Constituency has/is vastly growing and so far has exceeded the previous population estimate. Education and security projects by the Juja NG-CDF have greatly contributed to its growth making it a haven for the majority. Businesses and companies' development has been a key mover in the Juja constituency economy.

Schools-nursery, primary and secondary constructions, additions, libraries, and staff quarters to accommodate the increased number of pupils owing to Free Primary Education (FPE) are among the sectors that the CDF in Juja has greatly contributed to. Rural electrification projects and illumination for public buildings. Health Projects: Mobile clinics, health centres, and dispensaries. 10% bursary. In the event of one, there will be an emergency fund to assist in responding to crises, revitalizing initiatives, and addressing unique requirements. (5%) Police stations, administrative camps, and security equipment (Waribu, 2016).

1.2 Statement of the Problem

The mismanagement and theft of CDF funds by Constituency Development Fund Committees (CDFC) have been documented in the nation, according to the National Taxpayers Association (2012). Approximately Ksh. 242 million of the funding given

to the Constituency Development Funds (CDF) Committees in the 2010–2011 fiscal year was misappropriated, missing, or embezzled, claims Lobby Group. If individuals in charge of the CDF funds are required to account for them, management of the funds will be greatly improved.

Further a report of the auditor-general on NG-CDF-Juja constituency for the year ended 30 June 2017 showed unsupported bursary disbursements, the report noted that the financial statements for the year ended 30 June 2017 reflects other grants and transfers balance of Kshs.84,702,324 which includes Kshs.28,859,580 in respect of bursary-secondary schools which was awarded to various beneficiaries in learning institutions as bursaries to needy students. Nevertheless, out of the total disbursements, Ksh. 27,613,990 was not backed by statements or receipts of appreciation from the organizations that got the bursary grants to prove that it was deposited and accounted for. Consequently, was not been possible to ascertain whether the bursaries awarded reached the intended beneficiaries (Auditor General report, 2017).

Roba (2014) assert that there has been an increase in concern regarding the implementation of endorsed and established projects as well as the effective use of community development funds throughout the nation since the enactment of the CDF Act. The major objective of any project is its effective completion, even though the process of project implementation is complicated and usually requires simultaneous attention to a number of different factors, such as managerial assistance. There is uncertainty regarding whether the fund is being utilized effectively or if politicians have taken advantage of it to develop their patron-client networks (Kimenyi, 2005). According to the Juja Constituency Development Fund Project Implementation Status Report (2017), the Kshs. 3,479,565.6 earmarked for the Athi Bridge has not yet been

utilized from the scheduled year 2008/09, despite the whole amount having been disbursed. Despite the distribution of the allotted Kshs. 7,056,000, the construction of a perimeter wall at Abba Salama Primary School, which was planned for the year 2008/09, is 75% complete (The Auditor-General, 2015).

Several studies have been conducted as a means of addressing the issue of risk and project performance. Carvalho and Junior (2013) examined risk management practices in a range of Brazilian industrial sectors as part of their study. The study's conclusions suggested that utilizing the most effective risk management strategies has a beneficial impact on a project's success. Rubio, Ferrada, Serpella, and Howard (2013) conducted a survey of Chilean construction projects, and the findings showed that failing to implement risk management procedures had adverse effects. In Kenya Ngugi & Odhiambo (2014) argued that strong risk management practices facilitated the initiatives' success because they decreased the likelihood that unfavourable risks would materialize and lessened their effects when they did. 24 Constituency Development Funds in Kiambu county were assessed by Wachuru (2013). Due to a poor implementation of risk management procedures, the study's conclusions about project success were limited.

Additionally, research by Kariuki (2013), Oyalo (2015), and Sugal (2017) were based in the respective constituencies of Gachoka, Kangundo, and Balambala. They did not, however, concentrate on how risk management techniques affected the execution of CDF projects in the Juja constituency. It is clear that there is little study on risk management tactics and CDF project implementation in the Juja constituency because the results of the studies mentioned above and others have limited applicability to the current constituency. The current study determined the existing gaps in the studies

and tries to close them by evaluating the effects of risk management procedures and the effectiveness of NG-CDF projects in Juja constituency in Kiambu County.

1.3 Objectives of the Study

1.3.1 General objective

The study's main objective was to examine the correlation between risk management procedures and the effectiveness of projects financed by NG-CDF in Juja Constituency, Kenya

1.3.2 Specific Objectives

The study's specific objectives were;

- i) To ascertain the influence of risk retention on the performance of NG-CDF in Juja constituency in Kiambu county, Kenya.
- ii) To determine the effects of risk prevention on the performance of NG-CDF projects in Juja constituency in Kiambu county, Kenya
- iii) To examine the impact of risk control on the performance of NG-CDF projects in Juja constituency in Kiambu county, Kenya
- iv) To assess the influence of risk transfer on the performance of NG-CDF projects in Juja constituency in Kiambu county, Kenya

1.4 Research Questions

- i) How does risk retention affect the performance of NG-CDF in Juja constituency in Kiambu County, Kenya?
- ii) What is the effect of risk prevention on performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya?
- iii) How does risk control affect the performance of NG-CDF in Juja constituency in Kiambu County, Kenya?
- iv) What is the effect of risk transfer practice on performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya?

1.5 Significance of the study

The study would be valuable to a several CDF committees, such as the planning and implementation committees by identifying the key factors affecting project implementation. As a result of this study, prospective and current scholars would have access to information on performance evaluations. This would increase the body of information on factors affecting the performance of CDF-funded projects and also point out potential study areas. The results of the investigation would be beneficial to the academic community, which includes academics and researchers, as they would provide empirical data with which to compare and contrast subsequent findings. For improved project outcomes, the government institutions can learn a lesson out of the private sector's book on how to implement effective programming. The research would also reveal any gaps that could be filled in future researchers.

1.6 Scope of the study

Geographically, the study confined itself to projects within Juja, a constituency in Kiambu County, Kenya. The town is situated between Thika and Ruiru town, around 30 kilometres north of Nairobi. According to Kenya's Vision 2030, Juja is a part of the Nairobi Metropolitan Authority. The projected total population of Juja Constituency is 272,737. The constituency is number 113 of the 290 constituencies. The independent variable of the study will be risk management practices whose indicators will be risk retention, risk prevention, risk control and risk transfer, while the dependent variable will be performance of NG-CDF projects.

1.7 Limitations of the study

Stakeholders working in the CDF projects work in a very political environment this may make respondents be wary of disclosing crucial data for the study, which will pose a problem of objectivity for the study. This will be alleviated, however, by

having a letter from the institution (Kenyatta University) and a NACOSTI authorization to show that the research is being conducted solely for academic purposes. The respondents' privacy will be protected by the non-disclosure of the participants' names. The study will be limited to Juja constituency CDF projects thus making the generalization of the study findings to other sectors of the economy difficult. Some responders, particularly project managers, may believe that the study is an assessment of their abilities, which could lead to a negative perspective toward the research and sometimes outright unwillingness to take part in the study.

1.8 Organisation of the Study

This study is categorized as follows: Chapter 1 discusses the study's backdrop in order to clarify the study's problem. The review of the theoretical and empirical literature that is pertinent to the study's specific goals is covered in chapter two. The study's methodology is covered in Chapter 3 of the book. Other items that are focused on in the chapter are the research design, the target population, the sampling design and techniques, data collection method, validity and reliability as well as the ethical issues in the research study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter gives a theoretical overview and empirical literature as per the goals of this study. The theoretical review addresses the key theories that are crucial for comprehending the study and its goals. An empirical review examines the connections between various study variables while concentrating on the study's unique aims. Additionally, the chapter provides a description of the empirical literature, research gaps, and conceptual framework demonstrating the connection amongst study variables.

2.2 Theoretical Literature Review

Existing theories employed for a specific topic make up a theoretical review. The theoretical support must exhibit comprehension of key concepts and principles related to the research paper's subject and link it to broader bodies of knowledge in the field being investigated. a theory is a group of interconnected concepts, definitions, and assertions that provide a logical interpretation of an event in an endeavour to explain a natural occurrence (Mensah, 2014). The Prospect Theory, Enterprise Risk Management Theory, Uncertainty Theory, and Theory of Project Implementation will serve as the foundation for this study.

2.2.1 Prospect Theory

R. McDermott (2001) asserts that this approach entails decision-making under risky circumstances. According to this idea, choices are founded on discernment and the situation of the external world. Internal disagreement regarding value trade-offs is resolved. Making decisions becomes challenging when options support ideals and

objectives that are in conflict. Prospect theory examines the decision-making process involves presenting and weighing these possibilities. This theory was deemed to be prominent in the examination of option decision-making under risk by Kahneman & Tversky (1979). Making decisions when there is risk involved is seen as a decision between prospects and gambles. This philosophy places more emphasis on gains and losses than on finished assets. People are risk-averse when it comes to profits but risk-acceptant when it comes to losses, and they assign losses greater weight than equal gains (Levy, 1992).

