# FACTORS INFLUENCING PERFORMANCE OF SELECTED KENYA POLICE HOUSING PROJECTS: A CASE OF KIAMBU COUNTY OF KENYA.

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A Research Project Report Presented to the University of Nairobi in Partial Fulfillment of the Requirements for the Award of Degree of Master of Arts in Project Planning and Management of the University of Nairobi.

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## **DECLARATION**

I wish to declare that this research project report is my original work and to the best of my knowledge has not been presented for examination or award of any degree in any institution.

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

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This research project report is submitted for examination with my approval as the University Supervisor.

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

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## **DEDICATION**

This research project report is dedicated to my family, employer as well as my colleagues at work and college for their understanding, inspiration, prayers, moral and material support that gave me energy to what I never thought will be a dream come true in preparing this research project report.

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## ABBREVIATIONS AND ACRONYMS

APS	:	Administration Police Service
CID	:	Criminal Investigation Department
CSFs	:	Critical Success Factors
GSU	:	General Service Unit
IG	:	Inspector General
IPOA	:	Independent Policing Oversight Authority
KNBS	:	Kenya National Bureau of Statistics
KPS	:	Kenya Police Service
NACOSTI	:	National Commission of Science, Technology and Innovation
NHS	:	National Housing Corporation
NPSA	:	National Police Service Act
NPSC	:	National Police Service Commission
PMBOK	:	Project Management Book of Knowledge Guide
SPSS	:	Statistical Package for Social Science
тос	:	Theory of Change
UDHR	:	Universal Declaration of Human Rights
UNCHS	:	United Nations Center for Human Settlement.

#### ABSTRACT

The government creation initiatives are critical to the economy of any country worldwide. The performance of a given assignment alongside three vital dimensions of time, cost and satisfactory, calls for detailing all the planning necessities. There are various factors that have an effect on the delivery of a service and it's far the motive of this study to investigate elements influencing the performance of decided on Kenya police housing tasks in Kiambu. The study was guided by consequent goals; evaluate how mission making plans have an effect on performance of selected Kenya police housing initiatives in Kiambu county, to establish how task manipulate influence performance of selected Kenya police housing tasks in Kiambu, to establish how motivation of undertaking team impact performance of decided on Kenya police housing tasks in Kiambu county, to determine how competency of challenge team participants affect overall performance of selected Kenya police housing initiatives in Kiambu county. Descriptive survey research layout turned into hired to give an explanation for how these elements impact the overall performance of selected Kenya police housing projects. The scope of the study was two government initiatives in Kiambu County this is in Thika and Kikuyu police stations. Goal population for the study become 95 and a pattern length of 76 respondents became decided on using easy random sampling technique. This studies used dependent self-administered questionnaires. A pilot study was carried out to pre-take a look at the validity and reliability of gadgets for records collection. The accrued facts changed into analyzed the usage of quantitative and qualitative records analysis strategies. Quantitative method concerned descriptive evaluation. Records from questionnaire changed into coded and processed using Statistical Package for Social Sciences model 21. Qualitative facts accumulated turned into analyzed the usage of descriptive information and inferential facts and provided the usage of frequency tables. Consequences from the model of goodness suit generated, the scope was set up a linear dependence of the determinant factors influencing overall performance of selected Kenya police housing projects in Kiambu County. The study shows correlation coefficient of 0.761 that's a sturdy nice correlation depicting a near best linear dependence between the unbiased and structured variable. An R adjusted of 0.678 became received and changed R-rectangular to 0.646. This indicated the study variables that are mission making plans, assignment manipulate, motivation of the venture team and competency of the task group contributes to 76.1%. This shows that there are 23.9% other variables that impact the overall performance of Kenya police housing tasks. In addition the regression version suggest that conserving undertaking planning, mission manipulate, motivation of the assignment crew and competency of the mission group at constant overall performance decided on Kenya police housing projects would be 1.348. Which means maintaining all elements constant, a unit boom in project planning could result in 0.192 growth in overall performance of police housing venture, unit increase in project manipulate, would cause 0.642 growth in performance of police housing task, a unit growth in motivation of mission crew might brought about 0.245 growth in overall performance of police housing task, and a unit growth in competency of mission team might lead to 0.319 increase performance of police housing mission. The study recommends that a complete plan to be laid out before a venture is started out, competent people need to be involved in the assignment implementation, and assignment crew be nicely inspired if you want to carry out the mission diligently. Ultimately the study recommends that the useful resource be properly managed to avoid wastage.

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background to the Study

Human beings have made relentless efforts to obtain basic needs, which are food, clothing, and shelter. Search for the above basic needs increases as people increase in number and diversity their cultural. The Universal Declaration of Human Rights (UDHR) 1948 emphasized on a better housing as a crucial average living. It was also endorsed by other international instruments which included the Social and Cultural Rights of 1966, International Covenant on Economic, the Istanbul Declaration and the Declaration on Cities, Habitat Agenda of 1996 and Other Human Settlements in the New Millennium of 2001. In all of the instruments housing was understood in the broader context as an essential need in a clean environment. Sambasivan and Soon, (2010) states a common and worldwide occurrence that affect not only the government construction projects but all of the country's economy. Most third world countries are facing critical construction problems that raise national and international eyebrows (Auma, 2014).

In United Kingdom, Shehu, & Akintoye, (2010) contended that effective and efficient procurement process, implementation skills of a project, guarantees by the government and support and favorable economic and environmental conditions form important success factors (CSFs) for public-private partnership projects (PPP's). In Bulgaria, Alexadrova and Ivanova (2012) considers good enough venture supervisor skills, competence and integrity of venture group, fine and integrity of subcontractor services, and top control assist as CSFs of successful task control. Xia & Chan (2012) diagnosed loss of exact ready undertaking control skills motive of time overruns in Hong Kong production. In step with Schwalbe (2010), the principle feature of venture management, and mainly the function of a venture supervisor is to make certain initiatives take off as deliberate and efficaciously carried out and finished in the parameters of excellent, budget or value, time-frame or schedule. In Saudi Arabia, Assaf and Al-Hejji (2009) stated that, 30% of the construction projects were finished within time allotted and the average time overrun turned into among 10% and 30%.

In Africa, Hwang, Zhao, & Ng (2013) made emphasis that project team considered stakeholder management involvement by contractor during construction period contributor Egyptian construction projects. Love, Sing, Wang, Edwards, & Odeyinka, (2013) emphasized that contractors' financial constrains were the major contributing factors of construction projects delay in Nigeria. The poor performance of most local contractors has huge implications in terms of their competence and integrity (Zulu and Chileshe 2010). Yusif and Odeyinka (2010) noted of ten projects studied in Nigeria, seven delayed at the stage of execution. Miller and Lessard (2011) indicate that 40% of huge engineering projects studies globally had suffered serious challenges in the course of its performance (\$985 million average cost). Subramanian and Shanmugapriya (2013) indicate that in India there are up to 60% of construction projects that are normally overrun by cost and time (Gupta, 2009).

In Kenya, Ondari, (2013) notes that stakeholder support, management, and involvement, specifications design, capacity of the contractors, supervision and skills, and capacity of management as the major determinants of a successful implementation of roads projects. The study further indicates that financial issues, stakeholder management, project management skills to be some of the implementation of administration subsidized housing plans in Kirinyaga County. Ondego, and Moturi, (2016) emphasizes that poor monitoring and evaluation, and incompetent project team to be the highlighted influencers of efficacious performance government construction projects in the Ministry of Housing in Nairobi, Kenya. According to Ochieng and Ruth, (2013) the impact of delays is that funds committed on projects do not benefit intended recipients. Kenya police officers experience housing problems according to reports (Ransley, 2009).

Kerzner (2009) indicate that project planning need great knowledge and skills on collection and analysis of data, project stakeholders' communication, and negotiations of resources, top management commitment and involvement, and development of measurable achievements. Such planning skills and knowledge on stakeholders of project, however, require a good understanding and assessing in practice. Scheduling of projects job is included in Physical planning whereas financial planning denotes cash flow that is required for any given period. (Zwikael and Saleh 2006). Project control outlines the strategies and structures to govern and track that scope of the assignment, schedule and price in help of goals of task control shipping of a scope that meet the requirement of a task, agenda and finances. Schedule, fee, and scope, and dependent on mission. It compares real performance with baseline (plan), comes up with variances, and reconciles the unfavourable variances. A vital tool for mission control is the control configuration and other challenge control methods for cost and time table manipulate is the Work Breakdown Structure (WBS) (PMI, 2008).

According to Andawei (2002) indicate that motivational elements impact the overall performance of people appreciably. Chan et al., (2002) noted that during project crew, dedication is the essential factors for implementation of a task. Darrington (2010) concluded that motivation at the site of construction can't be primarily based on economic incentives since it destroys their internal motivations, which cause them to much less productive. He cautioned that intrinsic motivation be advocated so that parallel positioning of an incentive systems with motivation can cause a hit venture contractor and the customer.

The principle objective of creation mission management is advent of a plan, coordination and controlling software of the targets of the mission inside the maximum efficient and effective way in accordance to the want of the stakeholders (Mc Caffer and Harris, 2013). Consistent with Heagney 2011, notes that with a view to acquire this, one wishes to have a sizable know-how in assignment control for you to design a success task schedule and plans (Heagney, 2011), which are vital for one to supply the mission according to the great goals, , price and time (Babu and Suresh, 1996; Whitty And Maylor, 2009).

