



**EFFECT OF RISK MANAGEMENT PRACTICES ON PROJECT IMPLEMENTATION AMONG FAITH-BASED ORGANIZATIONS IN KENYA: A CASE OF CONSTRUCTION PROJECTS IN THE CATHOLIC DIOCESE OF NGONG**

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**ABSTRACT**

*This study sought to analyze the effect of risk management practices on project implementation among faith-based organizations in Kenya. The study focused on the projects in the Catholic Diocese of Ngong. The study analyzed the effect of risk identification; risk response planning; stakeholder inclusion and organizational risk management policies on project implementation among Catholic Church construction projects in the Diocese of Ngong. Enterprise Risk Management, Contingency and stakeholder theories informed the foundation upon which the study variables were reviewed to establish their relationships. The study adopted a descriptive case design to analyze how risk management practices affect the implementation of projects in Catholic Diocese of Ngong. The target population involved 240 members that were drawn from the PPC and PEC. The sample size was 72 members whom were selected by simple random sampling and purposive sampling techniques to give each member in the population a chance of selection and ensure that only those with relevant information are involved in the study. A structured questionnaire aided in gathering primary data for the study. The questionnaires were issued to the respondents through a drop and pick method and data collected were analyzed with the help of statistical packages for social sciences (SPSS) version 23. Quantitative data were analyzed using descriptive analysis while qualitative data were analyzed through content analysis and data presented in frequency tables, pie charts and graphs. The study found a strong significant positive relationship between risk response planning, risk management policies and project implementation. The results also showed that there was a weak positive significant relationship between stakeholder inclusion, risk identification and project implementation though these had a direct link to a successful project implementation. The study recommended that organizations should formulate and put in place elaborate risk response plans to enable them succeed in their project implementation. The researcher further recommends for more studies to be conducted on risk management practices other than the ones the study concentrated as they only accounted for 57.8%.*

**Keyword:** Risk Identification; Response Planning; Stakeholder Inclusion, Organizational Risk Management

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## INTRODUCTION

Risk management has over the years presented one of the major concerns for managers, contractors and other professionals that are involved with projects. For instance, great concerns regarding risk management were noted after the 2008 world financial crisis that shook the entire world and which was rated to be worst compared to the Great Depression of 1929 (Zuo, Zillante, Xia, Chan, & Zhao, 2015). The results of ex-post assessments of project or even verification of loss of business opportunities for companies are clear signals that this evidence has become more intense (Carvalho & Rabechini, 2015). The current state of project management practices in developing African countries has remained a critical issue due to the technological advancement, the scarcity of human capital and the increasing complexity of projects (Crawford et al., 2006). It is viewed that the success of a project would be measured by the extent to which the predetermined targets set by the clients are attained, and additionally, whether it achieves the function for which it was intended to meet adequately and if it solves an identified problem within the stipulated time, cost and quality standards (Ofori, 2013).

According to Barriere (2003), project management practices have become a universal tool for optimal performance measurement for any organization that seeks professionalism. Ibbs (2002) identified professional project management practices as the skills and science of planning, designing, and managing activities throughout the project lifecycle processes. During these stages, a number of challenges come up that influence project implementation schedules and completion success. Further, Bushbait and Cunningham (2012) argue that projects are designed, planned, and implemented in tandem with the sequence that is displayed in the project cycle. During these phases of the project cycle, projects are influenced by multiple factors which can stem from the internal or external environment to the organization responsible for its management and execution. The

important point for the project manager is to recognize what these factors are and how they will impact on the project during the various phases from inception to final stage of completion and handover.

Project implementation presents a major concern to project teams, financiers, and beneficiaries. This may be attributed to the fact that a number of projects that have been rolled out have failed to achieve the desired goals and targets. This has been facilitated by the challenges and changes that were unanticipated during the project design and planning. Some projects stall at different stages of their development while others are completed but do not bring the anticipated impact/results; whether financial, social, economic, physical, or even institutional. Effective project implementation can be measured on the basis of time, cost, and quality (performance), basically referred to as the triple constraint. These three factors represent the Key Performance Indicators (KPIs). To establish whether a project has been effectively implemented, or if the project has been successful, one has to review the initial project goals of time, cost and quality (performance) and be able to measure the extent of their individual achievement.

In Kenya, the construction industry is an important sector in the growth of her economy and according to the economic survey by Kenya National Bureau of Statistics (KNBS) report of 9<sup>th</sup> September, 2021), the construction industry which contributes to 4.8% of Gross Domestic Product (GDP) was plagued with a slack in performance that was chiefly due to the effect of Covid-19 pandemic (KNBS, 2021). According to Wanyona, Dickson, and Gerrishom, (2015) there are several variations that affect engineering construction projects in Kenya which range from project expenditures exceeding the budgets, delays in completing the projects in time and lack of acceptance by the stakeholders or end users at project completion. These greatly affect the project plan and put a strain on the limited resources employed to achieve the project goals.

Risk and uncertainty can significantly have damaging consequences on the construction projects (Odeyinke, Oladapo & Akindele, 2006). Therefore, risk management continues to be a major feature of the management of construction projects in an attempt to deal effectively with uncertainties and unexpected events and to achieve project success. Project Management Institute defines project risk as an uncertain event or a condition whose occurrence has positive or negative effect on at least one project objective, such as time, cost, scope, or quality (PMI, 2008).