As a result, it is believed that utility curves in a domain of gain and a domain of loss are different. According to Kahneman & Tversky (1975), fatalities are prioritized more in decision-making because the psychological effects of advantages are significantly lower than that of losses. The decision weight of each outcome is multiplied by the significance of each outcome while making decisions. Decision weights are significant because they provide an empirically obtained evaluation of how decision makers determine how likely something is to happen. Tversky and Kahneman (1979) assert that low probabilities are often overweighed whereas large probabilities are typically underweighed. Risk, according to Dionne (2013), is the total of an event's likelihood and its likely consequences. The volatility of the results can be used to measure it, although more often than not, more dispersion moments are needed. Uncertainty is less exact since the chances of an indeterminate event and their effects are often unknown.

Prospect theory is applicable to all independent variables, including risk avoidance, whereby project team members may decide to shorten the project's duration in order to reduce hazards. As part of risk transfer, the project team will decide to assign tasks with a strong likelihood of risk to a third party who is financially prepared and

willfully to manage the risk if it materializes. The project team can opt not to take any action in response to a risk that has been detected, or they can try to reduce all risk circumstances to controllable or reasonable levels given the project's timelines.

2.2.2 Enterprise Risk Management Theory

Nocco &Stulz (2006) assert that Enterprise Risk Management (ERM) is a risk management approach that favors managing substantial risks that affect a certain organization as a whole rather than treating each risk separately. Its primary goal aims to integrate all of the organization's risk management silos into a single, systematic approach. According to the ERM risk management framework for managing risk, senior corporate leaders and personnel must play an active role in assessing and addressing a range of business risks as part of the risk management process (Hallowell, Molenaar, &Fortunato, 2013). This concept emphasizes all organization members, not only chosen few, to participate in risk management.

The ERM also emphasizes how crucial it is to manage risks with clear procedures and guidelines. The theory also states that if 10 enterprises adopt written rules that specify risk appetite, strategic goals, tolerance, and standardized processes, they will be able to increase their capacity for identifying, assessing, and managing risks (Olson and Wu 2010). The theory additionally emphasizes on creating a culture of risk management whereby all parties involved have the power and obligation to manage risks. ERM techniques, according to Cormican (2015), are associated with improved organizational enduring success, stakeholder trust, and competitive edge. Despite being created for the control of corporate risks, the ERM theory has gained popularity in project management methodologies. Drumll (2001) posit that applying the ERM concept in the construction industry is a smart move because it is applicable to sectors with a high rate of failure. Our idea is pertinent to this research since these failures

arise from a failure to recognize, manage, and control risk across the entire organization. This hypothesis accounts for all independent variables.

2.2.3 Uncertainty Theory

Liu (2010) established the concept of uncertainty theory as a result of the generalization of the uncertainty domain. The truth value is described as the uncertain assessment that the statement is true in Li and Liu's (2010) application of uncertainty theory to uncertain logic. Additionally, Liu created the concept of uncertain entailment that takes into account the truth values of other uncertain formulae to determine the actual meaning of an uncertain formula. Project management does, at all, take uncertainty into account. The 1950s saw the early development of activity network approaches like PERT (Program Evaluation and Review Technique), which recognized the potential for task length variability. For example, probabilistic branching was added to these techniques in the 1960s. To assist project managers in preparing for uncertainty through risk prevention and contingency planning, qualitative approaches like the Synergistic Contingency Evaluation and Review, Technique for Graphical Evaluation and Review, Technique and Analysis of Potential Problems were developed (Henriksen & Uhlenfeldt, 2010).

2.2.4 Theory of projects implementation

Nutt (1986) assert that Project implementation theory is a sequence of decisions made by accountable organizational agents to manage a change process and secure the cooperation necessary to implement changes. Managers utilizes implementation to make planned changes in their organizations by establishing circumstances that allow for changes to survive and take root. The anticipated changes in an organization are implemented via a method called implementation, which is overseen by a manager. There is broad consensus that managers are the essential players in the process and

that implementing intended changes, if they are distinctive or conventional, is the main objective of implementation. Nonetheless, since implementation is so common, it's proven difficult to pinpoint the precise steps involved. Amachree (1988) made a number of important distinctions regarding these phases of planned change, classifying four components as the entrepreneurial, exploratory, control, and implementation subprocesses. This point of view suggests that implementation may be thought of as a planning technique for a change process that defines the steps that all parties involved will do to support the change.

Project implementation methodologies have developed to plan, coordinate, and oversee the intricate and varied activities of contemporary industrial and commercial endeavours. A characteristic shared by all undertakings is the incorporation of thoughts and actions into new projects. It is impossible to forecast with total accuracy the actions that will result in completion due to the ongoing existence of risk and uncertainty. In the case of some really difficult or sophisticated projects, even the prospect of their satisfactory implementation may be potentially seriously contested (Amachree, 1988). The objective of project management is to recognize and foresee as many risks and problems as is practical. Despite all the hazards, it also organizes, plans, and controls activities to make sure the project is completed as smoothly as feasible. The goal is for the project's ultimate outcome to satisfy the project's sponsor or buyer while also completing it in the specified amount of time and without exceeding the allocated or budgeted amount of money or other resources.

2.3 Empirical Review

An empirical literature review entails analyzing what other academics have written on the subject under investigation. The researcher will be given access to various studies' prior material to give them the ideas that have been advanced on the

2.3.1 Risk Retention and Performance of Projects

Anca, Cezar, and Andrian (2015) define risk retention as a method when the project team acknowledges a risk but chooses to do nothing about it. When addressing a particular risk cannot be done in a way that is cost-effective, this technique is used. Methods for accepting risks can be divided into two categories: passive risk acceptance and active risk acceptance. Documenting the risk and dealing with it as it arises are the only actions necessary for passive risk acceptance. Active risk acceptance comprises building up emergency funds, as well as the time, effort, and resources needed to deal with the risk. Potts (2008) perceives risk acceptance as a choice if it cannot be transferred or prevented but needs to be regulated to decrease its impact.

Ploywarin and Song (2014) analyzed risk retention utilizing contingency planning, taking accurate knowledge about risk as it arises, and self-insurance in their research on the evaluation of risk acceptance/retention predicated on railway building initiatives in Thailand. Active and passive risk retention was further differentiated by them. Passive risk retention refers to dangers that project managers are not equipped to handle during a project. Active risk retention involves actively and methodically identifying risks. They observed that errors in risk identification and risk analysis led to risk retention in the engineering construction. Risk management employees should work to minimize these mistakes as well as take timely risky decisions and implementation for the execution of substantial and large projects. They deduced from their assessment that the risk retention method, used in 53.49% of Thai railway construction projects, was the most widely used risk response measure.

Sibomona (2015) that examined the impact of risk acceptance strategies on project performance in the Rwandan construction sector, the degree of risk management

practices used throughout a project's lifespan directly affects project performance. Retention or acceptance of risks was viewed by the author as the least effective approach of risk management and should only be employed when it is determined that all other methods are ineffective. It was emphasized that risk acceptance is a decision made by the company and that this choice should be wisely chosen in light of the circumstances that occurred during a certain period of time. Data for this study was gathered using a straightforward sampling technique from multi-story structures with a representative sample of the customer, consultants, and contractors. Contingent or backup plans were used to gauge risk retention. The performance of building projects and risk retention were found to be strongly correlated.

Mbuya and Lima (2017) discovered that Tanzania's construction sites were regarded as the second most dangerous location to work after mines due to the increase in fatalities, lasting disabilities, and severe injuries there. As a result, there had been a decline in the productivity and general effectiveness of building projects, which had a negative impact on Tanzania's economy and labour force. The formation of risk assessment, communication, and control in order to manage, mitigate, control, or transfer risk exposure was determined by many think tanks to be the most likely option in this regard (Phoya, 2012). The results of the study showed that the primary advantage of risk assessment improved the determination of the level of risk exposure to employees, the development of risk control protocols, and the dissemination of crucial risk protection information to project participants to facilitate greater awareness of all things related to risk.

2.3.2 Risk Prevention and Performance of Projects

Zamzam (2014) that examined the risk-avoidance tactics employed by Equity Bank (Kenya) Ltd. to boost performance clearly demonstrates how dangers have

proliferated in the banking industry and how crucial risk management is to Equity Bank's success. Five senior managers were selected as respondents by the author, and content analysis was performed to analyze the data. It was underlined that using risk avoidance, which involves balancing risk with performance, was a crucial step in the need analysis process. He assessed risk avoidance by increasing reserves (contingency planning) and running credit checks on all prospective borrowers.

Wanyonyi (2015) evaluated the impact of risk avoidance strategies on the performance of certain multinational development agencies in Nairobi. He stated that risk avoidance meant looking for alternatives in projects and using established strategies rather instead of inventing new ones to lessen the users' needless stress. He collected respondents from each international organization using the purposive sampling method. He then went on to assess risk avoidance utilizing work plans, contingency plans, safety systems, and safety inspections. The analyses showed a positive connection and a 5% significant level, which suggests a high association between risk avoidance and project performance. He continued by claiming that minimizing tasks with a higher risk of losses renders it more challenging for risk to materialize in projects.

A study by Weingarten, Humphreys, Gimenez, and McIvor (2016) examined the impact of risk management on the effectiveness and efficiency of supply chain integration. Twelve businesses involved in the supply of stationery were the study's target audience, and a descriptive research design was utilized. After that, questionnaires were successfully distributed to the study's respondents, who included managers, finance departments, and procurement officers. Descriptive and inferential statistics were employed to statistically examine the data after data collection. The study's findings demonstrated that supply chain firms implemented risk-reduction

strategies such careful planning, alternate approaches, and contingency. The study's results also showed that risk management techniques improved the performance of supply chain companies.