#### **1.2 Statement of the Problem**

Demand and supply for housing in Kenya is widening every now and then. The demand of house estimate in urban setting is close to150, 000 units whereas that currently the supply stands at 30,000 units (HASS, 2013). This gap is not different from the situation within the Kenya Police Service. According to KNBS (2016), construction sector recorded 4.8% growth rate. The demand for cement went up by 9.9 percent to5, 708.8 thousand tones in 2015. Issues of cost and time overruns are dominant in the public quarter creation tasks (Mwandali 2009, Karimi, 2011, and Musa, 2010). This calls for studies to be conducted on

adaptive, dynamic and innovative mission control strategies to creation projects from the initial level to the closing stage (Leung, 2010, Mawdesley and Askew, 2011).

According to national housing policy for Kenya Sessional Paper no 3 of 2004, the institutional housing state of affairs for Kenya prisons and Kenya police personnel has over the time deteriorated forcing males and females in the disciplined forces to live in awful homes and a segment of them stay in poor conditions where there can be at least four families sharing a residence intended for simplest one family thereby compromising the privateness of everybody. Kenya Police Officers have been forced to live outside the police lines which are against the service standing orders. This has been necessitated by the increasing number of police officers to the service without adding new houses or completing the stalled ones, despite the Kenya Police reforms report being clear. According to IPOA Chairman Macharia Njeru in an annual report in 2016, most of the houses Kenya police officers are living in are deplorable, un-conducive for human habitation and others are contempt. Others were built during the colonial era and those under construction have taken longer time than expected. Construction of the two housing projects in Thika and Kikuyu started on 31<sup>st</sup> January, 2011 and as at 31<sup>st</sup> October, 2017, the projects had not been completed. Thus, there was a need to investigate causes of the Kenya police service housing department projects remaining not implemented properly years beyond the scheduled time.

#### 1.3 Objectives of the Study

The objectives were:

- To assess how project planning influence performance of selected Kenya police housing projects in Kiambu County.
- ii) To establish how project control influence performance of selected Kenya police housing projects in Kiambu County.
- iii) To establish how motivation of project team influence performance of selected Kenya police housing projects in Kiambu County.
- iv) To establish how competency of project team members influence performance of selected Kenya police housing projects in Kiambu County.

## **1.4 Research Questions**

The following were the research questions for the study:

- i) How does project planning influence performance of selected Kenya police housing projects in Kiambu?
- ii) How does project control influence performance of selected Kenya police housing projects in Kiambu County?
- iii) In what way do motivation of project team influence performance of selected Kenya police service housing projects in Kiambu?
- iv) In what way does competency of project team members influence performance of selected Kenya police service housing projects in Kiambu?

## **1.5 Significance of the Study**

The study is hoped to be crucial to policy makers in Kenya police service department, government departments and even the private sector in general concerning the performance of housing projects, monitoring and evaluation of these projects, and policy formulation regarding implementation of Kenya Police Service housing projects.

Study findings is of benefit to the ministry of land, housing and urban development and also the ministry of Interior and Coordination of National Government by making them understand the effect determining performance of Kenya Police Housing projects and return come up with suitable solutions with challenges facing the performance of housing projects in the service.

The findings hoped to provide a flat form for future research

## **1.6 Delimitation of the study**

The study examined how project planning, project control, motivation of project competency of project team members influence performance of selected Kenya police housing projects in Kiambu County, whereas there are other several factors: law and order situation, political instability, financial challenges, crisis in energy, taxation challenges, issues in labour, poor coordination and unstable exchange of information among the involved institutions. Further study on the other factors ought to be researched to have a holistic understanding on the assessments on determinants of performance of selected Kenya police housing projects.

The target population was limited to Kikuyu and Thika police stations in Kiambu County. Housing challenges in the Kenya Police Service cut across the whole country.

## 1.7 Limitations of the study

The fear of disclosing classified, secret and sensitive information within the Kenya Police Service and the Ministry of Lands, Housing and Urban Development being a law enforcement body was eminent; this was overcame by the researcher personally taking round the questionnaires and explaining to the respondents and assuring them on confidentiality of the information obtained and that it was meant for academic purposes only.

Government entities operate on closed systems thus the bureaucratic nature of the Kenya Police service where information considered classified, secret and confidential might not have been shared to the public. The researcher thus requested permission from the Kenya Police Service and the Ministry of Lands, Housing and Urban Development with a view of gaining access to all offices and data banks.

### **1.8** Assumptions of the study

- i) The researcher supposed the client, accountant, the procurement personnel, contractors, and the supervision team will be free to be interviewed about the ongoing projects and give out information willingly as their opinions because the research report recommendations will be used for improving project management which as stakeholders they have a hand.
- ii) The researcher presumed respondents were honest, cooperative, and objective thus will be trustworthy in their response to the items in research instruments and will be available in time to respond.
- iii) The researcher assumed there was no coercion when administering the research instruments which avoided biasness because the questionnaires were assumed to give precise data.

 iv) The authorities in the targeted authorities in different departments and ministries granted the researcher permission to collect data and information from their employees.

#### **1.9 Definition of significant Terms**

- Client: refers to a customer, a buyer or receiver of goods and services. In this study the Inspector General of National Police Service is the client.
- **Competency of project team members**: refers to important behavioral dimensions which organizations assess to determine whether their staffs have proper skills to carry out the assigned tasks.
- **Determining:** refers to something that decisively affects the nature of the Kenya police housing projects.
- **Financial Year:** refers to the Kenya government financial year which spans from 1st July up to 30th June of the following year
- **Influence:** refers to the capacity to have an effect on the development of Kenya Police Housing Projects.
- **Kenya police service:** refers to the service established under article 234 (1) of the Kenya Constitution.
- **Performance:** refers to the measure or barometer for success in the Kenya Police Housing projects.
- **Project control**: refers to tools that help to save time and stay on schedule during project implementation. It tracks and manages the scope, cost and schedule of a building Project
- **Motivation of Project Team**: refers to having team members personally committed to the success of Kenya Police Housing project. It has an impact on the team productivity, quality of work, their engagement, morale and their relationship with others.

#### **1.10 Organization of the study**

The study is divided into 5 chapters with numerous topics and subtopics. Chapter one is introduction covering background, statement of the problem, purpose, objectives, research questions, significance, delimitations and limitation of the study. Chapter two has diverse subtopics following each other. There is introduction, performance of selected Kenya police housing undertaking, venture planning, project control, and motivation of venture team, competency of assignment group, conceptual framework, theoretical framework and expertise gap. Chapter three study technique, introduction, studies layout, target populace, sample of respondents desk, sampling size and method, information series methods, the validity and reliability of research instruments, facts evaluation approach, ethical overview of the study and desk of operationalization of variables. Chapter four covers records presentation, data interpretation and discussions. Finally, the last chapter five gives a summary of the study, conclusion and recommendation. Suggestions for further studies were additionally offered.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.1 Introduction**

This chapter presented literature that is reviewed relating to the execution or implementation of projects generally. It covered; National Police service, Implementation of construction projects, project planning, project Control, motivation of project team, competency of project team members.

## 2.3 Performance of Kenya Police housing project

In Lithuania, Gundecha (2012) indicate that experience in project management, value of the project, contractor's experience, size of the project, project team competency, realistic and clear goals, effectiveness in decision making in project management, and technical capability of the project management are the critical factors required in construction projects. Wambugu (2012) identifies strategy, capacity of project team, communication within the project, and consultation with the clients and monitoring and evaluation the major factors influencing success of projects in Nyeri County. Further, Kabutu (2013) states that support by the top management, competency and training, organizational resource, technology and management of funds to be success factors implementation of projects and offshore development of software.

During project planning of Kenya police housing projects enough consideration for establishment of objectives and goals is never available; yet they are core planning elements. Having good project plan is not a guarantee a better project. Thus, Kenya police housing project plans should not be built on foundations that are weak which can result to a poor project (Andawei, 2014). Planning in a project comprise of collecting baseline data, assessment of needs, action plan development, implementation and evaluation. Andawei (2014) indicates that actions should be carried out in order to realize long-term outcomes of housing project in Kenya Police The Theory of QA1Change (TOC) indicates the sufficient and important conditions in order to identify some long-term outcomes that are required in a project. Backward mapping should be applied in Kenya police housing projects to aid planners develop long term plans using a backward method.

There are many project management skills which are crucial for execution of a project. Competence of a project manager sends a feedback of whether the project will be implemented well and thus work within the project constrains. Kenya police housing projects should employ competent employees for the success of such projects. Good communication between stakeholders makes sure there is division of labor, enhancement of a person's competency and their responsibilities for effective and efficient decision making process. Organizational learning theory sets up competencies of their management through incorporation of informal practices development of their strategies. This theory enables a firm to respond appropriately to the needs of competition engaging other employees (Siemens, 2014). Training of employees enhances their competence and this result in competency. Learning in an organization help to enhance interaction among pragmatic matters, vision and people, which is the main problem that an organization face to gain competitive advantage.

Project management skills are part of the entire construction project roles which include sub-contractors coordination, schedule preparation, controlling of costs, labour relation, buying of goods, expending, and other roles in relation related to the project. In the Kenya police housing projects, project manager is in charge of these functions. The application of mission control skills may be very important within the enterprise of construction, because the coordination and usage the numerous varieties of labour, skills, substances, and gadget that are used in production require each day application of right challenge management strategies Brown, & Phua, (2011).

## 2.4 Project Planning and performance of Kenya Police housing projects

Kerzner (2009 indicate that project planning need skills that are effective and the project managers need to have knowledge on information collection and analysis, communication with the major stakeholders in the project, negotiation of resources, involvement and commitment of entire management especially those on the top, and development of milestones that can be measures. Such skills and planning knowledge especially must be well assessed and understood in practice.