Risk management in the construction project management context is a comprehensive and systematic way of risk identification, risk analysis and risk response with a view to achieving the project objectives (Fernández-Sánchez, & Rodríguez-López, (2010). In the construction industry, risk is often referred to as the presence of potential or actual threats or opportunities that influence the objectives of a project during construction, commissioning, or at time of use and which affects project success (ICE, 2005). According to Mebrate (2021) construction projects are faced with risky challenges that affect project implementation and project success. The study cites that most projects are not completed in conformity to scheduled time and targets that arise due to various problems and changes that lead to delay, cost overrun and lower quality. Gitau (2015) observe that uncertainties and other unforeseen events have a damaging consequences on projects and therefore, risk management should be a major concern in project management because project managers need to effectively deal with the risks and uncertainty in order to fully achieve the vision of the project (Anderson, 2012). Rostami, Sommerville, Wong, and Lee (2015) established that uncertainty such as baseline measurement and increase overrun costs and project complexity arises due to failure by project managers to identify risks at the initiation phase of the projects. Whereas Augustine, Ajayi, Ade and Edwin (2013) while assessing the risk management practices in the

construction industry in Nigeria established that the introduction of risk management practices has helped in reducing costs, overtime run and hence has improved the quality of construction projects.

A report by African Development Bank, ADB (2013) looked at risk mitigation needs and possible solutions and advancing investments in Africa. The study aimed at generating a 'map' of the needs of investors into North-Africa for guarantees and other risk mitigation instruments, and more generally into the Continent as a whole, over the next three years. The results underscored a significant demand for risk mitigation in African countries and the need to scale up a wide array of risk mitigation instruments, services, and processes that will serve to accelerate private sector investment throughout the continent. Similarly, Macharia (2016) concluded that risk reduction, risk sharing and risk retention practices positively influenced the completion of the construction projects. According to Mbada (2016), failure of private and public construction projects to meet cost, time and quality has resulted to poor performance and waste of resources.

### **Statement of the Problem**

The success in the implementation of construction projects is indicated by their performance in the achievement of project time, cost, quality, safety and environmental sustainability objectives outlined in the project plans (Zhou, Zhang, & Wang, 2007). Despite the major efforts by the key stakeholders in the construction industry, many construction projects in Kenya and even in the developing world run a high risk of poor performance by being well over their budgets and significantly delay behind time schedule. Kagendo (2013) noted that a considerable number of Construction projects in faith based organization have experienced notable problems of cost overruns and delays which consequently affected project schedule and budgets. Chowdhury et al., (2020) also noted on a study of challenges facing faith-based NGO interventions in community project that deficient implementation mechanisms

brought about by unforeseen uncertainties and sustainability aspects were the major gaps in successful project success. In general, the construction industry in Kenya significantly has experienced poor cost and schedule performance. While some degree of poor cost and time schedule performance is inevitable in construction projects, it is imperative to improve on risk management practices in order to minimize their negative impact thus improving the project performance. According to report by Deloitte East Africa, (2017) cost and time overruns were the major reasons infrastructure projects are abandoned in Kenya. The report highlighted that 48% of projects in Kenya were normally over budgeted and 87% of projects experienced a time overrun. These project overruns could be as a result of procurement delays - either upfront or during construction period and which results in significant cost escalations. The report further observed that where projects are contracted irregularly, procurement challenges can be a major factor that contributes to project delays and cost overruns. According the Business Daily (2021) June Issue, the value of stalled projects in Kenya is equivalent to the size of Kenya's economy,

Several related studies that had been done concerning risk management practices and project implementation in various areas of the economy also noted similar results. For instance, Mwangi (2018) did a study on risk management practices on performance of construction projects. The study concentrated on an evaluation of project sustainability, consumer acceptability, timeliness and cost aspect. Kinyua, Ogolla and Mburu (2015) carried a study on effect of risk management strategies on project performance of small and medium enterprises. The study concentrated on risk containment and reduction policies. Abdi (2020) carried a study on project planning and project implementation. The study revolved around establishing the key factors that influence effective project implementation. Makokha (2020) carried a study on influence on project planning practice on performance of construction projects,

Muthomi (2015) equally did a research study on influence of project management practices on donor funded education projects and focused on the need for involvement of key stakeholders in all project phases for effective and successful implementation. Gitau (2015) carried a study on effects risk management practices at project planning phase on performance of construction projects with a critical focus of risk factor influence in the planning stage. The above and many other studies conducted in the same area failed to emphasize on risk management practices on successful project implementation in the construction projects. At the same time no studies have been conducted focusing on faith based construction projects in Kenya. This study therefore sought to examine the effect of risk management practices on the implementation of faith based construction projects in the Diocese of Ngong.

### **Objective of the Study**

The general objective of the study was to examine the effect of risk management practices on project implementation among faith based construction projects in the Diocese of Ngong. The specific objectives of the Study were;

- To examine the effect of risk identification on project implementation among faith based construction projects in the Diocese of Ngong.
- To evaluate the effect of risk response planning on project implementation among faith based construction projects in the Diocese of Ngong.
- To examine the effect of stakeholder inclusion on project implementation among faith based construction projects in the Diocese of Ngong.
- To determine the effect of risk management policies on project implementation among faith based construction projects in the Diocese of Ngong.