Wabomba (2015) carried out a study in Nairobi, Kenya (IDO) to better understand how risk avoidance techniques affect project effectiveness among international development organizations. The study utilized a correlational predictive research methodology, and data was gathered through both primary methods and video study, review, and analysis of literary concepts. Then, project and program managers who were in charge of overseeing overseas development initiatives were given questionnaires. The data was then examined through Excel 2013, and the study's results demonstrated that the business adopted modified work schedules to get rid of risks, contingencies, regular audits, functional reviews, training, and skill upgrades to mitigate risks.

A study by Weingarten, Humphreys, Gimenez, and McIvor (2016) examined the impact of risk management on the effectiveness and efficiency of supply chain integration. The study utilized a descriptive research approach and its target audience consisted of 12 firms involved in the supply of stationery. The study's responders, who included managers, finance offices, and procurement officers, were successfully presented questionnaires after that. Descriptive and inferential statistics were then utilized to statistically examine the acquired data. According to the study's findings, supply chain companies have started using risk averted techniques like thorough preparation, alternate methods, and contingency plans. According to study results, risk prevention practices have a favourable impact on supply chain organizations' performance.

2.3.3 Risk Control and Performance of Projects

Risk management is the practice of acting promptly to lessen the likelihood or impact of risks. By minimizing the size of the risk and the likelihood that it will occur or its impact, risk control is the process of enhancing risk acceptance by the organization (Hillson, 2001).

Kinyua, Ogollah, and Mburu (2015) underlined the benefits of risk reduction on project performance of small and medium information communication technology firms in Nairobi, Kenya in their study. They said that the degree of hazards vary from project to project depending on how sophisticated they are, and that includes projects for developing IT software. To obtain a representation of the target population, the authors used the Random approach in their sampling. By using emergency plans, signing contracts, and holding crisis meetings, risk reduction was quantified. They came to the conclusion that risk management techniques have a profound effect on the performance of modest Kenyan ICT projects.

Ogolla, Mugambi, and Obwongi (2019) examined the impact of risk management controls on project performance for the Mombasa County Government. The study's findings revealed that every respondent agreed that experience (mean of 3.9061) and training (mean of 3.6845) can improve project performance. It is clear that both were trustworthy because their respective coefficients of 0.719 and 0.768 are higher than the suggested cutoff of 0.70. Results of correlation analysis revealed that indicators of project managers' risk management competency and performance generally had strong positive connections. Training and Functionality and Budget exhibited association values of 0.392 and 0.369, respectively. Budget, on the contrary, showed correlation coefficients with functionality that ranged from 0.492 to 0.433, respectively. According to the report, Mombasa County Government should provide

project team members with training so they may apply risk management strategies appropriate to their particular project setting.

Tabi (2016) conducted an analysis on risk management and analysis in Ghanaian construction companies. A sample of 55 respondents was employed in the analysis, and data were gathered utilizing both qualitative and quantitative methods. The study employed both open-ended and closed-ended questionnaires. According to the analysis, 96.15% of responders said that prior to beginning building projects, risk control was a key factor.

Qiuzhen, and Qingguo (2017) focused on the instance of Chinese vendor companies to examine the effects of project risk control on IT project performance. The purpose of the analysis was to investigate whether project performance would be considerably improved by project risk management at low levels of unpredictability as opposed to high ones. A 181-person sample of software project managers and other important sources from software companies in Hangzhou City, China, were surveyed using a questionnaire, and responses were obtained via mail and email. The respondents were asked for details in connection with one or more effectively outsourced IS development projects. It was concluded from the research's findings that project performance and project risk management had a strong positive link. The outcomes showed that project risk planning and control increase project performance, completing the project on schedule, within budget, and with a higher level of profitability for the vendor.

Addison and Vallabh (2016) conducted a study on the effects of project risk control performance of software projects in IT firms in China. The research design for the study was survey-based. A systematic questionnaire that addressed respondents'

questions geared toward attaining the study's goal was used to collect the data. A total of 70 project managers from IT companies were chosen at random using the "snowball" sampling method of sample selection. 36 of the 70 sent questionnaires were resubmitted. The study confirmed that software project risks like relatively vague or wrongly interpreted scope/objectives, unrealizable schedules and budgets, dissatisfying knowledge/skills, and a lack of a reliable project management approach as well as mischaracterization of the standards outlined by many researchers, subcontracting risk, and typically occur in software projects influence management embracing adequate risk mitigation initiatives influencing software projects' success.

2.3.4 Risk Transfer and Performance of Projects

Risk transfer is the process of transferring the risk of loss to a different independent party that is stable financially at an affordable rate under a binding contract. Reduced risk-related losses are the goal of risk shifting (Bekefi, Epstein, and Yuthas, 2008).

The best course of action is to transfer a risk if it can be handled by a different expert with superior skill or capacity. According to Michaela, the responsibility for managing the risk should be passed to them. Depending on how the risk is characterized, it may be shifted to the client, the contractor, the subcontractor, the designer, etc. This could result in risk premium, or more expenditures and labour. It is important to realize that the risk is not eradicated but just moved to the party who can manage it the best (PMI, 2014).

Ropel (2017) assert that shifting risks and the negative effects they generate are also a possibility when hazards, such political worries or labor strikes, are outside of the project manager's control. There may also be accidents that are unusual and

unforeseeable in a certain situation. Utilizing insurance companies to transfer such risks that the management cannot control.

Macharia and Kirui's (2018) explored the risk transfer approach and performance of construction projects in Kenya's public secondary schools in Murang'a County. Primary data from the study were gathered through the distribution of questionnaires. The data were then summarized and interpreted utilizing descriptive and inferential statistics. It was shown that the risk transfer strategy had no effect on how successfully construction projects proceeded. The examination of the research's findings produced the fact that the risk transfer technique significantly affects how well secondary schools' building projects perform.

Ahamed and Azhar (2014) evaluated the most recent risk management and transfer strategies used by contractors in the Florida construction sector. More than 55% of respondents in Florida who participated in the study chose the risk transfer strategy as their method of risk management, according to the study's findings. Findings also show that Florida contractors utilize both project-related risk transfer methods, such as insurance, and special subcontractors, but they favour the latter when the potential loss is bigger. Last but not least, the study also demonstrates that risk transfer can occasionally result in subpar quality, low productivity, and project delays.

Odhiambo and Senelwa (2016) undertook a study to determine the impact of risk transfer strategy on project sustainability at NGO healthcare initiatives in South Nyanza. The findings of the regression analysis suggested that the Risk Transfer Strategy had a substantial beneficial impact on the sustainability of the Project. In light of this, the study suggested that risk transfer strategy is crucial for improving project sustainability in businesses.

Salman (2017) used a survey of 200 participants to do out research on effective risk management and organizational performance in Pakistan. It was discovered that risk identification had little to no impact on organizational performance and that the monitoring and evaluation process actually improved performance. 90% of those surveyed said that risk management strategies increased organizational performance and that businesses should use them. Ahmed et al claim that no organization can currently prosper without using risk management strategies like context, risk identification, risk analysis, risk evaluation, risk treatment, communication and consultation, monitoring and review effect performance favourably.

In Kigali, Rwanda, Amandin and Kule (2016) studied risk management procedures for building projects. According to the report, project delays are frequently brought on by an inability to formulate a formalized and comprehensive risk management strategy throughout project planning with input from the project team, experts, and end users.

2.4 Summary of Literature Reviewed and Research Gaps

Table 2.1: Summary of Literature Reviewed and Research Gaps

Author(s) and year	Study's Focus	Study Findings	Knowledge gap	current study's Focus
Ploywarin <i>et al</i> (2014)	Analysis of risk acceptance/retention predicated on the railroad building projects in Thailand	The most popular risk management technique used in Thailand's railroad building projects was the risk retention approach.	The context of the study was an advanced nation.	This study was conducted in an emerging economy
Sibomona (2015)	Analyzed how risk acceptance strategy affected how well projects performed in the Rwandan construction sector.	The most often used risk management technique in Rwandan building projects was the risk acceptance method.	The study was limited to a specific institution the findings cannot be generalized	Several institutions were utilised in the study making it possible to generalize in the sector
Mbuya <i>et al</i> (2002)	Project performance and risk acceptance approach in Tanzania's construction sector	discovered that, Tanzania's construction sites were listed as the second most hazardous work environments after mines given the rising frequency of fatalities, lifelong disabilities, and severe injuries at such sites.	The study's findings were not conclusive	The study's findings of were conclusive
Zamzam (2014)	Analysis of the risk-avoidance tactics employed by Equity Bank Ltd. to boost	Demonstrates unequivocally how hazards have spread throughout the banking industry and how	The study does not adequately examine how risk plays a role	The study addressed four risk strategies

	performance	risk management is essential to Equity Bank's profitability.	as a factor.	
Wanyonyi (2015)	Evaluation of the impact of risk avoidance tactics on the effectiveness of selected Nairobi-based international development organizations	A favorable connection and a 5% level of significance in the measurements imply that risk avoidance and project performance are strongly correlated.	The research design is not indicated	This study utilized descriptive research design
Ogolla, <i>et al</i> (2019)	Explored how the risk management practices of the project manager impacted the effectiveness of Mombasa County Government projects.	The study's findings demonstrated that everyone surveyed agreed that risk management can improve project performance.	The study was limited to a specific institution the findings cannot be generalized	Several institutions were utilised in the study making it possible to generalize in the sector
Addison <i>et al</i> (2012)	Impact of project risk management on software project performance in Chinese IT companies.	According to the report, software projects run the danger of having scope or objectives that are unclear or misinterpreted, unrealistic timetables and budgets, inadequate expertise and skills, and ineffective project management.	The study was conducted in an industrialized economy.	This research was carried out in a developing economy. Kenya