In instances where there exists inadequate knowledge on project management, its application leads to poor planning due to incomplete plans of the project thus, decline in performance (Ahern et al., 2014). Alias et al. (2014), posits currently applied management practices projects do not ensure that they succeed in terms of quality achievement and proper planning. The author associates this failure within adequate study on crucial and important factors affecting those practices from the project stakeholders' perspectives. According to Bordoli and Baldwin (2014), maximization of the need for executing project efficiency cost, time and cost is highly required.

In view of great projects related to the industries, the impact and importance of planning has also been acknowledged by Merrow (2011) who can to a conclusion that defining poorly the scope of the project in planning results to slippage in schedule and overrunning of the costs. Merrow noted that such phenomenon's were brought about by from initiating the project inappropriately and front-end planning, resulting to poor project scope definition: "the need to come up with main changes on the precise location, scope, objectives, or other main elements after the well elaborated initial phase has started can lead the project being unmanageable" (Merrow, 2011).

Challenges associated with deviation of the schedule and overrunning of the cost are experienced in project execution (Altoryman, 2014). Such challenges emanate from improper risk identification at the initial planning stage of the project (Hussein and Klakegg, 2014).

### 2.5 Project Control and performance of Kenya police housing projects

Project control outlines the procedure and systems to control and track schedule, scope and cost of the project in support objective in delivery of scope that is within the allocated time and schedule. Time, Scope and cost, greatly depend on each other. The role Project control is to compare the set performance standards with the actual performance. It identifies any deviations, and is then corrected. A crucial project control is the Work Breakdown Structure (WBS) as it is used to configure the management other processes in project control. WBS is a structure that outlines project scope and its deliverables into their respective component.

Kenya police houses should rely on project management practices that will lead to successful the project with regard to achievement of quality, time, planning, cost, and implementation. However, numerous challenges manifest themselves and result to cost overrun and deviation from the planned schedule (Altoryman, 2014). These challenges emanate from poor risk identification in planning of the project in the initiation stage (Hussein and Klakegg, 2014). This clearly indicates the importance of having a good plan and proper scheduling of activities.

Morris (2013) noted that in construction projects, having great knowledge in project management is very critical for achieving the objective of project successfully. Thus, such knowledge in project management put across and is prioritized in specific areas of management. When a project is successful it should be done within the stipulated time, to be delivered within the expectation of the stakeholders and be within the scope and budget (Kerzner, 2009)

Project managers in housing projects often normally come up with plans of the project, milestones to be achieved and project budget in order to avert and mitigate against risks and further control the project (Mata & Ashkenas, 2005). This is not different from the Kenya Police housing projects. A survey on the reason why construction projects succeed includes; clear definition of goals, support by the management, mechanism of control and communication among the project team (Rozenes, Spraggett & Vitner, 2006). The approaches that have been put forward have caused a major conflicton the role of project manager and project managers cannot put up with the projects pace when they are being audited every now and then (Alshanbari, 2010).

## 2.6 Motivation of project team and performance of Kenya police housing projects

Chan et al., (2002) posits that commitment team is most critical factor for successful implementation of a project. Darrington (2010) indicated that schemes of motivation worker at construction site should not be majored on money only as the motivating factor since it destroys the inner motivation for them and thus carry out work with less vigour. He suggested that workers should be encouraged to have the intrinsic motivation so as to facilitate parallel positioning of structures of incentive and this would result to success of the project and clients be satisfied economically and the contractor to be happy. Lewis

(2003) pointed that project managers' require to have a full understanding of the each member of the project desires and wants.

The behaviors of people affect the management's attempts of to level up the productivity of the project. Motivation goes hand in hand with the character; the best techniques of motivation should be give in accordance to the pattern of a character in order to achieve the cherished outcome. The communication pattern of the project team is very crucial to maintaining an effective working relationship and also helping in team building of the project team. The project manager should conduct general meeting to discuss status of as well as the design and project arising matter.

Different people are motivated by different methods. The goal of a construction manager is to direct the workers in the construction site and their behavior. Understanding the character of an individual is necessary to use the best techniques of motivation in an attempt to change the behavior of a person. Financial incentives usage and rewarding as way of motivation in construction is viewed as very good way of improving outcomes (Rose and Manley 2011). Financial inducements method is applied as a means of cost reduction in a contract, reduction of contract duration, achievement of performance standards.

(Cox. et al, 2006) indicate that very significant for running to bear the employees nedd well defined objectives that can be measured that they will work hard to achieve and the employee or the subcontractor should feel that the goal can be achieved, failure to which they may be frustrated. They further identified factors that influence positive motivation of subcontractors' team and by use of those characteristics to come up a model of motivation for subcontractor employee.

#### 2.7 Competency of project team and performance of Kenya police housing projects

Modern projects need to have a broad context in management that extends beyond further from the technical competencies to facilitate right actions in responding to the risk that accrue to the project (Hwang and Ng 2013). Project Competence is an essential skill in the success of projects especially construction ones. It comprises of utilization of latest technology, past experience emphasis, project team competency, and awarding contacts to the best bidder. Mega construction projects require specialized technology; though the selection of this technology may be hectic especially the project has no competent team. Transfer of technology has always been a bone of contention considering that third world countries apply out of date technology (Eriksson, 2008). Application of the modern technology is very essential for the success of business and its sustenance.

According to Harris and McCaffer (2013), the main function of project management planning, coordinating and controlling the project objectives application in an effective and efficient manner in accordance with the stakeholders' requirements. In order to achieve this, one need to have a substantial knowledge in project management fundamentals for the project is successful and be within the schedule and plan (Heagney, 2011). These aspects are very critical in order to deliver the project in time, within the budget and quality. (Whitty and Maylor, 2009).

Project management comprise of various steps and sub-steps and further outline the scope of the project, cost estimation, responsibilities and duties project stakeholders and team. It also indicates controlling and planning tools for the project. For the mega construction projects in third world countries, it becomes difficult to gather enough professional to take part in the success of the project. Hence, these factors are seen to have a great impact on the success of the project. In construction projects many parties must be involved for its success (Eriksson, 2008). Failure of one party to carry out their part appropriately, the project may not achieve its objective thus fail. Thus its very crucial to choose the appropriate contractors and designers who will conduct their business diligently and make the ideas a reality.

According to Lam (2008), management require to be part of up-front planning and setting up of effective communication, System controlling, organizational culture and management system. Study on factors that lead to of construction projects delay in Malaysia, Alaghbari, Kadir, Salim and Ernawati (2007) noted three analysis categories which include; the owner, consultant and the contractor. The causes of projects delay in the contractors perspective were noted to be; financial challenges, material shortage and poor management of construction site. On the perspective of the owner, causes included; scope of contract, payments and slow decision making process. According to the contactor, delays were being caused by; inexperience, poor supervision of the project and inefficiency in giving instructions.

#### 2.8 Theoretical framework

This section contains theories adopted for this study.

#### **2.8.1 Project implementation theory**

This theory was established by Knapp and Fugate in Mid-1990. They noted that over relying on theoretical aspects is one of the factors distinguishing a profession and craft. According to Koskela and Howell (2002) argue that the theory was practiced today on an implicit and narrow theory that explain the other concerns of project Management such as lack of commitment on the project, project failure, and slow methodological renewal. Therefore this theory is very important for project management profession. Implementation involves series by organization prepare a plan set up changes that are required (Nutt, 1996). Most of the project managers use this theory to make planned changes in their organizations by creation of environments that changes can withstand. However, there are no specified procedural steps in project implementation that have set up due to universality of project implementation.

The principle is connected to this observe in that, venture overall performance is a cycle that perspectives a challenge life cycle to include venture initiation, assignment layout, assignment planning, assignment implementation, assignment monitoring and control. In the context of this have a look at the Kenya police housing projects are initiated, designed, planned and applied. Assignment inputs that facilitate the execution of the Kenya police housing initiatives correctly, efficiently and sustainable are inform of venture making plans, motivation of mission team, task control and competency of mission team. Project budget are supposed to be used effectively to allow a success performance of Kenya police housing Projects.

## 2.8.2 Project Management Competency Theory

McBer & McClelland developed the competence theory in 1980. This author's defined competency as those characteristics underlying a person who is directly related to performance of a job. However, Crawford noted a competence model integrates, core personality characteristics, demonstrable performance, knowledge, and skills, noting that personality characteristic is not easy to develop. In contrast, she notes PMBOK and project management standards, focus on the aspect of knowledge of competency whereas the third book, Australia's National Competency Standards, focus only on performance that can be demonstrated. Crawford, (2010) noted that it is not that necessary for project managers to be competent to perform all the duties that are required in order to implement changes in their projects.

This theory is linked to this study because it outlines that an organisation must build competency by means of making an investment in technology, schooling personnel in relevant talents, motivating employees, hiring gifted individuals and growing conducive operating environment. Successful Kenya police housing projects wishes timely acquisition of the specified talents, development of talents (technical skills, revel in, education and talents) and use of era to attain task deliverables. The Kenya police housing assignment team must have the needful enjoy and ardour to satisfy the customer (Kenya police Service) needs.

#### **2.9 Conceptual framework**

The study proposed that project performance is determined by the following independent variables: - project preparation, project controller, motivation of project team and competency of team members. Using the named four variables, the study assessed how project planning determines project performance which was through the time and percentage of funds released for completion of the project. Assessment on the project control was done to ascertain whether they are able to affect the effective and efficient project performance. The study analyzed how motivation of project team is sufficient and sustainable to facilitate project performance. Competency of project team members was analyzed and investigated to ascertain whether the team players have the right training, experience, and qualifications leadership skills.