## LITERATURE REVIEW

### Theoretical Review

#### Enterprise Risk Management Theory

Enterprise Risk Management (ERM), according to Nocco and Stulz (2006), is a risk management theory that advocates for the measurement and management of significant risk facing a given company as a whole rather than managing each risk separately. Its fundamental goal is to unite an organization's risk management silos into a single holistic and complete framework.

The theory also emphasizes the development of a risk management culture in which all stakeholders are empowered and responsible for risk management. ERM techniques, according to Cormican (2015), provide firms with a competitive advantage, stakeholder confidence, and long-term viability. Despite the fact that it was created to control company risks, the ERM theory has gained prominence in project management practices. According to Drumll (2001), adopting the ERM philosophy in the construction industry is a wise decision because it applies to industries with high failure rates, such as construction. This theory is pertinent to this research since project failures are the result of a failure to recognize, mitigate, and control risk across the entire firm.

#### Contingency Theory

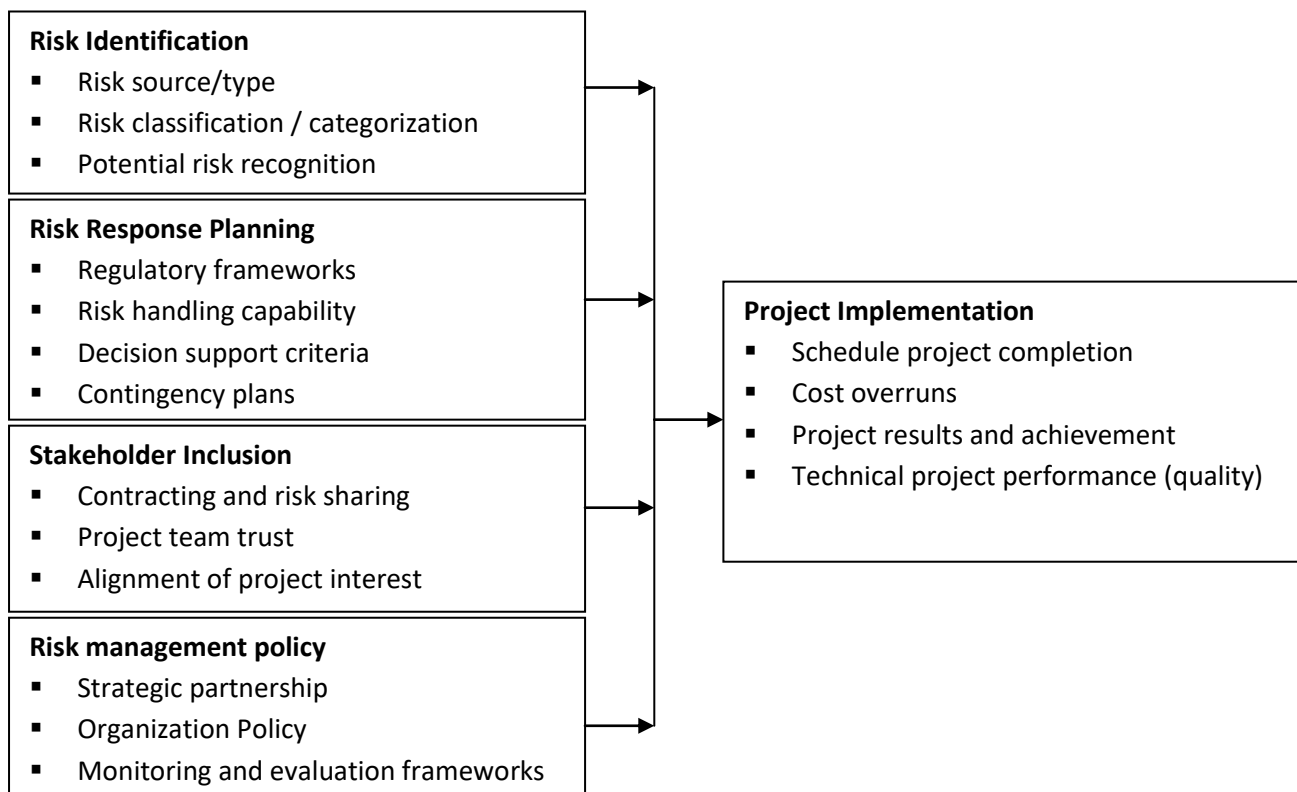
The contingency theory of organizational structure provides a major background for the study of organizational design (Donaldson, 1995a, 2001). The theory holds that the most effective organizational structural design is where the structure fits the contingencies. The contingency approach is considered a dominant, theoretical, rational, open system model at the structural level of analysis in organization theory (Scott, 1992). Organizations are unique; have contingency variables, and require different ways of managing their activities. Contingency approach challenged

the classic process and models that are designed by management theorists such as Taylor and Fayol. The Contingency Approach recognizes the significance of macro-environmental factors, or contingencies that should be considered. When management is flexible, then they can respond to each of these factors and act accordingly. The three variables i.e. risk management policies; risk identification and risk response chosen in this research are related to the contingency approach. Every organization has a different strategic plan based on their goal and mission whom they purpose achieve. Therefore, such organizations will require different approaches to different levels of management to make the best of out of the prevailing economic, cultural, political and social business environment. The ultimate goal will be to deliver projects that are within the clients' agreed cost, time and quality projects, which contribute to the overall aim of the organizational purpose.