Macharia <i>et al</i> (2018)	Performance of development projects and risk transfer approach at Kenya's Murang'a County public secondary schools	Results lead researchers to the conclusion that risk transfer technique significantly affects how well secondary school construction projects perform.	The study was on performance of construction projects in public secondary schools	This study was on performance of projects under the CDF
Ahamed <i>et al</i> (2014)	Risk management and transfer procedures used by contractors in Florida's construction sector	As per the study's results, more over 55% of Florida responders employed risk transfer as their main technique of risk management.	The context of the study was an advanced nation.	This study was conducted in a developing country Kenya
Odhiambo <i>et al</i> (2012).	The impact of risk transfer strategy on long-term project viability at South Nyanza NGO healthcare projects	Risk Transfer Strategy had an enormously beneficial effect on Project sustainability	The study's findings were not conclusive	The study's findings were conclusive
Amandin <i>et al</i> (2016)	Carried out an analysis on the study risk management practices on construction project in Kigali Rwanda	It has been established that projects typically experience delays due to a failure to define a concise, organized risk management strategy during project planning with the involvement of the project team and experts.	The study was limited to a specific institution the findings cannot be generalized	Several institutions were utilised in the study making it possible to generalize in the sector

Source: Researcher (2022)

2.5 Conceptual Framework

A conceptual framework is an analytical technique for organizing concepts and drawing conceptual differences. Strong conceptual frameworks accurately represent reality in a way that is simple to remember and apply. Risk management practices, which are the significant independent variable in this study and whose indicators include risk retention, risk prevention, risk control, and risk transfer were represented by the conceptual framework.

Independent Variable

Dependent Variable

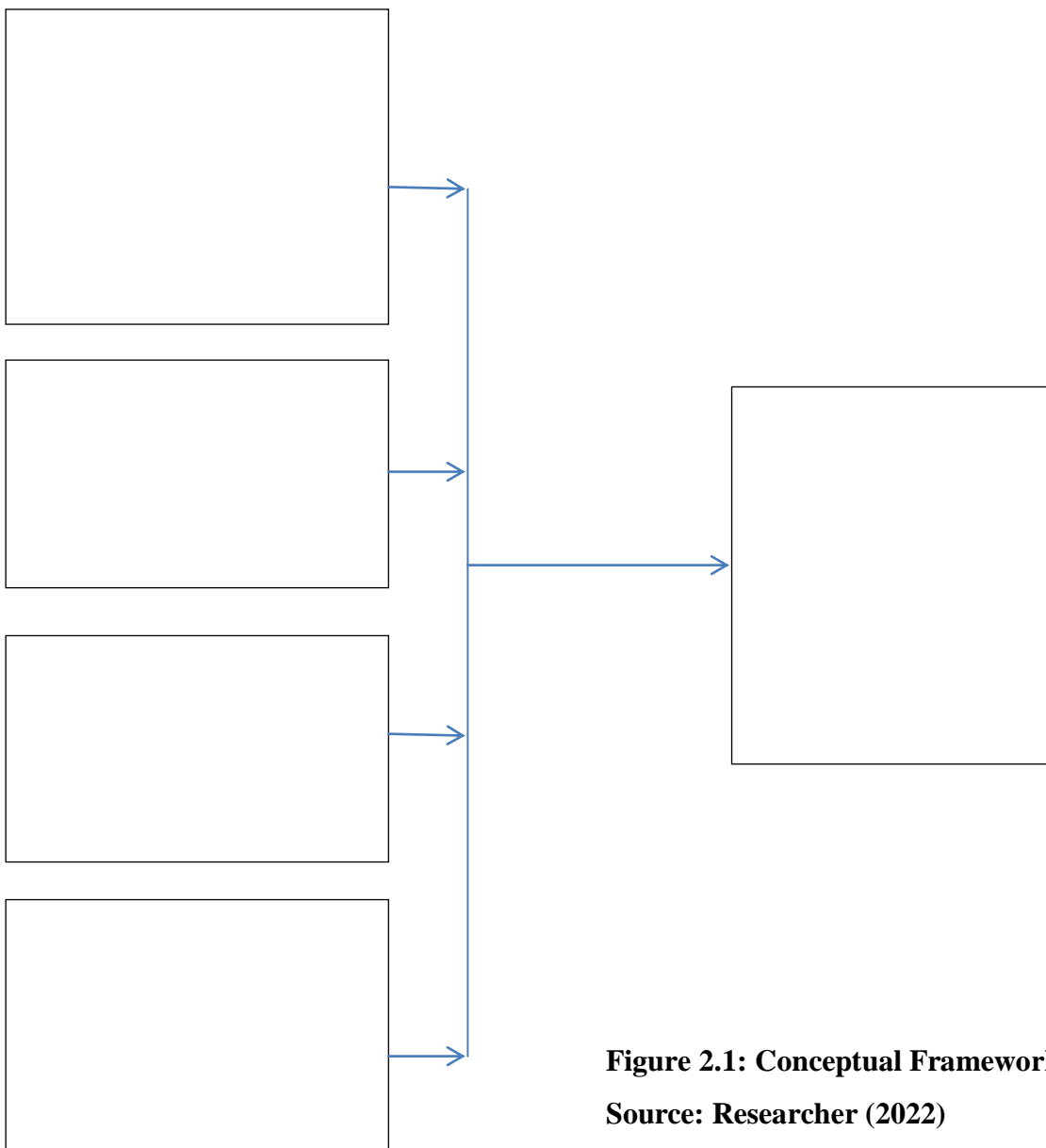


Figure 2.1: Conceptual Framework
Source: Researcher (2022)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter details the process for testing the study objectives is explained. The research design, target audience, sample design and method, data collection tool, validity and reliability of the research tool, data collection method, data analysis, and ethical deliberations all be dealt with in this section.

3.2 Research Design

A research design is the general framework for data collecting, measurement, and analysis. By presenting important options, research design helps scientists allocate their resources more effectively. It is an investigation's design and organizational structure that was created to find answers to specific research questions (Cooper & Schindler, 2011). A descriptive research design with a cross-sectional approach was used for this study. In a descriptive study design, data are gathered without being altered or the setting being changed. Lambert (2012) claims that a descriptive research design involves watching and characterizing participants without applying outside influence. Considering that a descriptive research strategy by its very nature captures the essential elements of a circumstance from a detached point of observation with explicit references to the variables. With the help of a cross-sectional survey, conclusions can be drawn about a universe's (or population's) current state. This particular research strategy allows you to gather information from a large number of people all at once.

3.3 Target Population

The target population is a predetermined group of individuals, businesses, organizations, associations, families, or even the services the researcher is examining (Cooper & Schindler, 2011). All of the project managers, committee members, and community leaders who are engaged in the continuing and completed CDF projects in Juja constituency for the 2020–2021 fiscal year made up the study's population. A sample was taken from the following categories, which make up 89 projects with a total human population of 534.

Table 3.1: Population Frame

Category	Population Size	Percentage (%)
Project Managers	89	17
Committee Members	267	50
Community Representatives	178	33
Total	534	100

(Source: Field Data)

3.4 Sample Size and Sampling Procedure

A sample is a subset or segment of the relevant population. Sampling is done in order to understand certain qualities or qualities of the sample that represent traits of the overall population (Mugenda & Mugenda, 2003). Sampling is the method of selecting a subset of a population, so that the subset has elements that are typical of the traits present in the full population (Orodho & Kombo, 2002). The formula developed by Nassiuma (2009) was used in this investigation to determine the sample size.

$$n = \frac{NC^2}{C^2 + (N - 1)E^2}$$

Whereby:

n = Sample Size

N = Size of target population

C = Coefficient of Variation (0.5)

E = Error of margin

When these values are substituted in the equation, the projected sample size (n) is:

$$n = \frac{534(0.5^2)}{0.5^2 + (534 - 1)0.05^2} = 115$$

The study used stratified sampling in the first stage, where sample participants were chosen depending on the relative strength of the strata. Project managers, committee members, and community representatives made up the three categories on which the stratas were established. Thus, the project managers, committee members, and community representatives who were used are the respective samples of 20, 58, and 37. The second phase included selecting the responses at random.