## **Independent variables**

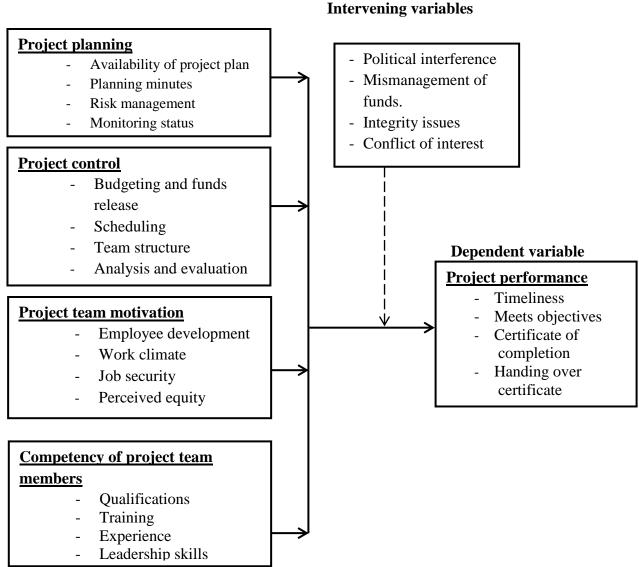


Figure 1: Conceptual framework of the study

## 2.10 Summary of Literature

This chapter defined in detail the factors influencing performance of housing initiatives as the impartial variable of the study highlighting numerous characteristics of the independent variable. The study discussed the factors influencing performance of housing projects in terms of the identified variables on the performance of selected Kenya police housing projects in relation to various components of the dependent variable. The components of the dependent variable include certificate of completion, timeliness, meets objectives, occupancy of houses and handing over of certificate of the police housing projects. The theoretical framework addressed theories that are relevant to the study. Project implementation theory and project management competency theory emphasize that internal organization environment is very important in determining how effectively and efficiently a project in an organization can be implemented.

Studies that have been conducted have not established the relationship that exists between factors influencing housing projects and performance of Kenya police housing projects. This therefore clearly shows that there exists a knowledge gap and this study aims at shedding more light on aspects influencing performance of housing projects, a case of Kiambu County selected Kenya police housing projects, Kenya.

## 2.11 Knowledge gap

This section outline the gap the study aims at filling:

Variable	Indicators	Author (Year)	Title of Study	Findings	Knowledge Gaps
Project Planning	<ul> <li>Risk management</li> <li>Monitoring status</li> <li>Communicat ion</li> <li>Availability of project plan</li> <li>Planning minutes</li> </ul>	Mueni (2009)	Factors influencing completion of public building construction projects in Machakos county, Kenya	The study found that payment, communication, contractors technical capacity had a great influence in completion of housing projects in Machakos County	The author identified some of the factor influencing Completion of public works. This study sought to identify the influence of project planning on completion of Police Housing Projects, which was not indicated in the study

#### Table 2.1 Knowledge Gap

Project control	<ul> <li>Budgeting and funds release</li> <li>Scheduling</li> <li>Team structure</li> <li>Analysis and evaluation</li> </ul>	Langat, (2015)	Factors influencing completion of construction projects in public secondary schools in Bomet East sub-county, Kenya	The study found out that delayed procurement process, funding, misappropriation of funds affects completion of construction projects	The author identified funding challenges that affect completion of construction projects. The study however did not acknowledge that project control is factors that greatly affect completion of construction project. Thus this study aims at filling this gap.
Motivation of project team	<ul> <li>Employee development</li> <li>Work climate</li> <li>Job security</li> <li>Perceived equity</li> </ul>	Munyok i, (2014)	Factors influencing completion of construction projects. A case of construction projects in Nairobi Kenya	The study found out that duration of the contract, project financing, Project delivery type chosen influence completion of projects	The author acknowledged that duration of the contract, project financing and Project delivery type chosen greatly influence completion of the construction project. The study however did not indicate whether project team motivation have an influence on completion of construction project Therefore this study sought to fill this gap.
Competency ofproject team members	<ul> <li>Defects</li> <li>Client satisfaction</li> <li>Construction time</li> <li>Technology</li> </ul>	Nyamb ura, (2015)	Factors influencing completion of building projects in Kenya, ministry of land, Housing and urban development , Nairobi County	The study shows project management factors are integral in entire building function. They have an influence in completion of building projects.	From the study, it was clear that project management skills are very critical for any construction project to be completed. The study however did not indicate how competencies of project team members influence completion of project. Therefore this study aims to fill this gap

## CHAPTER THREE RESEARCH METHODOLOGY

## **3.1 Introduction**

This chapter incorporates research layout, goal population, sample length and sampling approaches, studies contraptions, pilot-testing, validity and reliability of studies devices, information series procedures, statistics evaluation techniques, operationalization of variables and issues.

## **3.2 Research Design**

Kothari (2003) describes research design as structure of research which shows the major parts of the research together address the questions being investigated. It's an outline for data collection and analysis. Thus, this study adopted descriptive survey design. Descriptive research design is used to determine frequency of an occurrence of a phenomenon. This design entails the collection of quantitative and qualitative data in a single field visit and it was employed in this study.

## **3.3 Target Population**

The study was conducted in Kiambu County. The target population for the study was 95 respondents drawn from Thika and Kikuyu police station housing projects, distribution was as shown on the table below.

Category	Target population
Contractors	5
Police commanders	10
Clerk of works	20
Project manager/ tendering committee	60
Total	95

Table 3:1 Target Population

#### 3.4 Sample Size and Sampling Procedure

In case of the study, individual sample sizes were arrived at using proportionate sampling method followed by simple random sampling. The sampling unit is an administrative location/ward from which respondents were drawn. Shields, (2013) argue that precision rate and desired confidence level are crucial determinants of sample size.

### 3.4.1: Sample Size

The sample size of 76 respondents in the study was drawn from Thika and Kikuyu Police Stations Housing Projects from a population of 95. Krejcie and Morgan table (1970) was used to obtain the sample.

Category	Target population	Sample size
Contractors	5	4
Police commanders	10	8
Clerk of works	20	16
Project manager/ tendering committee	60	48
Total	95	76

Table 3:2 Sample size

## **3.5 Research Instruments**

Statistics collection changed into carried out using a based questionnaire. The researcher accumulated number one facts using the based questionnaire. Primary data is that which is accumulated for first actual time (Creswell, 2011). The structured questionnaire became administered to officials managing production police residence in Kiambu County. The based questionnaire contained likert-kind questions in five sections. The likert scale was generated to usually comply with the following connotation (1) strongly disagree, (2) disagree, (three) neutral, (four) agree, (five) strongly agree.

#### **3.5.1 Pilot Testing of Research Instruments.**

Questionnaires were reviewed by the researchers' supervisor then administered for pilot study to sampled respondents who possessed similar characteristics as the actual respondents. The pilot study consisted of 8 respondents from the ministry of Land, Housing and Urban Development and Ministry of Interior and National Coordination. Data collected was reviewed to test validity and reliability using SPSS software.

It was carried out to determine responses, clarity, relevance and appropriateness of questions. It also helped to determine suitability of the wording in all the instruments. Data that was collected from the pilot study was examined to establish discrepancies and relevant modification were done and corrected anomalies before administering them to target respondents. Pilot testing process was done one week before.

#### **3.5.2 Validity of Research Instruments**

Study utilized content to determine meaningfulness of instruments. This helped to ensure that qualitative items desired achieve desired appropriateness in regard to the subject matter and the inferences to be made. Two types of content validity exist and include: sampling and face validity. Face validity is concerned with extent to which an instrument measures what it appears to measure according to researcher's subjective assessment while sampling validity is the degree to which a measure adequately samples the subject matter under consideration. Face validity concerned with quantity to which instrument measures what it seems to degree consistent with researcher's subjective evaluation whilst sampling validity is the degree to which a degree thoroughly samples the challenge depend beneath attention. Content validity was determined via the experts from the department of ODeL to critically examine questionnaire items to determine their suitability.

#### **3.5.3 Reliability of the Research Instruments**

Two methods estimating reliability exist; repeated measurements and internal consistency. These methods involve the procedure of correlating sets of scores. In this study, Split half method was used to establish the wellness of the data collection instrument where the quantitative questionnaire were divided into two equal parts. The scored were correlated using the Spearman-Brown Prophesy formula which gave a value of 0.7. This was deemed fit for the study as indicated by Mugenda and Mugenda (2003).

## **3.6 Data Collection Procedures**

A research permit from NACOSTI authorizing this study was photocopied and given to the research assistants. 100 questionnaires were printed and distributed equally to the two research assistants with clear instructions on modalities for their administration. Once a questionnaire was issued, the research assistants were expected to obtain contact details of respondents. The entire data collection process took one week to be complete. After responses were received; grouping, checking for inconsistencies and data cleaning process were then be done. Data coding and tabulation was undertaken in order to detect errors.

#### **3.7 Data Analysis Techniques**

Data was collected, cleaned, coded in excel sheet, entered in the SPSS software version 21 and finally analyzed. SPSS software was preferred since it's fast, flexible and provides much more accurate information that is reliable. Kothari (2007) indicate that data processing involve editing, classification, coding and tabulation to help in analysis. Descriptive statistics was used to analyze, present and interpret data. The study also conducted inferential statistics which involved a multiple regression analysis to test affiliation amid independent and dependent variables.

A regression model:  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$  was used for this study in order to determine the influence.