#### Stakeholder theory

The stakeholder theory is credited to the works of Edward Freeman throughout his seminal pitches on strategic management in the industrial age of the mid 80's. Researchers, Ogolla and Moronge (2016) found credence in stakeholder theory for the implementation of mega projects. The stakeholder theory puts into perspective the internal and external effect of organizational policies and programs. According to Piketty (2015) the organization must consider that the initiatives and programs they undertake exert significant impact on the surrounding communities thus necessitating the need for close cooperation. The theory yields to a framework for stakeholder management with the role of stakeholder given the highest priority (Uribe, Ortiz-Marcos & Uruburu, 2018). This enables the determination of stakeholder roles and its overall effect in the delivery of the project. This basis effectively fits well with the integration of all stakeholders in project decision making.

## The Conceptual Framework



### Independent Variables

### Dependent Variable

Figure 1: Conceptual Framework

## METHODOLOGY

**Research Design:** To achieve the objectives of the study, a descriptive research design was adopted for the study. Descriptive survey research design is applied in preliminary and exploratory studies to allow researchers to gather information and summarize, present and interpret data for the purpose of clarification (Orodho, 2003).

**Population of the study:** The target population for the study comprised all the 240 members of the parish pastoral council (PPC) and the parish executive council members (parish priests) of the parishes in the diocese of Ngong. These members were considered for the study because they were involved in the implementation of various catholic projects in the Diocese and understood various project risk management practices that affected project implementation schedules.

**Sampling Techniques and Sample Size:** The study used both simple random sampling and purposive

sampling techniques to select the sample for the study. All the individuals from the PPC and PEC were given an equal opportunity for selection to take part in the study. The advantage of adopting a purposive sampling was that it allowed only those individuals who were considered to have the information required for the study to be selected without prejudice. Therefore, the study only targeted those people with the coherent knowledge regarding the area of study. The sample size of the study therefore constituted 72 respondents representing 30% of the entire population of the study that were drawn from 10 parishes in the Catholic Diocese of Ngong.

**Data Collection Instruments:** The study adopted the use of a Likert scale type of questions that allowed the respondents to rate their responses based on a scale of 1 to 5, where (1-strongly disagree; 2-disagree; 3-neutral; 4-agree; and 5-strongly agree). This was crucial in ensuring that the study objectives were comprehensively evaluated

within the defined scope and that the responses were aligned to realizing the study purpose. The main advantage of the instrument was that it allowed the researcher to control and focus responses to the research objectives, thus enhancing relevancy of the data collected. The questionnaires were prepared thematically on the basis of the research objectives. Questionnaires were also preferred because they were incredibly economical in terms of financing, time and mode of administration and they were capable of facilitating an easier analysis because they were usually in their immediate serviceable form.

**Data Analysis and Presentation:** Data was analyzed using both qualitative and quantitative techniques. Quantitative data was subjected through a preliminary data analysis phases to check for its completeness, accuracy, errors if any, omissions and other inconsistencies. Qualitative data was analyzed by first checking the statements or opinions written by the respondents to note their similarities or variation patterns and then processed into groups for easier analysis and interpretation. Data collected through the sets of questionnaires were assessed for completeness first then edited. The data was analyzed using both descriptive and inferential statistics. Descriptive statistical analysis focused on the exhaustive measurement of sample characteristics. Inferential statistical analysis involved using information from the sample to make inferences, or estimates about the population. Descriptive statistics was used in assessing the impact of risk identification, risk response planning, stakeholder inclusion and risk management policies on project implementation. Correlation analysis was used to determine the magnitude and direction of relationship between the independent variables and the dependent variable under consideration. The Statistical

Package for Social Sciences (SPSS) version 23 software was used in the analysis. The study also adopted the use of multiple regression models to establish and measure the strength of the relationship between the dependent variable and each of the independent variables. The model was deemed relevant because it had the ability to show the extent to which one or more predictor variables influenced the dependent variable. The resulting quantitative data were then presented in tables and figures for easier interpretation and understandability. Percentages, frequencies and cumulative percentages were used to present the data. Consequently, qualitative data collected from open-ended questions were analyzed thematically and presented in form of narratives.

## RESULTS AND DISCUSSION

### Response Rate

The study sought to examine the effect of project risk management practices on project implementation among faith based construction projects in the Diocese of Ngong. The research targeted the parish pastoral council and parish executive council members. A total of 72 questionnaires were distributed to the respondents (PPC and PEC members) that were drawn from the 10 parishes in the Ngong Diocese. Out of these, only 61 were collected having been fully filled. This represented 85% response rate while 11 questionnaires were not returned, representing 15%. according to Mugenda and Mugenda (2003), a response rate of 50% is adequate for data analysis and reporting; a rate of 60 % is good whereas a response rate of 70% and above is excellent. This implies that a response rate of 85% achieved by the study was sufficient and suitable for data analysis and reporting. (See Table 1) below.