Table 3.2: Sampling Frame

Category	Percentage (%)	Sample Size
Project Managers	17	20
Committee Members	50	58
Community representatives	33	37
Total	100	115

(Source: Field Data)

3.5 Data Collection Instrument

A questionnaire is a list of questions that are prepared on a subject and are intended to elicit responses from respondents Lyon (2007). Semi-structured questionnaires were utilized by the researcher to gather primary data. So as to get comprehensive information from the respondents, the questionnaire included both closed-ended and

open-ended questions. Part A provided broad information on the respondents, and Parts B and C contained more specialized questions.

3.6 Validity and Reliability of Data Collection Instrument

3.6.1 Validity of Data Collection Instrument

Mugenda & Mugenda (2003) assert that Validity is determined by the accuracy and importance of any conclusions made in light of research findings. In other words, validity is the magnitude to which data analysis findings accurately depict the phenomenon being examined. In this study, the concept, predictive, and content validity was all examined. The degree to which a test or scale result predicts results on a criterion measure is known as predictive validity (Chen, 2015). The researcher did a thorough literature analysis and conducted a wide range of consultations to increase content validity. The study used user feedback.

3.6.1 Reliability of Data Collection Instrument

A set of measurement items' consistency can be defined as their reliability. Measurement consistency, or the extent to which an instrument measures consistently every time it is used with the same conditions and individuals, is known as reliability. If a person receives a similar score on the same test when it is administered again, the measure is deemed dependable (Sekaran and Bougie, 2010). In other words, dependability is the degree to which a study tool used repeatedly produces consistent outcomes. The researcher was interested in the study instrument's internal consistency and reliability elements, particularly the split-half correlation measure. SPSS Cronbach's Alpha Reliability Test was utilized by the researcher to evaluate the reliability of the instrument. By conducting a pilot study in the neighbouring Gatundu South constituency, Cronbach's alpha measures internal consistency. If the coefficient

is more than 0.7, the reliability criteria is likely to be met. The results of the reliability tests are presented in Table 3.3.

Table 3.3: Results of Reliability Tests

Variable	Cronbach's Alpha Value	Remarks
Risk retention	0.845	Reliable
Risk prevention	0.715	Reliable
Risk control	0.806	Reliable
Risk transfer	0.745	Reliable
Project performance	0.815	Reliable
Total	0.785	Reliable

Source: Pilot Study (2023)

The results in Table 3.3 shows that the indicators of risk retention had the highest reliability ($\alpha= 0.845$), followed by project performance variable ($\alpha=0.815$), risk control ($\alpha=0.$), risk transfer ($\alpha=0.745$) and risk prevention ($\alpha=0.715$). This reveals that all the four research variables were reliable as their Cronbach's alpha values were way above the 0.7 threshold at $\alpha=0.785$ and therefore they could provide reliable data for the study as recommended by Mugenda and Mugenda (2003).

3.7 Data Collection Procedure

Kothari (2011) argues that data collecting entails finding people and compiling the necessary facts for the study. Depending on the study's design, several data collection methods are used. Cooper and Schindler (2011) argue that data collection is the systematic gathering, selection, and computation of information that enables the researcher to accomplish the goals of the study. Data was acquired from various employee classes. Due to the busy nature of the employees and the need to increase response rates by allowing them to complete the questionnaire at their convenience, the instruments were administered using the drop-and-pick approach (Mugenda and

Mugenda, 2013). In order to maximize the number of successful responses, the respondents had two weeks to complete the surveys.

3.8 Data Analysis and Presentation

The field data was sorted, gleaned, and filtered in accordance with the study's goals. The data was coded, entered into a statistics program, and examined (SPSS Version 25.0). The quantitative data was analysed using descriptive statistics. The standard deviation, means, frequencies, and percentages were all calculated. The development of themes related to the study's variables were part of the content analysis process for the open-ended questionnaire sections' qualitative data. Tables were used to present the results.

Multiple regression analysis aided in analyzing inferential data. The model also helped in obtaining the relation between the dependent and the independent variable.

The model took the form of the equation below;

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

Whereby:

Y = Project Performance

β_0 = Constant Term

$\beta_1, \beta_2, \beta_3, \beta_4$ = Beta Coefficients

X_1 = Risk Rentention

X_2 = Risk Prevention

X_3 = Risk Control

X_4 = Risk Transfer

ε = Error Term

3.9 Ethical Considerations

There were behavior standards which the researcher paid attention to with regards to the persons who were participants of this research or are to be impacted by the study: One, those participating are going to be made aware of the study's objective and how confidential the gathered information would be, by a letter for purposes of enabling them to provide enlightened consent. When granted consent, those participating are going to Keep their rights, that involves but no restricted to withdrawing and taking part in other research aspects counting the right for not answering questions or not providing any requested data and probably withdrawing data which they provided. The researcher was very careful towards ensuring that no respondent is forced to engage in the research. The researcher focused on using minimum resources and time in gathering the needed information. Two, the research incorporated quantitative research techniques for the researcher's independence, objectivity and reliability. When carrying out the research, the researcher made sure that the ethics for research are adhered to. Voluntary participation was encouraged. Confidentiality and privacy was highly observed. The research objectives were elaborated to participants with a guarantee that the acquired data is to be employed for academic reasons only.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents analysis of data collected from the field. The response rate is given first followed background information of the respondents, descriptive statistics and regression analysis.

4.2 Response Rate

The response rate was analyzed based on the proportion of the questionnaires that were administered to a sample size of 115 respondents. The results are presented in Table 4.1.

Table 4.1: Response Rate

Category	Frequency	Percentage
Response	112	97.4
Non-response	3	2.6
Total	115	100

Source: Research Data (2023)

The results in Table 4.1 shows that out of 115 respondents that were served with the questionnaires, 112 filled in and returned their questionnaire giving an overall response rate of 97.4%. The study had a non-response rate of 2.6%. Mugenda and Mugenda (2003) observe that a response rate of more than 70% is adequate for analysis and reporting of statistical inferences. Therefore, the response rate 97.4% was sufficient for making conclusions and generalization from the sample measures.

4.3 Demographic Characteristics

The study sought to establish the demographic characteristics of the respondents about their gender, age bracket, the length of working with the projects and highest education level. The findings are presented as follows:

4.3.1 Respondents' Gender

Figure 4.2 describes the gender representation of the respondents in the study.

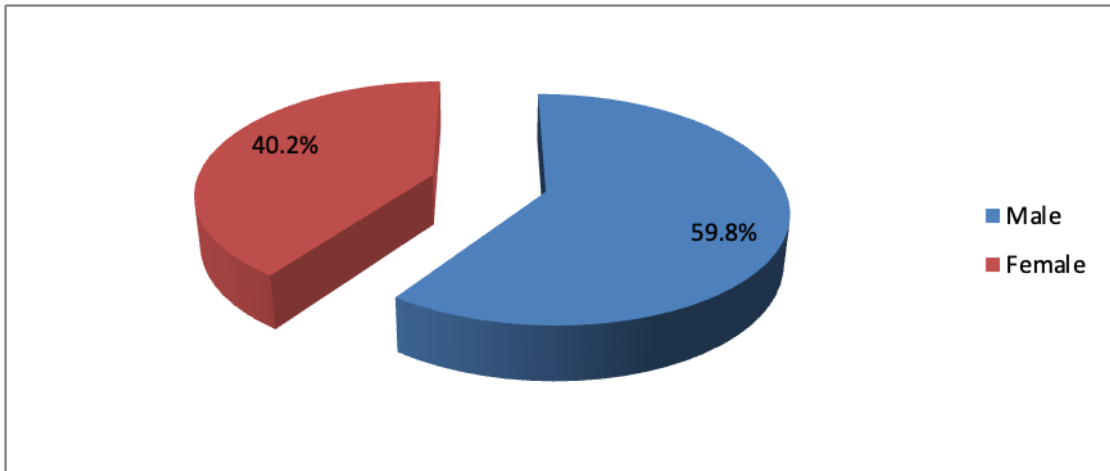


Figure 4.1: Respondents' Gender

Source: Research Data (2023)

According to the findings in Figure 4.2, majority of the respondents were male as demonstrated by a proportion of 59.8%. On the other hand, female respondents constituted 40.2% in the study. These results indicate that there was a fair representation of both genders in this research.

4.3.2 Respondents' Age Bracket

Table 4.2 describes the age bracket representation of the respondents in the study.

Table 4.2: Respondents' Age Bracket

Years	Frequency	Percentage
20 to 30	21	18.2
31 to 40	53	47.3
41 to 50	30	26.8
Above 50	8	7.1
Total	112	100

Source: Research Data (2023)

The results as given in Table 4.2 show that majority (47.3%) of the respondents were aged between 31 to 40 years, 26.8% aged between 41 and 50, 18.2% aged between 20 to 30 years and above and 7.1% aged above 50 years. This implies that the study involved employees from different age gaps.

4.3.3 Respondents' Years of Experience

Figure 4.2 describes the years of experience representation of the respondents in the study.