Where:

Y is the dependent variable; performance of selected Kenya Police housing Projects

 $\beta_0$  is a Constant while  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$  are coefficients

X<sub>1</sub>is the first variable; project planning

X<sub>2</sub>is the second variable; project control

X<sub>3</sub>isthe third variable; motivation of project team

X4is the fourth variable; competency of project team

## **3.8 Ethical Issues**

A research permit is a requisite instrument needed for undertaking research in Kenya. The researcher obtained a research permit from NACOSTI and authentication letter from the County Commissioner of Kiambu County. The researcher attached a letter of transmittal of data collection instrument with the questionnaires to sampled respondents. This letter is crucial in assuring respondents that the study is for academic purposes only. Respondents were assured that their identity would be kept in utmost confidentiality. In the exercise of ethical issues participation of respondents in the study was on a voluntary basis. Respondents were assured of confidentiality of information given.

## **3.9 Operationalization of Variables**

This section outline the operationalization of variable

Objectives	Variable	Indicators	Measur ement Scale	Data Analysis	Tools of analysis
To assess how project planning influence performance of Kenya Police Housing projects	Project Planning	<ul> <li>Risk management</li> <li>Monitoring status</li> <li>Communicati on</li> <li>Availability of project plan</li> </ul>	Ordinal	Descriptive statistics	Frequency percentage Mean Standard deviation
To establish how project control influence performance of Kenya Police Housing projects	Project control	<ul> <li>Budgeting and funds release</li> <li>Scheduling procedure</li> <li>Composition of team structure</li> <li>Method of Analysis and evaluation</li> </ul>	Ordinal	Descriptive statistics	Frequency percentage Mean Standard deviation

## Table 3.3: Operationalization table

To establish how motivation of project team influence the performance of selected Kenya Police Housing projects	Motivatio n of Project Team	- - -	Employee development Work climate Job security Perceived equity	Ordinal	Descriptive statistics	Frequency percentage Mean Standard deviation
To establish how competency of project team members influence performance of selected Kenya Police Housing projects	Competen cy of project team members		Qualification s Training Experience Leadership skills	Ordinal	Descriptive statistics	Frequency percentage Mean Standard deviation

#### **CHAPTER FOUR**

#### DATA ANALYSIS, INTERPRETATION AND DISCUSSION

#### 4.1 Introduction

This chapter covers statistics analysis, presentation and interpretation findings of the study. The subtitles are arranged in line with the observe targets. Records turned into amassed from police commanders, contractors, clerk of works and tendering committee who were involved in production of police houses. Facts turned into gathered, analyzed and interpreted in accordance to the studies questions and include; questionnaire go back charge, bio facts of the respondents, mission making plans, project manipulate, motivation of the task group and competency of the project team and regression analysis.

#### 4.2 Questionnaire return rate

The study targeted 76 respondents from Thika and Kikuyu Police Stations Housing Projects. Data was obtained and tabulated in Table 4.1

 Table 4.1 Questionnaire return rate

	Target respondents	Actual responded	Return rate
	76	70	92%
TOTAL	76	70	92

In this study, 76 questionnaires were rolled out to the target respondents whereby 70 questionnaires were filled and given back. This represented response rate of 92%. Nachimais and Nachimais, (2008) indicated that a response rate of 80 to 90% is enough for a study thus it was considered excellent for the analysis of the study findings

#### 4.3 Demographic information

This section shows bio-data of the respondents which includes; gender, Age and years involved in construction project.

#### 4.3.1 Gender of the respondents

The respondents were requested to indicate their age to determine its impact on performance of police housing projects. The findings are as tabulated.

		Frequency	Percent	Valid Percent	Cumulative Percent
	Male	50	71.4	71.4	71.4
Valid	Female	20	29.6	29.6	100.0
	Total	70	100.0	100.0	

Table 4.2	Gender	of the	respondents
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In Table 4.2, the majority of the respondents were male 50(71.4%) while female were 20(29.6%). This clearly indicated that women were well represented according to the Kenyan constitution 2010.

#### 4.3.2 Age of the respondents

The respondents were requested to indicate their age to determine its impact on performance of police housing projects. The findings are tabulated in Table 4.3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-20	0	0	0	0
	20-35	15	21.4	21.4	21.4
	36 - 50	55	79.6	76.6	100.0
	Total	70	100.0	100.0	

#### Table 4.3 Age of the respondents

Data in Table 4.3 indicate that majority of the respondent 55 (79.6%) were of age 36-50 while 15 (21.4%) aged 20-35. This indicates that there are few youths involved in the police housing projects. This could be have been because man youths are in junior ranks and could not participate well in the study.

#### 4.3.3 Number of years involved in construction project

The respondents were asked to indicate number of years involved in construction project in order to assess its influence on performance of police housing projects. This is indicated in Table 4.4

		Frequency	Percent	Valid Percent	Cumulative Percent
	below 1 year	5	7.1	7.1	7.1
	1 -5 years	15	21.4	21.4	28.5
Valid	6 - 10 years	10	14.4	14.4	42.9
vanu	11 - 15 years	35	50.	50	92.9
	over 15 years	5	7.1	7.1	100.0
	Total	70	100.0	100.0	

Table 4.4 Number of years involved in construction project

Results indicated Majority of respondents 35(50%) have been in construction for 11-15 years, 15(21.4%) of the respondents have been in the construction for project for 1-5 years, 10(14.4%) of the respondents have been in construction for 6-10 years while 5(7.1%) have been in construction for over 15 years and below 1 year respectively. This indicates that the project was being run by people with experience

#### 4.4 Project planning and Performance of Kenya Police Housing Projects

The research was to establish the influence of project planning performance selected police housing projects in Kiambu County. Results were obtained and tabulated in Table 4.5

#### **Table 4.5 Project planning**

project planning	Mean	Std
		Dev
Successful performance of housing projects involves performing the	4.600	.7559
activities of the project according to the plan		
Planning is critical for performance of construction projects	4.2360	.7510
There is lack of proper channels to address project management	4.8600	.5739
Planning makes it possible to manage risk associated with	4.4360	.5639
construction		
Monitoring status reduces the cost construction	4.9232.	.6373
Planning enhance communication within the constriction project	4.8296	.7653

Results for analysis were obtained using a 1 to 5 point Likert scale with 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree. Respondents were requested to indicate their level of agreement with project planning as a factor influencing performance of police housing projects. Responses were coded into numerical value used to measure their perspective value under the study. The score of agreement and disagreement were put together to represent a variable of 0 to 2.5 mean score on the Likert scale. The score of neutral was taken to represent variable with a mean score of 2.5 to 3.5 and agree and strongly agree represent mean score of 3.5 to 5.0 on the Likert scale. Standard deviation greater 1.0 indicated a significant difference on the performance of police housing projects.

From the results in Table 4.5, majority of respondent indicated that monitoring of resources resource reduce cost of construction have a greatest impact with a mean score of 4.9232. A further majority were of the opinion that planning enhances communication within the construction project; and that there lacks proper channels to address project management

with a mean score of 4.8296 and 4.8600 respectively. Other factors of consideration in project planning showed varied results as indicated; Successful performance of housing projects involves performing the activities of the project according to the plan scoring a mean of 4.6000; Planning makes it possible to manage risk associated with construction scoring 4.4360; Planning is critical for performance of construction projects scoring 4.2360. Project planning was found to have a positive influence on performance of police housing projects according to the responses.

In instances where there exists inadequate knowledge on project management, its application leads to poor planning due to incomplete plans of the project thus, decline in performance of the project (Ahern et al., 2014). According to Alias et al. (2014), the currently applied project management practices in construction projects fail to ensure that they succeed in terms of quality achievement and proper planning. The author associates this failure with inadequate study on crucial and important factors affecting those practices from the project stakeholders' perspectives. According to Baldwin and Bordoli (2014), there is need to maximize the need for executing project efficiency in terms of cost, time and cost. This study concludes that project planning is very crucial before conducting the project so as to address issues of cost, time and quality. This is in agreement with study conducted by Alias et al (2014).

## 4.5 Project Control and Performance of Kenya Police Housing Projects

The study sought to establish the influence of project control on performance of selected Kenya police housing projects in Kiambu County. Results were obtained and tabulated in Table 4.6

Project control	Mean	Std dev
Budgeting and fund release influence performance of national	4.9002	.7752
police houses		
Scheduling is critical in performance of construction of projects	4.9921	.7854
Team structure influence performance of construction project	3.8245	1.7521
All construction projects should have control	4.9365	.4635

#### **Table 4.6 Project control**

Results for analysis were obtained using a 1 to 5 point Likert scale with 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree. Respondents were requested to indicate their level of agreement with project control as a factor influencing performance of police housing projects. Responses were coded into numerical value used to measure their perspective value under the study. The score of agreement and disagreement were put together to represent a variable of 0 to 2.5 mean score on the Likert scale. The score of neutral have been taken to represent a variable with a mean score of 2.5 to 3.5 and agree and strongly agree represent a mean score of 3.5 to 5.0 on the Likert scale. Standard deviation greater 1.0 indicated a significant difference on the performance of police housing projects.

From the results most respondents were of the opinion that scheduling is critical in performance of construction projects scoring 4.9921; all construction projects should have control scoring 4.9365; Budgeting and fund release influence performance of national police houses with a mean a score of 4.9002. Team structure influences performance of construction project scoring 3.8245. Team structure influences performance of construction project scoring 3.8245. Morris (2013) noted that in construction projects, having great knowledge in project management is very critical for achieving the objective of project successfully. Thus, such knowledge in project management put across and be prioritized in specific areas of management and this can help improve the performance of the project. When a project is successful it should be done within the stipulated time, to be delivered within the expectation of the stakeholders and be within the scope and budget (Kerzner, 2009). The roles of a project control are to compare the set performance standards with the actual performance. It identifies any deviations, and is then corrected. A crucial project control is the Work Breakdown Structure (WBS) as it is used to configure the management other processes in project control. WBS is a structure that outlines project scope and its deliverables into their respective component. This study concluded that project control is essential and this was supported by a study conducted by Altoryman (2014).