**Table 1: Response rate**

Response rate	No. of respondents	Percentage (%)
Returned	61	85
Not returned	11	15
<b>TOTAL</b>	<b>72</b>	<b>100</b>



The study results show that 85% of the respondents participated in the study and answered the questions on the questionnaire whereas 15% did not. However, the 15% who did not respond by returning the questionnaires did not have an adverse effect on the study.

### Reliability results

The pilot study was conducted to determine the reliability of the data collection instrument. Cronbach's Alpha coefficient was used to assess

reliability. Cronbach's Alpha is a measure of how effectively a group of items or variables measures a single one-dimensional latent construct, such as a reliability or consistency coefficient. According to Mugenda & Mugenda (2003), a high coefficient shows that there is a high correlation between items and that the items are consistent in measuring the subject of interest.

**Table 2: Reliability Results**

Variable	Cronbach's Alpha	Number of items	Comment
Risk identification	0.700	5	Acceptable
Risk response planning	0.707	5	Acceptable
Stakeholder inclusion	0.697	5	Good
Risk management policy	0.713	4	Acceptable
Project implementation	0.798	4	Acceptable

### Descriptive Statistics for study variables

The overall objective of this research was to examine the effect of project risk management practices on project implementation among faith based construction projects in the Diocese of Ngong. The focus of the research was on the catholic church projects in Ngong diocese. The study covered all the diocesan parishes within the Ngong Deanery and involved the PPC and PEC members who are charged with the implementation of the projects within the church organization. This section provides descriptive analysis of the findings on the four research objectives and their effect on project implementation. Specific questions on various

aspects of each of the four objectives were created to elicit responses about how they affect project implementation. The analysis yielded the following results.

#### Risk Identification

The study investigated the extent to which the respondents agreed with some statements on risk identification practice as observed in their committees. A total of five items on risk identification were asked to the respondents. The items were measured on a five-point Likert scale where 1=Strongly Disagree, 2= Disagree, 3= Neutral, 4 = Agree and 5= Strongly Agree. The results are presented in Table 3.

**Table 3: Risk Identification**

Statement	SD %	D %	N %	A %	SA %	MEAN	STD
Early identification of both internal and external sources of risk lead to early identification of risks.	0.0	0.0	6.6	31.1	62.3	4.56	.62
Identifying risk type at early stage presents a clear path to managing various risks even the unforeseen risks.	0.0	4.9	1.6	34.4	59.0	4.48	.766
Risk classification technique has enabled our project managers to identify the risks in terms of potentiality to minimize risk handling and maximize project time.	3.3	6.6	23.0	41.0	26.2	3.8	1.014
Our organization has commonly employed risk categorization method to identify and anticipate potential problems, hence strategies to minimize or avoid impact.	6.6	4.9	18.0	41.0	29.5	3.82	1.118
Potential risk recognition helps in identifying and differentiating high potential risks from low potential risk, hence maximum utilization of resources.	0.0	1.6	6.6	27.9	63.9	4.54	.697

Key: SD= Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree M=Mean, STD= Standard Deviation

### Risk Response Planning

The research sought to establish whether risk response planning had an effect on project implementation among faith based construction projects in the Diocese of Ngong. The study went on to see how much the respondents agreed with specific assertions about risk response planning techniques that their organization had in place. The

respondents were asked to rate their opinion on five questions about risk response planning in total. The items were graded on a five-point Likert scale, with 1 indicating Strongly Disagree, 2 indicating Disagree, 3 indicating Neutral, 4 indicating Agree, and 5 indicating Strongly Agree. Table 4 summarizes the findings.

**Table 4: Risk Response Planning**

Statement	SD	D	N	A	SA	MEAN	STD
On response to identified risks our organization employs regulatory framework to avoid or prevent occurrence of risks such as legal risks.	1.6%	8.2%	19.7%	42.6%	27.9%	3.57	0.974
All our project managers are equipped with risk handling capabilities, where they swiftly respond to any risk that poses threat to the completion of the projects	3.3%	8.2%	9.8%	41.0%	37.7%	4.02	1.057
The organization has put to practice decision support criteria when handling problems with limited options.	0.0%	3.3%	11.5%	44.3%	41.0%	4.23	0.783
The organizational management has a viable contingency plans in case of natural disaster.	1.6%	4.9%	14.8%	32.8%	45.9%	4.16	0.969
For the sake of success of the project the organization response plans are swift to counter potentials risks that would hinder the project implementation.	0.0%	1.6%	13.1%	31.1%	54.1%	4.38	0.778

Key: SD= Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree M=Mean, STD= Standard Deviation

### Stakeholder Inclusion

The third objective of the study was to examine the effect of stakeholder inclusion on project implementation among faith based construction projects in the Diocese of Ngong. The study sought the respondents' opinion on whether stakeholder inclusion was a key aspect in project

implementation and further wanted to examine how it affects project implementation. The respondents were required to rate their opinion on a five-point Likert scale, with 1 indicating Strongly Disagree, 2 indicating Disagree, 3 indicating Neutral, 4 indicating Agree, and 5 indicating Strongly Agree. Table 5 summarizes the findings.