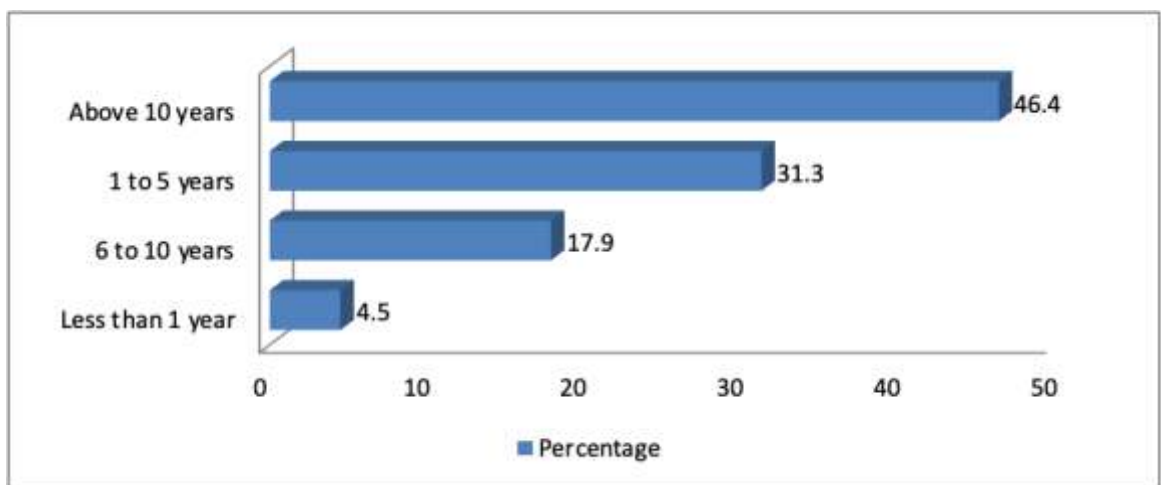


Figure 4.2: Respondents' Years of Experience

Source: Research Data (2023)

The results in Figure 4.2 shows that a majority of respondents comprising 46.4% had worked for the project for a period of over 10 years, 31.3% of the respondents had a work experience of between 1 to 5 years, 17.9% between 6 to 10 years and 4.5% less than 1 year. These results confirm that the respondents involved in this study had necessary experience to provide the information that was of interest to the researcher.

4.3.4 Respondents' Highest Level of Education

Table 4.3 describes the highest level of education of the respondents in the study.

Table 4.3: Respondents' Highest Level of Education

Level of Education	Frequency	Percentage
Primary certificate	6	5.4
Secondary certificate	14	12.5
College diploma	36	32.1
University graduate	45	40.2
Post graduate	11	9.8
Total	112	100

Source: Research Data (2023)

The results in Table 4.3 indicates that majority (40.2%) of the respondents had attained a University graduate as their highest level of education, 32.1% college diploma, 12.5% secondary certificate, 9.8% post graduate and 5.4% primary certificate. The findings show that the study had most of the respondents with a higher level of education.

4.4 Results of Descriptive Statistics

The study carried out descriptive statistics to summarize the characteristics of a data set using Mean (M) and Standard Deviation (SD) that were generated using SPSS version 20.0. The results are presented as follows;

4.4.1 Risk Retention

The study sought to ascertain the influence of risk retention on the performance of NG-CDF in Juja constituency in Kiambu County, Kenya. This was achieved by presenting a list of statements describing risk retention of NG-CDF in Juja constituency in Kiambu County, Kenya for the respondents to rate their level of agreement on each statement. The results are presented in Table 4.4.

Table 4.4: Risk Retention

Statements	M	SD
Despite the awareness that risks could cause the project to be delayed, there are situations when nothing is done to identify risks.	4.51	0.486
The implementation of contingency planning is encouraged to prevent situations that could result in project delays.	4.67	0.329
Self-insurance is utilized in CDF projects to prevent the manifestation of incidents that cause delays.	4.56	0.440
The organization classifies all risks in the project	3.96	1.037
There is provision for measuring all current risks	4.08	0.918
There is provision for measuring all expected risks	4.21	0.788
The organization always anticipates a project to have risks	4.30	0.679

Source: Research Data (2023)

The results in Table 4.4 indicate that the statements that were strongly agreed by the respondents were; the implementation of contingency planning is encouraged to prevent situations that could result in project delays (M=4.67, SD=0.329), self-insurance is utilized in CDF projects to prevent the manifestation of incidents that cause delays (M=4.56, SD=0.440) and that despite the awareness that risks could cause the project to be delayed, there are situations when nothing is done to identify risks (M=4.51, SD=0.486). The findings agree with Anca, Cezar, and Andrian (2015) who define risk retention as a method when the project team acknowledges a risk but chooses to do nothing about it. When addressing a particular risk cannot be done in a way that is cost-effective, this technique is used. Methods for accepting risks can be divided into two categories: passive risk acceptance and active risk acceptance.

The statements that were agreed by the respondents were; the organization always anticipates a project to have risks (M=4.30, SD=0.679), there is provision for measuring all expected risks (M=4.21, SD=0.788), there is provision for measuring all

current risks (M=4.08, SD=0.918) and that the organization classifies all risks in the project (M=3.96, SD=1.037). According to Strelnick (2016) risk retention is the act of acknowledging the existence of a threat yet choosing to accept the corresponding amount of risk without taking any steps to reduce it. When hazards cannot be avoided or shifted, the party involved is left with little choice except to assume the risk and enjoy the results that come with it.

4.4.2 Risk Prevention

The study sought to determine the effects of risk prevention on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. This was achieved by presenting a list of statements describing risk prevention of NG-CDF in Juja constituency in Kiambu County, Kenya for the respondents to rate their level of agreement on each statement. The results are presented in Table 4.5.

Table 4.5: Risk Prevention

Statements	M	SD
Regular inspections are performed on projects to check for problems that could cause delays.	4.59	0.408
A comprehensive work plan is implemented to ensure that nothing will happen to cause the construction project to be delayed	4.50	0.500
Alternative or contingency plans are put in place to prevent any situations that could cause a project delay	4.55	0.448
Risky parts of a project are avoided	3.71	1.287
We frequently review our operations in order to avoid risks	4.04	0.955
Frequent reviews on operations are conducted in order to avoid risks	4.05	0.946
We are occasionally trained on risk prevention	3.83	1.165

Source: Research Data (2023)

The results in Table 4.5 indicate that the statements that were strongly agreed by the respondents were; regular inspections are performed on projects to check for

problems that could cause delays (M=4.59, SD=0.408), alternative or contingency plans are put in place to prevent any situations that could cause a project delay (M=4.55, SD=0.448) and that a comprehensive work plan is implemented to ensure that nothing will happen to cause the construction project to be delayed (M=4.50, SD=0.500). The results agree with Soofifard and Gharib (2012) who propose a model for the selection of proper risk prevention from the responses portfolio with the objective of optimization of defined criteria for projects. In addition, risk response helps to eliminate those risks or reduce them and thereby increasing the success of the project and the achievement of its goals.

The statements that were agreed by the respondents were; frequent reviews on operations are conducted in order to avoid risks (M=4.05, SD=0.946), they frequently review their operations in order to avoid risks (M=4.04, SD=0.955), they are occasionally trained on risk prevention (M=3.83, SD=1.165) and that risky parts of a project are avoided (M=3.71, SD=1.287). The results agree with Hallgren and Wilson (2011) who observe that risk prevention as a tool in project risk management, show that risk response is used in the collective information in the analysis stage and in order to take decision how to improve the possibility to complete the project within time, cost and performance.

4.4.3 Risk Control

The study sought to determine the effects of risk control on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. This was achieved by presenting a list of statements describing risk control of NG-CDF in Juja constituency in Kiambu County, Kenya for the respondents to rate their level of agreement on each statement. The results are presented in Table 4.6.

Table 4.6: Risk Control

Statements	M	SD
Control measures are put in place to curb risks	3.96	1.040
A risk matrix is generated and utilized when carrying out undertakings	4.58	0.419
All projects have a cushion measure to anticipate risk	4.45	0.548
There is a system in place to minimize negative effect of risk	4.21	0.787
We have ways to identify risks associated with projects	4.35	0.649
We separate actual risk events from sources of risks	3.75	1.247
Risk audits are conducted regularly	4.51	0.485
We frequently alter our risk-reduction practices to assist lower risk,	4.62	0.376

Source: Research Data (2023)

The results in Table 4.6 indicate that the statements that were strongly agreed by the respondents were; they frequently alter their risk-reduction practices to assist lower risk (M=4.62, SD=0.376), a risk matrix is generated and utilized when carrying out undertakings (M=4.58, SD=0.419) and that risk audits are conducted regularly (M=4.51, SD=0.485). The findings agree with Nyakundi (2011) who observe that risk control is a mix of factors taken into account with the potential to reduce vulnerabilities across society, to prevent, limit, and generate readiness for hazards' effects and its relationship to sustainable development in general.

The statements that were agreed by the respondents were; all projects have a cushion measure to anticipate risk (M=4.45, SD=0.548), they have ways to identify risks associated with projects (M=4.35, SD=0.649), there is a system in place to minimize negative effect of risk (M=4.21, SD=0.787), control measures are put in place to curb risks (M=3.96, SD=1.040) and that they separate actual risk events from sources of risks (M=3.75, SD=1.247). According to Twigg (2015), certain programs to lessen risks have efficient information methods, insurance plans, and highly developed

emergency response systems. Risks are minimized in projects to a tolerable level that is durable if the initiatives are performed successfully.