#### 4.6 Motivation of the Project Team and Performance of Kenya Police Housing Projects

The study was to establish the influence of motivation project team performance of selected Kenya police housing projects in Kiambu County. Results were obtained and tabulated in Table 4.7

Motivation of project team	Mean	Std
		deviation
Employee motivation impacts performance of construction	4.7000	.4628
projects.		
Character of a workmate influence performance of construction	4.6521	.4595
projects		
Job security increases motivation of employees	4.7569	.6582
Team motivation has enhanced equity in construction projects.	4.1270	.9642

#### Table 4.7 Motivation of project team

Results for analysis were obtained using a 1 to 5 point Likert scale with 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree. Respondents were requested to indicate their level of agreement with project control as a factor influencing performance of police housing projects. Responses were coded into numerical value used to measure their perspective value under the study. The score of agreement and disagreement were put together to represent a variable of 0 to 2.5 mean score on the Likert scale. The score of neutral have been taken to represent a variable with a mean score of 2.5 to 3.5 and agree and strongly agree represent a mean score of 3.5 to 5.0 on the Likert scale. Standard deviation greater 1.0 indicated a significant difference on the performance of police housing projects

Analysis in table 4.7 indicate that majority of the respondents were of the opinion that Job security increases motivation of employees scoring a mean of 4.7569; Employee motivation impacts performance of construction projects scoring a mean 4.7000; Character of a workmate influence performance of construction projects scoring 4.6521 while minority

indicated that team motivation has enhanced equity in construction projects scoring a mean of 4.1270. Different methods motivate people differently. The goal of a construction manager is to direct the workers in the construction site and their behavior. Understanding the character of an individual is necessary to use the best techniques of motivation in an attempt to change the behavior of a person. Financial incentives usage and rewarding as way of motivation in construction is viewed as very good way of improving outcomes of a built environment (Rose and Manley 2011).

Commonly, financial incentives method is applied as a means of cost reduction in a contract, reduction of contract duration, achievement of performance standards. (Cox. et al, 2006) indicate that it is very important for the management to bear in mind that employees require well defined and objectives that can be measured that they will work hard to achieve and the employee or the subcontractor should feel that the goal can be achieved, failure to which they may be frustrated. They further identified factors that influence positive motivation of subcontractors' team and by use of those characteristics to come up a model of motivation for subcontractor employee. The model indicates that a supervisor should create positive motivation based on confidence, which originates from worker competence and/or by the use of incentives. This study therefore noted that project teams should be well motivated so that they can carry out their projects diligently. This has agreed with study by Cox. et al (2006)

# **4.7** Competency of Project Team Members and Performance of Kenya Police Housing Projects

The study sought to establish the influence of competency of project team on performance of selected Kenya police housing projects in Kiambu County. Results were obtained and tabulated in Table 4.8

Table 4.8	Competency	of team	members
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Competency of project team members	Mean	Std
		Deviation
Defects cause project delay	4.9245	.5875
Clients are satisfied with construction projects	4.9002	.7752
Contractors use updated technology to construct the houses	4.9635	.4635
Contractors take less time to complete the police houses	3.8245	1.7521

Results for analysis were obtained using a 1 to 5 point Likert scale with 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree. Respondents were requested to indicate their level of agreement with project control as a factor influencing performance of police housing projects. Responses were coded into numerical value used to measure their perspective value under the study. The score of agreement and disagreement were put together to represent a variable of 0 to 2.5 mean score on the Likert scale. The score of neutral have been taken to represent a variable with a mean score of 2.5 to 3.5 and agree and strongly agree represent a mean score of 3.5 to 5.0 on the Likert scale. Standard deviation greater 1.0 indicated a significant difference on the performance of police housing projects

Results in table 4.8 indicate that majority of the respondents indicate d a that Contractors use updated technology to construct the houses scoring a mean score of 4.9635; Defects cause project delay scoring a mean of 4.9245; clients were satisfied with the construction project with a mean score of 4.9002 while the minority indicate that contractors tale less time to complete police houses. Project management comprise of various steps and substeps and further outline the scope of the project, cost estimation, responsibilities and duties project stakeholders and team. It also indicates controlling and planning tools for the project. For the mega construction projects in third world countries, it becomes difficult to gather enough professional to take part in the success of the project. Hence, these factors are seen to have a great impact on the success of the project. In construction projects many

parties must be involved for its success (Eriksson, 2008). Failure of one party to carry out their part appropriately, the project may not achieve its objective thus fail. Thus it's very crucial to choose the appropriate contractors and designers who will conduct their business diligently and make the ideas a reality. According to Lam (2008), management require to be part of up-front planning and setting up of effective communication, System controlling, organizational culture and management system as this enhances competency within the project. To enhance competency within the project, project managers should completely remove defects within the project, ensure that clients needs are met fully and use up to date technology that is cost effective.

#### 4.8 Regression Analysis

In order to determine the factors influencing the performance of selected Kenya police housing projects: a case of Kiambu county of Kenya, the study conducted regression analysis. The four variables of the study were project planning, project control, motivation of project team and competency of the project team.

A regression model:  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$  was developed.

Where: Y is the dependent variable; performance of selected Kenya Police housing Projects  $\beta_0$  is a Constant,  $\beta_1 X_1$  is the first variable; project planning,  $\beta_2 X_2$  is the second variable; project control,  $\beta_3 X_3$  is the third variable; motivation of project team,  $\beta_4 X_4$  is the fourth variable; project management competency

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761 <sup>a</sup>	.678	.646	.2245

 Table 4.9: Significance of variables in the model

a. Predictors: (Constant), project planning, project control, motivation of project team , competency of project team members

From Table 4.9 model of goodness fit generated, the study established a linear dependence of the determinant factors influencing performance of selected Kenya police housing projects in Kiambu county. The study indicates correlation coefficient of 0.761 which is a strong positive correlation depicting a close perfect linear dependence between the independent and dependent variable. An R adjusted of 0.678 was obtained and adjusted R-square to 0.646. This indicated that study valuable that is project planning, project control, motivation of the project team and competency of the project team contributes to 67.8%. This indicates that there are other 32.2% other variables that influence the performance of Kenya police housing projects.

Model	Unstanda Coefficien		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	1.348	.563	_	2.845	.514
Project planning	.642	.132	.358	3.821	.026
Project Control	.192	.047	.316	2.562	.002
Motivation of the project team	.245	.124	.319	3.635	.000
Competency of project team members	319	.147	.378	3.734	.005

Table 4.9: Significance of the variables in the model

 $Y{=}1.348{+}0.642X_1{+}0.192X_2{+}0.245X_3{+}0.319X_4$ 

From the results in table 4.10, the regression model indicate that holding project planning, project control, motivation of the project team and competency of the project team at constant performance of selected Kenya police housing projects would be at 1.348. This means that holding all factors constant, a unit increase in project planning would lead to 0.192 increase in performance of police housing project, unit increase in project control, would lead to 0.642 increase in performance of police housing project, a unit increase in

motivation of project team would led to 0.245 increase in performance of police housing project, and a unit increase in competency of project team would lead to0.319 increase performance of police housing project. This indicates that project planning had the greatest influence followed by competency of project team, motivation of the project team and project control.

#### **CHAPTER FIVE**

#### SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATION

#### 5.1 Introduction

This chapter presents the summary of the findings, conclusion recommendation of the study and areas for further research.

#### 5.2 Summary of the findings

This section outlines summary of the findings obtained in the study according to the specific objective.

#### 5.2.1 Project planning and Performance of Kenya Police Housing Projects

From the study, majority of respondent indicated that monitoring of resources resource reduce cost of construction have a greatest impact with a mean score of 4.9232. A further majority were of the opinion that planning enhances communication within the construction project; and that there lacks proper channels to address project management with a mean score of 4.8296 and 4.8600 respectively. Other factors of consideration in project planning showed a varied results as indicated; Successful performance of housing projects involves performing the activities of the project according to the plan scoring a mean of 4.6000; Planning makes it possible to manage risk associated with construction scoring 4.4360; Planning is critical for performance of construction projects scoring 4.2360. Project planning was found to have a positive influence on performance of police housing projects according to the responses.

In instances where there exists inadequate knowledge on project management, its application leads to poor planning due to incomplete plans of the project thus, decline in performance of the project (Ahern et al., 2014). According to Alias et al. (2014), the currently applied project management practices in construction projects fail to ensure that they succeed in terms of quality achievement and proper planning. The author associates this failure with inadequate study on crucial and important factors affecting those practices from the project stakeholders' perspectives. According to Baldwin and Bordoli (2014), there is need to maximize the need for executing project efficiency in terms of cost, time and cost. This study concludes that project planning is very crucial before conducting the project so as to address issues of cost, time and quality. This is in agreement with study conducted by Alias et al (2014).

#### 5.2.2 Project control and Performance of Kenya Police Housing Projects

Findings in the study indicate that majority of the respondents were of the opinion that scheduling is critical in performance of construction projects scoring 4.9921; all construction projects should have control scoring 4.9365; Budgeting and fund release influence performance of national police houses with a mean a score of 4.9002. Team structure influences performance of construction project scoring 3.8245. . Morris (2013) noted that in construction projects, having great knowledge in project management is very critical for achieving the objective of project successfully. Thus, such knowledge in project management put across and is prioritized in specific areas of management and this can help improve the performance of the project. When a project is successful it should be done within the stipulated time, to be delivered within the expectation of the stakeholders and be within the scope and budget (Kerzner, 2009). The roles of a project control are to compare the set performance standards with the actual performance. It identifies any deviations, and is then corrected. A crucial project control is the Work Breakdown Structure (WBS) as it is used to configure the management other processes in project control. WBS is a structure that outlines project scope and its deliverables into their respective component. This study concluded that project control is essential and this was supported by a study conducted by Altoryman (2014).