**Table 5: Stakeholder Inclusion**

Statement	SD %	D %	N %	A %	SA %	MEAN	STD
As a means of inclusivity and spreading of risks the organizations sometimes contracts other stakeholders to undertake the project	3.3	13.1	14.8	34.4	34.4	3.84	1.143
The organization adopts risk sharing method as means of limiting risks impact during implementation	1.6	3.3	18	34.4	42.0	4.13	0.939
The stakeholders practice inclusivity and hold high level of project team trust	1.6	3.3	6.6	50.8	37.7	4.20	0.833
It's common for conflict to occur especially conflict of interest, as an aim to achieve the best the organization has an alignment of project interest	1.6	1.6	4.9	45.9	45.9	4.33	0.790
The stakeholders of every project undertaken are highly involved to ensure its successful completion.	0.0	0.0	6.6	34.4	59.0	4.52	0.622

Key: SD= Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree M=Mean, STD= Standard Deviation

### Risk Management Policies

The fourth objective sought to examine how risk management policies affect project implementation among faith based construction projects in the Diocese of Ngong. A total of four items on risk

management policies were asked to the respondents. The items were measured on a five-point Likert scale where 1=Strongly Disagree, 2= Disagree, 3= Neutral, 4 = Agree and 5= Strongly Agree. The results are presented in Table 6 below;

**Table 6: Risk Management Policies**

Statement	SD %	D %	N %	A %	SA %	Mean	STD
With the aim to achieve quality in project implementation the organization is involved in a strategic partnership, thus shared risks	0%	8.2%	16.4%	39.3%	36.1%	4.03	0.930
The existing organizational policy has effectively supported the implementation programs of projects with minimum risks.	0%	6.6%	13.1%	44.3%	36.1%	4.10	0.870
The organization has a well-established Monitoring and evaluation framework	3.3%	3.3%	11.5%	26.2%	55.7%	4.28	1.019
Project managers are commonly keen to apply the risk management policies lest they falter in implementation	0%	3.3%	11.5%	39.3%	45.9%	4.28	0.799

Key: SA=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree, M=Mean, STD=Standard Deviation

## Effectiveness of Risk Management Policies of the organization

The researcher sought to know from respondents whether the existing risk management policies were effective in managing risks.

**Table 7: Effectiveness of Existing Risk Management Policies**

		Frequency	Valid Percent	Cumulative Percent
Valid	Good	28	45.9	45.9
	Efficient	33	54.1	100.0
	<b>Total</b>	<b>61</b>	<b>100.0</b>	

From table 7 above, findings reveal that 45.9% admitted that the existing risk management policies were effective in handling project risks at the organization. Whereas 54.1% said that the existing risk management policies were efficient and therefore this translated to majority of their project implementation sailing through to a successful completion. The results imply that the ability of an organization to properly manage risk is determined by its goals and its ability to attain them. Its risk management policy framework, which is part of its governance and management system, reflects this intent and capability.

## Project Implementation

The study went ahead to investigate the extent to which the respondents agreed with some statements on project implementation as the dependent variable of the study. A total of four items on project implementation were asked to the respondents. The items were measured on a five-point Likert scale where 1=Strongly Disagree, 2= Disagree, 3= Neutral, 4 = Agree and 5= Strongly Agree. The results are presented in Table 8 below;

**Table 8: Project Implementation**

Statement	SD %	D %	N %	A %	SA %	MEAN	STD
Scheduled project completion program has ensured majority of the projects undertaken by the organization gets to successful completion	0.0	3.3	4.9	50.8	41.0	4.30	0.715
Unforeseen cost overruns affect the project implementation program hence need for measures to avert the risk of overrun \	1.6	4.9	9.8	44.3	39.3	4.15	0.910
A good project outcomes clearly indicate that the project managers applied risks management techniques	1.6	3.3	4.9	37.7	52.5	4.36	0.857
The key aspect of quality is essentially the extent to which the company is able to meet stakeholder expectations on certain dimensions that have value for them	0.0	0.0	6.7	38.3	55.0	4.48	0.624

Key: SA=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree, M=Mean, STD=Standard Deviation

## Correlation Analysis

The correlation analysis a statistical method that is used to measure the strength of the linear relationship between two variables and computation of their association. For this study, Pearson correlation coefficient was used to

measure the strength of the relationship between the independent variables; risk identification, risk response planning, stakeholder inclusion and risk management policies and the dependent variable, project implementation.

**Table 9: Pearson Correlations**

		PI	RI	RR	SI	RMS
PI	Pearson Correlation	1	.363**	.535**	.339**	.491**
	Sig. (2-tailed)		.004	.000	.008	.000
	N	61	61	61	61	61
RI	Pearson Correlation	.363**	1	.546**	.511**	.400**
	Sig. (2-tailed)	.004		.000	.000	.001
	N	61	61	61	61	61
RR	Pearson Correlation	.535**	.546**	1	.558**	.609**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	61	61	61	61	61
SI	Pearson Correlation	.339**	.511**	.558**	1	.416**
	Sig. (2-tailed)	.008	.000	.000		.001
	N	61	61	61	61	61
RMS	Pearson Correlation	.491**	.400**	.609**	.416**	1
	Sig. (2-tailed)	.000	.001	.000	.001	
	N	61	61	61	61	61

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Regression Analysis

Regression analysis was used to determine the relationship between the dependent variable and independent variables of the study. The model was then put through a series of testing to see if it was satisfactory. The aim was to establish a linear relationship between the dependent variable and the independent variables

**Table 10: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.578 <sup>a</sup>	.334	.286	.525

a. Predictors: (Constant), RMS, RI, SI, RR

The study found that the independent variables in the study explained a significant proportion of variance in implementation of faith based construction projects in Ngong Catholic Diocese, where,  $R^2 = .334$  This implied that the model could explain 33.4% of the proportion in the implementation of construction projects while the other variables not covered by this study

### Model Summary

The model summary shown in table 10 below, shows the strength of the relationship between the model and the dependent variable of the study (percentage variation in dependent variable being explained by changes in the independent variables)

contributed to 66.4% of the variance as indicated in table 10 above.