4.4.4 Risk Transfer

The study sought to assess the influence of risk transfer on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. This was achieved by presenting a list of statements describing risk transfer of NG-CDF in Juja constituency in Kiambu County, Kenya for the respondents to rate their level of agreement on each statement. The results are presented in Table 4.7.

Table 4.7: Risk Transfer

Statements	M	SD
Most tasks that could impede a project team's progress are outsourced.	3.52	1.478
Legal contracts are signed with third parties, particularly when things happen that could delay projects.	4.64	0.356
The project managers pay insurance premiums on certain of the project deliverables to prevent the project scope from being impacted	4.53	0.469
We have a system that ensures risk is transferred to minimize financial stress	4.10	0.899
All project risks are carefully documented before any transfer	3.74	1.258
The organization is in partnership with others for risk handling	4.37	0.628
We outsource tasks that, if carried out by the project team, might cause delays.	4.60	0.400
The community is involved on security risky project tasks	3.64	1.355

Source: Research Data (2023)

The results in Table 4.7 indicate that the statements that were strongly agreed by the respondents were; legal contracts are signed with third parties, particularly when things happen that could delay projects (M=4.64, SD=0.356), they outsource tasks that, if carried out by the project team, might cause delays (M=4.60, SD=0.400) and

that the project managers pay insurance premiums on certain of the project deliverables to prevent the project scope from being impacted (M=4.53, SD=0.469). According to Bekefi, Epstein and Yuthas (2008) risk transfer is the process of transferring the risk of loss to a different independent party that is stable financially at an affordable rate under a binding contract. Reduced risk-related losses are the goal of risk shifting.

The statements that were agreed by the respondents were; the organization is in partnership with others for risk handling (M=4.37, SD=0.628), they have a system that ensures risk is transferred to minimize financial stress (M=4.10, SD=0.899), all project risks are carefully documented before any transfer (M=3.74, SD=1.258), the community is involved on security risky project tasks (M=3.64, SD=1.355) and that most tasks that could impede a project team's progress are outsourced (M=3.52, SD=1.478). The results agree with Ahamed and Azhar (2014) study which evaluated the most recent risk management and transfer strategies used by contractors in the Florida construction sector and the findings also show that Florida contractors utilize both project-related risk transfer methods, such as insurance, and special subcontractors, but they favour the latter when the potential loss is bigger.

4.4.5 Performance of NG-CDF Projects

The study sought to examine the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. This was achieved by presenting a list of statements describing the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya for the respondents to rate their level of agreement on each statement. The results are presented in Table 4.8.

Table 4.8: Performance of NG-CDF Projects [Indicate the scale with SD]

Statements	M	SD
Projects are carried out within the stipulated budget	4.53	0.466
Every activity is matched at every stage from input to output	4.57	0.427
Projects are carried out within the stipulated time schedule	3.71	1.286
Projects executed are at the intended quality	3.94	1.060
Projects carried out address the needs of customers.	4.50	0.500
Project performance is affected by risk management practices	3.93	1.068
Stakeholders are invited at project inception	4.25	0.746
The government has a watchdog for project beneficiary risks	4.11	0.886
Projects are reviewed together with stakeholders	4.56	0.436

Source: Research Data (2023)

The results in Table 4.8 indicate that the statements that were strongly agreed by the respondents were; every activity is matched at every stage from input to output (M=4.57, SD=0.427), projects are reviewed together with stakeholders (M=4.56, SD=0.436), projects are carried out within the stipulated budget (M=4.53, SD=0.427) and that projects carried out address the needs of customers (M=4.50, SD=0.500). According Dissanayaka and Kumaraswamy (2013) project performance measurement is essential for managing projects because it allows the project manager to identify issues with scope and budget early on and create appropriate solutions. According to Stevens (2016), a project's success is determined by how well it performs, and project performance is determined by the scope of the project, the agreements established in the contracts, the relationships between the parties involved, the skills of the project manager, and the competencies of the other stakeholders.

The statements that were agreed by the respondents were; stakeholders are invited at project inception (M=4.25, SD=0.746), the government has a watchdog for project beneficiary risks (M=4.11, SD=0.886), projects executed are at the intended quality

(M=3.94, SD=1.060), project performance is affected by risk management practices (M=3.93, SD=1.068) and that projects are carried out within the stipulated time schedule (M=3.71, SD=1.286). According to Takim, Akintoye and Kelly (2013) the performance of a project is typically assessed and evaluated on the basis of the measurements based on its performance, about its inputs, project efficacy, and project efficiency. Therefore, the success of a project can be determined by how much money was spent, how long it took, how well it was done, and whether it met the needs of the users.

4.5 Results of Regression Analysis

The study carried out regression analysis to establish the degree to which risk retention, risk prevention, risk control and risk transfer influenced the performance of NG-CDF projects. The results are presented as follows:

Table 4.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.712 ^a	.805	.798	1.075

Source: Research Data (2023)

The results in Table 4.9 indicate that risk retention, risk prevention, risk control and risk transfer, explain 0.798(79.8%) of the performance of NG-CDF in Juja constituency in Kiambu County, Kenya as represented by the adjusted R square value. This therefore means that other factors not studied in this research contribute 0.202(20.2%) of the project performance.

Table 4.10: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	201.345	4	50.336	506.629	.001
	Residual	10.631	107	.0994		
	Total	211.976	111			

Source: Research Data (2023)

The results in Table 4.10 show that the statistical F value is greater than the statistical mean square value ($14.718 > 4.138$) at 5% significance level. The value 0.001 shows the significance level is less than 0.05 showing a statistical significance of the model on how independent variables studied influenced the dependent variable. These conditions confirm the significance of the model.

Table 4.11: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	201.237	4	50.309	267.705	.001
	Residual	20.860	107	.188		
	Total	222.097	111			

Source: Research Data (2023)

The results in Table 4.10 indicate that the statistical F value was greater than the statistical mean value of mean square ($267.705 > 50.309$) at 5% significance. Furthermore, the value 0.001 shows the significance level is less than 0.05 which confirms the significance of the model.

Table 4.12: Coefficients [use standard coefficient] to factor in the standard error]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.609	.167		3.647	.001
	Risk retention	0.834	.264	2.675	3.159	.000
	Risk prevention	0.768	.347	1.308	2.133	.000
	Risk control	0.699	.161	5.128	3.416	.001
	Risk transfer	0.504	.117	2.555	4.311	.000

Source: Research Data (2023)

From the results in Table 4.11, holding all the independent variables studied constant, the dependent variable would be 0.609. The findings also indicate that if risk retention is increased by one unit the performance of NG-CDF projects in Juja constituency in

Kiambu County, Kenya would be at 0.834 if risk prevention is increased by one unit the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya would be at 0.768 if risk control is increased by one unit the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya would be at 0.699 and if risk transfer is increased by one unit the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya would be at 0.504.

The final regression equation is described as follows:

$$\text{Project performance} = 0.609 + 0.834 (\text{risk retention}) + 0.768 (\text{risk prevention}) + 0.699 (\text{risk control}) + 0.504 (\text{risk transfer})$$

The results in Table 4.11 also indicate that the risk retention had a positive significant influence on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya as indicated by beta value of 2.675 and a significance value of 0.000 which is less than 0.05. The findings agree with Ubani, Amade, Benedict, Aku, Agwu, and Okogbuo (2015) study conducted a study in Nigeria to investigate the influence of risk retention on project performance of construction industry and found that risk retention positively influences projects performance of the construction firms.

The study revealed that risk prevention had a positive significant influence on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya as indicated by beta value of 1.308 and a significance value of 0.000 which is less than 0.05. The result agree with Wabomba (2015) who conducted a study in Nairobi Kenya to investigate the influence of risk management strategies on performance of projects among International Development Organization and the study revealed that the organization adopted changing of work plans to avoid risks, contingency, regular

inspections, operational reviews training and skill enhancements in order to prevent risk.

The study found that risk control had a positive significant influence on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya as indicated by beta value of 5.128 and a significance value of 0.001 which is less than 0.05. The findings concur with Okumu and Wanjira (2017) study which investigated the risk control strategies adopted by Insurance firms in Kenya. The findings of the study implicated that risk control strategies such as identifying risk events, quantifying risk, responding to risk as defined in risk management plan, risk control meetings, use of quality assurance, signed contracts, and use of contingency positively influenced project performance of the motor insurance companies.

The study found that risk transfer had a positive significant influence on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya as indicated by beta value of 2.555 and a significance value of 0.001 which is less than 0.05. The findings are in line with Kolo (2015) study which investigated the influence of risk transfer in construction projects in Abuja Nigeria. The findings of the study revealed that the construction firm adopted risk transfer strategies such as insurance policy and risk premiums influenced project performance of the projects in terms of cost time and quality.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter provides the summary of findings, conclusions and recommendations for policy and practice and suggestions for further studies.

5.2 Summary of Findings

The study's main objective was to examine the correlation between risk management strategies and the effectiveness of projects financed by NG-CDF in Juja Constituency, Kenya. The risk management strategies adopted were; risk retention, risk prevention, risk control and risk transfer. Data was collected from a sample of 115 respondent comprising of project managers, committee members and community representatives using questionnaires. Data was analysed using descriptive statistics and regression analysis. The following is the summary of the findings;

The first research objective sought to ascertain the influence of risk retention on the performance of NG-CDF in Juja constituency in Kiambu County, Kenya. The study found that risk retention had a positive significant influence on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. The respondents strongly agreed that the implementation of contingency planning is encouraged to prevent situations that could result in project delays, self-insurance is utilized in CDF projects to prevent the manifestation of incidents that cause delays and that despite the awareness that risks could cause the project to be delayed, there are situations when nothing is done to identify risks.