# **5.2.3 Motivation of the project team and Performance of Kenya Police Housing Projects**

Results indicate that majority of the respondents were of the opinion that Job security increases motivation of employees scoring a mean of 4.7569; Employee motivation impacts performance of construction projects scoring a mean 4.7000; Character of a workmate influence performance of construction projects scoring 4.6521 while minority indicated that team motivation has enhanced equity in construction projects scoring a mean of 4.1270. Different methods motivate people differently. The goal of a construction manager is to direct the workers in the construction site and their behavior. Understanding the character of an individual is necessary to use the best techniques of motivation in an attempt to change the behavior of a person. Financial incentives usage and rewarding as way of motivation in construction is viewed as very good way of improving outcomes of a built environment (Rose and Manley 2011).

Commonly, financial incentives method is applied as a means of cost reduction in a contract, reduction of contract duration, achievement of performance standards. (Cox. et al, 2006) indicate that it is very important for the management to bear in mind that employees require well defined and objectives that can be measured that they will work hard to achieve and the employee or the subcontractor should feel that the goal can be achieved, failure to which they may be frustrated. They further identified factors that influence positive motivation of subcontractors' team and by use of those characteristics to come up a model of motivation for subcontractor employee. The model indicates that a supervisor should create positive motivation based on confidence, which originates from worker competence and/or by the use of incentives. This study therefore noted that project teams should be well motivated so that they can carry out their projects diligently. This study then agrees with a study by Cox. et al (2006)

#### 5.2.4 Competency of project team and Performance of Kenya Police Housing Projects

Result indicate that majority of the respondents indicate d a that Contractors use updated technology to construct the houses scoring a mean score of 4.9635; Defects cause project delay scoring a mean of 4.9245; clients were satisfied with the construction project with a mean score of 4.9002 while the minority indicate that contractors tale less time to complete police houses. Project management comprise of various steps and sub-steps and further outline the scope of the project, cost estimation, responsibilities and duties project stakeholders and team. It also indicates controlling and planning tools for the project. For the mega construction projects in third world countries, it becomes difficult to gather enough professional to take part in the success of the project. Hence, these factors are seen to have a great impact on the success of the project. In construction projects many parties must be involved for its success (Eriksson, 2008). Failure of one party to carry out their part appropriately, the project may not achieve its objective thus fail. Thus its very crucial choose the appropriate contractors and designers who will conduct their business diligently and make the ideas a reality. According to Lam (2008), management require to be part of up-front planning and setting up of effective communication, System controlling, organizational culture and management system as this enhances competency within the project. To enhance competency within the project, project managers should completely remove defects within the project, ensure that clients needs are met fully and use up to date technology that is cost effective.

#### **5.3** Conclusion

This section outlines conclusion based on the specific objectives

#### **5.3.1 Project planning**

The study concludes that project planning is the most important factor that influences the performance of police housing projects in Kiambu County. Regression coefficient obtained indicates that project control has a significant influence on performance of police housing projects. This therefore shows that increasing levels of project planning would lead to increase in performance of Kenya police housing projects in Kenya

#### 5.3.2 Competency of project team

The study concludes that competency of project team is the second most important factor that influences the performance of police housing projects in Kiambu County. Regression coefficient obtained indicates that competency of project team has a significant influence on performance of police housing projects. This therefore shows that increasing levels of competency of project team would lead to increase in performance of Kenya police housing projects in Kenya

#### 5.3.3 Motivation of project team

The study concludes that motivation of project team is the third factor that influences the performance of police housing projects in Kiambu County. Regression coefficient obtained indicates that motivation of project team has a significant influence on performance of police housing projects. This therefore shows that increasing levels of project planning would lead to increase in performance of Kenya police housing projects in Kenya

#### 5.3.4 Project control

The study concludes that project control was least important factor that influences the performance of police housing projects in Kiambu County. Regression coefficient obtained indicates that project control has a significant influence on performance of police housing projects. This therefore shows that increasing levels of project control would lead to increase in performance of Kenya police housing projects in Kenya

#### 5.3 Recommendations of the study

Based on the results obtained in the study, it was found out that project planning, competency of project team, motivation of the project team and project control are the major factors influencing performance of selected Kenya police housing projects in Kiambu County. Therefore the study makes the following recommendations.

The study recommends that a comprehensive plan to be laid out before a project is started. This will help to carry out housing projects with scheduled time. Responsibilities should also be well defined during planning.

The study recommends that competent people be involved in in project implementation. This will help to carry out quality work and avoid defects and also reduce the cost of implementing the project.

The study recommends that project team be well motivated so that they can carry out the project diligently. When entrusted with higher responsibilities they will be motivated. Project team should also be recognized when they achieve a milestone.

The study further recommends that the resource be well controlled to avoid wastage. Proper monitoring of the resources be practiced since this will enhance accountability.

#### 5.4 Areas for further research

The study suggest the following areas of research

Influence of determining factors on performance of selected Kenya police housing projects was limited to one county. More studies should be conducted in other counties so that conclusive report can be obtained.

Influence of project funding on performance housing projects

#### REFERENCES

- Abd El-Razek, M. E., Bassioni, H. A., &Mobarak, A. M. (2008).Causes of delay in building construction projects in Egypt. Journal of Construction Engineering and Management, 134(11), 831-841.
- Adamu, K. J., Dzasu, W. E., Haruna, A., &Balla, S. K. (2011). Labor productivity constraints in the Nigerian construction industry. Continental Journal of Environmental Design and Management, 1(2), 9-13.
- Adnan, E., Mohamed, S. and Saleh, A. (2009), Factors affecting performance of construction projects in the Gaza strip. Journal of Civil Engineering and Management ,15(3):269-280
- Ahern, T., Leavy, B., Byrne, P.J., 2014. Complex project management as complex problem solving: A distributed knowledge management perspective. International Journal of Project Management, 32, 1371-1381.
- Aiyetan, A., Smallwood, J., &Shakantu, W. (2011). A systems thinking approach to eliminate delays on building construction projects in South Africa.ActaStructilia, 18(2), 19-39.
- Akinsiku, O., Akintola, A., Ameh, O., &Ige, A. (2014). Contributions of Construction
  Project Team to Cost Overruns: The Contractors' Perspective. In
  Construction Research Congress 2014: Construction in a Global Network (pp. 1528-1536).
- AlKharashi, A., & Skitmore, M. (2009).Causes of delays in Saudi Arabian public sector construction projects. Construction Management and Economics, 27(1), 3-23.
- Alojairi, A. (2011). Project Management: A Socio-Technical Perspective.Aiyetan, A., Smallwood, J., &Shakantu, W. (2011). A systems thinking approach to eliminate delays on building construction projects in South Africa.ActaStructilia, 18(2), 19-39.
- Alshanbari, H. (2010). Impact of Pre-Construction Project Planning on Cost Savings (Doctoral dissertation, University of Florida).

- Altoryman, A., 2014. Identification and assessment of the risk factors affecting construction projects in the Gulf region: Kuwait and Bahrain. School of Mechanical, Aerospace and Civil Engineering, PhD thesis, University of Manchester, UK.
- Alwi, S. Hampson K and Mohamed S., (2002), Factors influencing contractor's performance in Indonesia, (Non-value adding activities). In Proceedings International Conference on Advancement in Design, Construction, Construction Management and Maintenance of BuildingStructure., pages pp 20-34, Bali.
- Ameh, O. J., Soyingbe, A. A., &Odusami, K. T. (2010). Significant factors causing cost overruns in telecommunication projects in Nigeria. Journal of Construction in Developing Countries, 15(2), 49-67.
- Amoah, P., Ahadzie, D. K. and Dansoh, A. (2012), Factors affecting contractor's performance in Ghana. The perspective of small-scale building contractors.Ghana Surveyor Journal, 2(4)
- Andawei, M. E. M.(2014) Environmental Friendliness of Project Cost Management Process in Nigeria: The Role of the Quantity Surveyor.
- Arogo, G. M. (2015). Factors influencing completion of community-initiated projects: the case of Eldoret town, UasinGishucounty, Kenya (Doctoral dissertation, University of Nairobi).
- Assaf, S. A., & Al-Hejji, S. (2009). Causes of delay in large construction projects.International journal of project management, 24(4), 349-357.
- Auma, E. (2014). Factors Affecting the Performance of Construction Projects in Kenya: A Survey of Low-Rise Buildings in Nairobi Central Business District. The International Journal of Business & Management,2(12), 115.
- Babu, A. J. and Suresh, N. (1996), "Project management with time, cost, and quality considerations." European Journal of Operational Research, Vol. 88 No.2, pp. 320-327.Kerzner, H. R. (2009), "Project Management: a systems approach to planning, scheduling, and controlling", John Wiley and Sons, New Jersey, NJ.Kerzner, H. R. (2013), "Project Management: a systems approach to planning, scheduling, and controlling", John Wiley and Sons, New Jersey, NJ.
- Barasa, J. A. (2014). Influence of board of managements' contribution to development of public secondary schools in Nyamira north district, Nyamira county, Kenya

(Doctoral dissertation, University of Nairobi).Chavada, R., Dawood, N. N., &Kassem, M. (2012). Construction workspace management: the development and application of a novel nD planning approach and tool. Journal of Information Technology in Construction.