### Analysis of Variance (ANOVA)

The analysis of variance (ANOVA) test was used to determine the model's significance in this study. This was done expressly to see if the variation in the independent variables could account for the observed variance in the outcome (Dean & Illowsky 2013). The outcomes were shown in Table 11 below

**Table 11: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.731	4	1.933	7.021	.000 <sup>b</sup>
	Residual	15.416	56	.275		
	Total	23.148	60			

a. Dependent Variable: PI

b. Predictors: (Constant), RMS, RI, SI, RRP

The results shown in table 11 above, showed that the F-value for regression is 7.021 which is significant at p value of 0.000, hence indicated that the regression relationship was significant in predicting how risk management policies, risk identification, stakeholder inclusion and risk response planning, affected project implementation of faith-based construction projects at the Catholic Diocese of Ngong.

### Beta Coefficients

**Table 12: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.	Correlations		
	B	Std. Error				Zero-order	Partial	Part
(Constant)	1.906	.581		3.281	.002			
RI	.082	.152	.074	.544	.589	.363	.072	.059
RRP	.291	.137	.336	2.118	.039	.535	.272	.231
SI	.007	.124	.008	.058	.954	.339	.008	.006
RMS	.225	.123	.253	1.827	.073	.491	.237	.199

a. Dependent Variable: PI

b. Independent variables: RI , RRP, SI, RMS

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

The results in table 12 above, show that of the four independent variables; risk identification, risk response planning, stakeholder inclusion and risk management policies had a significant effect on project implementation. Risk response planning had the greatest effect on project implementation with (B =0.291). This means that for every one positive unit increase in RRP practices would lead to a 0.291 units increase in project implementation holding all other variables. This was followed by risk management policies with B = 0.225, meaning that if RMS practices increased by one positive unit, project implementation would positively increase by 0.225 units holding all other variables constant. The third variable that had effect on project implementation was risk identification with B = 0.082 which means that if employee empowerment increased by one positive unit, project implementation would increase by 0.082 units holding all other variables constant. Stakeholder inclusion had the least significant effect with a B = 0.007 units and this meant that one-unit positive

The Beta coefficients is the size of the coefficient for each independent variable that gives the size of the effect that variable is having on the dependent variable. The sign on the coefficient (positive or negative) gives the direction of the effect. In regression with a single independent variable, the coefficient reveals how much the dependent variable is expected to increase (if the coefficient is positive) or decrease (if the coefficient is negative) when that independent variable increases by one.

increase in stakeholder inclusion would cause a 0.007 units increase in the project implementation holding all other variables constant among construction projects by faith-based organizations in Ngong Diocese.

The result also indicates that all the four independent variables; RI, RRP, SI and RMS had a p-value of less than 0.05, hence an indication that all the independent variables predicted the dependent variable significantly. Using the values of the coefficients Beta from the regression coefficient Table 10 the established multiple linear regression equation was obtained as follows:

$$Y = 1.906 + 0.082X_1 + 0.291X_2 + 0.007X_3 + 0.225X_4 + \epsilon$$

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### Summary of Findings

This study was conducted on the premise that a project's life cycle, is always riddled with problems

and uncertainty. If these risks are not appropriately managed, they can cause delays, cost overruns, and even project collapse. As a result, risk management strategies are important aspects of project management that project managers, project teams, and other stakeholders must successfully apply in order to cope with the risks and uncertainties that may impede project success.

Findings revealed that risk identification was an essential risk management practice that influenced an organization's resolve to develop strategic measures to reduce the effect of risks on project implementation. Further it was established that with good risk identification framework in place, project implementation would realize its goals of delivering the benefits to its stakeholders in general. Elaborate risk classification techniques enabled project teams to design methods upon which potential and anticipated risks are handled to minimize/reduce their effects on project implementation. The results also showed that risk identification should involve understanding and determining the potential unsatisfactory outcomes that are likely to affect a project implementation.

The results from the study found that regulatory policy frameworks were critical to the organization as provides the fundamental basis in preventing such risks that may occur and affect project implementation. The researcher further observed that risk response planning had a greater influence on project implementation because it creates a good measure of risk preparedness by project managers and other project team members. It was also found that the risk response plans help in reducing or eliminating risks that might otherwise affect the projects. The study further noted that measures put in place by the management in dealing with contingencies were critical in delivering project objectives and goals as these provide elaborate ways of preventing risk occurrence. According to the findings, the organization's support for decision criteria fosters an atmosphere for swift decision making to address difficulties that arise during project implementation. This is further

enhanced by streamlined organization structures that permit effective decision making process with limited bureaucratic processes.