The second research objective sought to determine the effects of risk prevention on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. The study revealed that risk prevention had a positive significant influence on the

performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. The respondents strongly agreed that regular inspections are performed on projects to check for problems that could cause delays, alternative or contingency plans are put in place to prevent any situations that could cause a project delay and that a comprehensive work plan is implemented to ensure that nothing will happen to cause the construction project to be delayed.

The third research objective sought to determine the effects of risk control on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. The study found that risk control had a positive significant influence on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. The respondents strongly agreed that they frequently alter their risk-reduction practices to assist lower risk, a risk matrix is generated and utilized when carrying out undertakings, risk audits are conducted regularly and that all projects have a cushion measure to anticipate risk.

The fourth research objective sought to assess the influence of risk transfer on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. The study established that risk transfer had a positive significant influence on the performance of NG-CDF projects in Juja constituency in Kiambu County, Kenya. The respondents strongly agreed that legal contracts are signed with third parties, particularly when things happen that could delay projects, they outsource tasks that, if carried out by the project team, might cause delays and that the project managers pay insurance premiums on certain of the project deliverables to prevent the project scope from being impacted.

5.3 Conclusions

Based on the findings, the study reached the following conclusions;

The study conclude that risk-retention helps to avoid negligible risks while paying more interest to the project management tasks and it is a valuable strategy applicable to budgeting and prioritization of project tasks. The risk retention strategy is a part of risk management policy in organizations in which small and insignificant risks that may arise during project implementation are considered bearable and have a very low impact on the project progress. If the cost of managing risk is bearable, project managers choose to let them remain as it is rather than acting on them instantly.

The study concluded that risk prevention measures aim to stop or reduce the likelihood of a building safety risk happening in a project. Risk prevention stops risks from happening, where possible, that poses a threat to delivering a successful project outcome, mitigates risks that cannot be avoided by planning the most appropriate response and act upon risks that might present positive opportunities. That is, viewing risk from a different perspective one that does not always assume risks are bad for a project.

The study concluded that that the important role of the project managers is to identify and control it and without any control, risks can become disasters, causing delay, unnecessary expenses and even bringing the project to an end. With risks being actively tracked and managed, the project team can maintain a focus on the critical outcomes. Knowing that risk is being actively managed sets an expectation for project success. With the framework in place to deliver despite the known risks, and open communication about the project's challenges with senior managers, everyone begins work knowing that success is the expected outcome.

The study concluded that risk transfer is a risk reduction method that shifts the risk from the project to another party. Risk transfer allocates risk equitably, placing responsibility for risk on designated parties consistent with their ability to control and insure against that risk. Liability should ideally rest with whichever party has the most control over the sources of potential liability.

5.4 Recommendations for Policy and Practice

The study makes the following recommendations as per the objectives;

The study recommended that the organization should allocate funds for potential losses and any associated costs. The organizations may choose to retain a risk when the potential losses associated with it are small enough that the cost of transferring the risk would be more expensive than the cost of the losses and if the risk is difficult to transfer or insure. The organizations may also choose to retain a risk if the potential losses associated with it are variable and/or unpredictable.

The study recommended that the project managers should document each risk in detail, including their potential impacts and possible responses to mitigate the risk, then, assign a team member to monitor each risk as your project progresses and keep this risk log updated throughout the project. Prioritisation of risks should rely on a combination of how likely the risk is to occur and its effect on the project's schedule or budget. Once compiled, the detailed and prioritised list of all the known risks needs to be communicated to the team members, stakeholders and anyone else involved in the project and finally consider what the best solution to the problem would be, should it occur.

The study recommended that project managers must first identify risks as soon as possible and should then analyze each identified risk and come up with a plan to deal

with it. Since risks can change at any time and new risks can present themselves without warning, risks need to be addressed throughout a project's life cycle. The potential for risk should be reviewed before the project and then on a regular basis throughout the project life cycle and discussed as a part of regular project meetings. The project manager should be on the lookout for unknown risks that may arise as well.

The study recommended that project managers can accomplish risk transfer through non-insurance agreements such as contracts. These contracts often include indemnification provisions. The project managers can also accomplish risk transfer through an insurance policy. This is a voluntary arrangement between two parties, the insurance company and the policyholder, where the insurance company assumes strictly defined financial risks from the policyholder.

The context of the current study was projects financed by NG-CDF in Juja Constituency, Kenya. Therefore, the study suggests that further study should be done that focus on other constituencies in Kiambu County, Kenya. The study identified a gap of 20.2% in regression analysis that account for other factors that influence project performance in Juja Constituency. Therefore, there is need to similar study focusing on other risk management strategies apart from risk retention, risk prevention, risk control and risk transfer.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

Anne Wambui Wachira
P O Box 30677 - 00100
Nairobi

17th February 2023

Dear Sir/Madam

RE: INTRODUCTION LETTER

I am an MBA (Project Management Option) student at Kenyatta University. I am conducting a research study as a prerequisite of the partial fulfillment. The study is on the influence of risk management practices on performance of national government constituency development funds projects in Juja constituency in Kiambu County, Kenya. This letter's request that you kindly complete the research study's questionnaire, which is enclosed, will assist it be completed. The information gathered will be handled with the highest discretion.

Yours Faithfully,

ANNE W. WACHIRA

APPENDIX II: QUESTIONNAIRE

INSTRUCTIONS: Please complete the survey by checking the appropriate box next to each response. Don't put your name down. Information provided will be handled discreetly.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. Kindly indicate your Gender?

Male Female

2. What is your age bracket?

20 – 30 Years 31 – 40 years 41 – 50 years

Above 50 years

3. Kindly indicate your Job designation

4. How long have you been working on this project?

Less than 1 year 1 – 5 years 5 – 10 years

Above 10 years

5. What is your highest educational level?

Primary Certificate

Secondary Certificate

College Diploma

University Graduate

Post – graduate

SECTION B: RISK MANAGEMENT PRACTICES

i) RISK RETENTION

This section contains various statements on Risk Retention. Kindly tick the options you consider right:

5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree

		1	2	3	4	5
	Despite the awareness that risks could cause the project to be delayed, there are situations when nothing is done to identify risks.					
	The implementation of contingency planning is encouraged to prevent situations that could result in project delays.					
	Self-insurance is utilized in CDF projects to prevent the manifestation of incidents that cause delays.					
	The organization classifies all risks in the project					
	There is provision for measuring all current risks					
	There is provision for measuring all expected risks					
	The organization always anticipates a project to have risks					

ii) RISK PREVENTION

This section contains various statements on Risk Prevention. Kindly tick the options you consider right:

5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree

		1	2	3	4	5
	Regular inspections are performed on projects to check for problems that could cause delays.					
	A comprehensive work plan is implemented to ensure that nothing will happen to cause the construction project to be delayed					
	Alternative or contingency plans are put in place to prevent any situations that could cause a project delay					
	Risky parts of a project are avoided					
	We frequently review our operations in order to avoid risks					
	Frequent reviews on operations are conducted in order to avoid risks					
	We are occasionally trained on risk prevention					

iii) RISK CONTROL

This section contains various statements on Risk Control. Kindly tick the options you consider right:

5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree

		1	2	3	4	5
	Control measures are put in place to curb risks					
	A risk matrix is generated and utilized when carrying out undertakings.					
	All projects have a cushion measure to anticipate risk					
	There is a system in place to minimize negative effect of risk					
	We have ways to identify risks associated with projects					
	We separate actual risk events from sources of risks					
	Risk audits are conducted regularly					
	We frequently alter our risk-reduction practices to assist lower risk,					

iv) RISK TRANSFER

This section contains various statements on Risk Transfer. Kindly tick the options you consider right:

5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree

		1	2	3	4	5
	Most tasks that could impede a project team's progress are outsourced.					
	Legal contracts are signed with third parties, particularly when things happen that could delay projects.					
	The project managers pay insurance premiums on certain of the project deliverables to prevent the project scope from being impacted					
	We have a system that ensures risk is transferred to minimize financial stress					
	All project risks are carefully documented before any transfer					
	The organization is in partnership with					

	others for risk handling					
	We outsource tasks that, if carried out by the project team, might cause delays.					
	The community is involved on security risky project tasks					

What do you think can be done to improve on risk transfer?

SECTION C: PERFORMANCE OF PROJECTS

This section contains various statements on Performance of Projects.

Kindly tick the options you consider right:

5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree

		1	2	3	4	5
	Projects are carried out within the stipulated budget					
	Every activity is matched at every stage from input to output					
	Projects are carried out within the stipulated time schedule					
	Projects executed are at the intended quality					
	Projects carried out address the needs of customers.					
	Project performance is affected by risk management practices					
	Stakeholders are invited at project inception					
	The government has a watchdog for project beneficiary risks					
	Projects are reviewed together with stakeholders					

Kindly comment of the overall performance of projects as handled by CDF