The third objective was to establish the effect of stakeholder inclusion in project implementation on construction projects in the catholic diocese of Ngong. Results of the study revealed that stakeholder inclusion was a key element that played an important role in the successful implementation of faith-based construction projects. The study noted that there was a direct link between stakeholder inclusion and successful project implementation. Stakeholder inclusion as noted by the results created relationships between the organization and its various interested parties or stakeholders. These ties as noted have an impact on both individuals and their organizations, which can be positive or harmful for any project's success. As a result, it was concluded that any project's stakeholders should be handled by organizations with the goal of minimizing negative effects and ensuring that no barriers stand in the way of a successful project. This involved building team trust, outsourcing, subcontracting and ensuring security.

Risk management policies were found to critical in the execution of risk management practices by any implementing agency/organization. The study noted that these policies laid the foundation upon which foster elaborate and effective risk management strategies towards creating a successful project implementation process to these organizations. Risk management strategies like strategic partnership, outsourcing of services and components, focus on developing a structured approach to addressing the project risks with an aim of realizing desired project quality and desired project outcomes. The findings further showed that existing organizational policies had greater effect on project success as it laid the foundation that supports effective project implementation programs and decision making processes. The results also showed that the organization had a well-established and elaborate monitoring and evaluation framework coupled with the goodwill of

project managers, ensured the organization responded to risks in the optimal way in order to minimize risk effect on project implementation that guaranteed their project implementation success.

The general objective of the study examined the effect of risk management practices on the project implementation of faith-based construction projects in the catholic diocese of Ngong. Based on the results of the study, it was established that successful project completion was influenced by the scheduled project completion programs that had been designed for the projects and this provided the basis upon which project success would be evaluated when other factors were taken into consideration. The research also found that as much most faith-based projects succeeded in their implementation, the implementation processes was majorly affected by cost overruns. The cases of cost overruns were found to be as result of project manager's overlooking of unforeseen financial risks that could jeopardize project implementation process. The results also showed that project quality, cost, and timelines were essential elements when considering projects' deliverables in meeting stakeholder expectations of value from diversified dimensions.

### **Conclusion**

The study aimed at examining the effect of risk management practices on project implementation of faith-based construction projects in the catholic diocese of Ngong, the independent variables were risk identification, risk response planning, stakeholder inclusion and risk management policies of the organization with the dependent variable being project implementation. From the findings, the study revealed that all the four independent variables had a positive and significant influence on project implementation.

The study found a strong significant positive relationship between risk response planning and project implementation implying that the organization had well established regulatory frameworks that founded the basis of their swift response to risks. Because it produces a good

measure of risk preparedness by project managers and other project team members, risk response planning has a higher influence on project implementation. It was also discovered that risk response strategies aid in the elimination of risks that could otherwise derail projects.

Risk management policies and project implementation had the second largest positive relationship, an indication that the organization had a well-established and elaborate monitoring and evaluation framework, which, when combined with the goodwill of project managers, ensured that the organization responded to risks in the best possible way, minimizing risk effect on project implementation and ensuring project success. The study also noted that existing organizational policies had a bigger impact on project success because they set the groundwork for effective project execution programs and decision-making.

Risk identification and project implementation had the third largest positive relationship. The study established that project execution would achieve its aims of delivering benefits to its stakeholders in general if a solid risk identification strategy was in place. Stakeholder involvement and project implementation had the lowest correlation. This showed that stakeholder involvement was a significant factor in the effective implementation of faith-based construction projects and that there was a direct correlation between stakeholder inclusion and project success and that consequently would lead to formation of linkages between the organization and its different interested stakeholders.

### **Recommendations**

It can be noted that the study revealed that risk identification was a key element in achieving project implementation success, therefore the study recommended that other than faith-based organization, there is a need for incorporation of risk identification frameworks by organizations to enable them to deliver their projects objectives on time and within the budget.



Stakeholders play a very significant role in project success and hence the need to consider their input in the project cycle. The study recommends that all project stakeholders should be brought on board to enable organizations have a smooth implementation process. Stakeholder inclusion is critical in ensuring project acceptability and sustainability.

Risk management policy sets out the processes, methods, and tools that are used to manage the risks within the organization. In the study, risk management policies were found to have a great impact on project implementation success, the study recommends that there is a need for organizations to formulate and put in place elaborate risk management policies that would help them manage imminent risks that would otherwise affect project implementation success.

Also Risk management policies were found to be critical in the execution of risk management practices by any implementing agency/organization. This is because the policies help a lot in laying the foundation upon which faster, elaborate and effective response is adhered to. It is therefore recommended that every organization must put in place risk management policies that guide the risk management criteria.

On the other hand, the risk response planning involves determining ways that help to reduce or eliminate any threats and uncertainties to the project, and also the opportunities to increase their impact. On risk response planning, the study recommends that organizations other than faith-based ones, should formulate good risk response mechanisms as a basis to enhance their risk preparedness.

#### **Suggestions for Further Studies**

The study concentrated on the effect of risk management practices on the implementation of faith-based construction projects in the Catholic Diocese of Ngong. The study mainly examined four risk management practices though there are a number of other RMP which have not been exhaustively covered by this study. Therefore, the study suggests that further studies can be done on the remaining risk management practices not covered under this study such as Technological Risk Management practices, Communication Risk Management Practices, Financial Risk Management Practices among others. Further the researcher suggests that further studies can also be performed on RMP in government funded projects.

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