- Brown, A. D., &Phua, F. T. (2011). Subjectively construed identities and discourse: towards
  a research agenda for construction management. Construction Management
  and Economics, 29(1), 83-95.
- Chen, W. T., & Huang, Y. H. (2006). Approximately predicting the cost and duration of school reconstruction projects in Taiwan. Construction management and Economics, 24(12), 1231-1239.
- Chigara, B., &Mangore, E. (2012). An analysis of the implications of resources management on building projects performance in Harare and Bulawayo. International Journal of Marketing and Technology, 2(9), 144.
- Chigara, B., Moyo, T., &Mudzengerere, F. H. (2013). An Analysis of Cost Management Strategies Employed By Building Contractors on Projects in Zimbabwe. International Journal of Sustainable Construction Engineering and Technology, 4(2), 1-13.
- Chirisa, I. (2014). Building and urban planning in Zimbabwe with special reference to Harare: Putting needs, costs and sustainability in focus.
- Chmieliauskas, A. (n.d.). Implementing strategy through project management. Retrieved 09 15, 2009, from ZTI Institute web site: http://www.zti.com.pl/instytut/pp/referaty/ref20\_full.html
- Cox. R. F, Issa. R. R. A, Frey.A, 2006. "Proposed Subcontractor-Based Employee Motivational Model". Journal of Construction Engineering and Management, vol. 132, issue. 2
- Creswell, J.W. (2011), Research design: Methods of data collection. New bury Park, CA. Sage
- Daniel, W. Adrian, B and Skitmore, M. (2001), Factors affecting the performance of small indigenous contractors in Papua New Guinea. The Australian Journal of Construction Economics and Building 1(1): pp. 80-90

- Darrington, J. W., & Howell, G. A. (2010). An optimized project requires optimized incentives. In Proc. of the 18th Ann. Meeting of the IGLC.
- Doloi, H., Sawhney, A., Iyer, K. C., &Rentala, S. (2012). Analysing factors affecting delays in Indian construction projects. International Journal of Project Management, 30(4), 479-489.
- Douglas, S. and Chris, W.E., (2001).Delays, Disruption and Acceleration Claims. BordenLadnerGervais LLP Lawyers:Calgary, Montreal, Ottawa, Toronto
- Durdyev, S., Ismail, S., &Bakar, N. A. (2013). Construction productivity in Turkmenistan: Survey of the constraining factors. International Journal of e-Education, e-Business, e- Management and e-Learning, 3(1), 18.
- El-Behary, H. (2013). High prices cripple the construction sector. Daily News Egypt (Egypt) the Gale Group, Farmington Hills, Michigan.
- El-Gohary, K. M., & Aziz, R. F. (2013). Factors influencing construction labor productivity in Egypt. Journal of Management in Engineering, 30(1), 1-9.

Ethiopian Journal of Environmental Studies and Management Vol. 6 No.2 2013

- Eyken, V.D. (1993), Effective monitoring and evaluation: Monitoring & Evaluation. Hampshire County Council
- Faridi, A. S., & El- Sayegh, S. M. (2009). Significant factors causing delay in the UAE construction industry. Construction Management and Economics, 24(11), 1167-1176.
- Fred, C. (2008), Monitoring and Evaluation manual: Sport-in-Development. University of Stirling
- Fugor, F.D.F and Baah, A.B.A., (2010), Delays in building construction projects in Ghana: Department of Building Technology, Kwame Nkrumah University of Scienceand Technology, Kumasi, Ghana.
- Githui, D. M. (2012). Ethical issues in the construction industry in Kenya: A critical analysis of the professional conduct in engineering technology management.
- Golafshani, N. (2003), Understanding reliability and validity in qualitative research: TheQualitative Report, Vol.8No.4 pp.597-607, University of Toronto.

- González, P., González, V., Molenaar, K., Orozco, F., 2014. Analysis of Causes of Delay and Time Performance in Construction Projects. Journal of Construction Engineering and Management, 140, 1-9.
- Gosenheimer, C. (2012), Project prioritization guide: A structured approach to working on what matters most. Madison, University of Wisconsin.
- Guangshe, J., Jiangua, C. L., Shuisen, Z., & Jun, W. (2008). Application of Organizational Project Management Maturity Model (OPM3) to construction in China: An Empirical study. International Conference on Information Management, Innovation Management and Industrial Engineering, 2008. ICIII '08, (pp. 56-62). Taipei.
- Guba,E.G.&Lincoln, Y.S.(1989), Fourth generation evaluation. California: Sage publications
- Gundecha, M. (2012). Study of factors affecting labor productivity at a building construction project in the usa: web survey (Doctoral dissertation, North Dakota State University).
- Heagney, J., 2011. Fundamentals of project management, Fourth ed. American Management Association, New York, NY.
- Henry, A. (2012), How to prioritize when everything is important: Lifehacker Australia.
- Hoffman, G. J., ThalJr, A. E., Webb, T. S., & Weir, J. D. (2007). Estimating performance time for construction projects. Journal of Management in Engineering, 23(4), 193-199.
- Human Settlements in the New Millennium (2001)
- Hussein, B. A. and Klakegg, O. J. (2014). Measuring the Impact of Risk Factors Associated with Project Success Criteria in Early Phase. Procedia Engineering - Social and Behavioral Sciences, 119(0): 711-718.
- Hwang, B. G., Zhao, X., & Ng, S. Y. (2013).Identifying the critical factors affecting schedule performance of public housing projects.Habitat International, 38, 214-221.
- Hwang, B.-G., & Ng, W. J. (2013). Project management knowledge and skills for green construction: Overcoming challenges. International Journal of Project Management, 31(2), 272–284.

- Independent Policing Oversight Authority (IPOA), (2016). Housing Inspection Report February 22,
- Instabul Declaration and Habitat Agenda (1996)
- Jarkas, A. M., &Bitar, C. G. (2011). Factors affecting construction labor productivity in Kuwait. Journal of Construction Engineering and Management, 138(7), 811-820.
- Jekale, W. (2004).Performance for public construction projects in developing countries: Federal road and educational building projects in Ethiopia. Norwegian University of Science & Technology.
- Jerven, M. (2013). Poor numbers: how we are misled by African development statistics and what to do about it. Cornell University Press.
- Joppe, M. (2000), The Research Process. Retrieved December 16, 2006, from,http:// www.ryerson.ca/-mjoppe/rp.htm
- Kalsum, U., Hanid, M., Zakaria, N., Yahya, Z., &Lia, P. C. (2010). Assessing the performance of construction workers in Peninsula Malaysia. International Journal of Engineering and Technology, 7(2), 47-60.
- Kenya Police Service Strategic plan (2003-2007, 2004-2008, 2008-2012)
- Kenya Vision 2030, Kenya vision 2030 Flagship projects (www.vision2030.go.ke)
- Kikwasi, G. (2013, February). Causes and effects of delays and disruptions in construction projects in Tanzania. In Australasian Journal of Construction Economics and Building Conference Series (Vol. 1, No. 2, pp. 52-59).
- Koontz, H. (2010). Essentials of management. Tata McGraw-Hill Education.
- Kothari, C. R. (2004). Research methodology: Methods and techniques. New Age International.
- Kumaraswamy, M.M., Chan, D.W., 1998. Contributors to construction delays. Construction Management and Economics, 16
- Langat, D. K. (2015). Factors influencing completion of construction projects in public secondary schools in Bomet east sub-county, Bomet county, Kenya (Doctoral dissertation, University of Nairobi)., 17-29.

Laws of Kenya

- Le-Hoai, L., Dai Lee, Y., & Lee, J. Y. (2008). Delay and cost overruns in Vietnam large construction projects: A comparison with other selected countries. KSCE journal of civil engineering, 12(6), 367-377.
- Love, P. E., Sing, C. P., Wang, X., Edwards, D. J., & Odeyinka, H. (2013). Probability distribution fitting of schedule overruns in construction projects. Journal of the Operational Research Society, 64(8), 1231-1247.
- Mahdavinejad, M., &Molaee, M. (2011). The result of delayed projects on publics' satisfaction in Tehran. In 2nd International Conference on Construction and Project Management IPEDR. Singapore (pp. 16-18).
- Marzouk, M. M., & El-Rasas, T. I. (2014). Analyzing delay causes in Egyptian construction projects. Journal of advanced research, 5(1), 49-55.
- Masieka, Z. J. (2012). Factors influencing implementation of Adventist Development Relief Agency's educational projects in Nyamira County, Kenya (Doctoral dissertation, University of Nairobi, Kenya).
- Mayavi, P. M. (2015). Influence of risk management process on the quality of construction of petrol station projects in Kenya: A case of petrol stations in Westlands constituency, Nairobi county, Kenya (Doctoral dissertation, University of Nairobi).
- McCaffer, R., 2013. Modern construction management, Seventh ed. Wiley-Blackwell, Chichester, UK.
- McLeod, L., Doolin, B., &MacDonell, S. G. (2012). A perspective- based understanding of project success. Project Management Journal, 43(5), 68-86.
- Mohamed M. Marzouk, (2012), Analyzing delay causes in Egyptian construction projects: Journal of Advanced Research, Vol.5, issue 1, pages 49-55
- Morris, P., 2013. Reconstructing Project Management Reprised: A Knowledge Perspective. Project Management Journal, 44, 6-23.
- Moskal,B.M.& Leyden, J.A.(2000),Scoring rubric development: validity&reliability; Practical Assessment, Research Evaluation, 7:10, Colorado: Golden
- Moyo, T., Mangore, E., & Chigara, B. (2014). Work Measurement Techniques Utilized byThe Building Industry in The Midlands Province Of Zimbabwe. InternationalJournal of Sustainable Construction Engineering and Technology, 5(1), 42-52.

- Muchungu, M. P. (2012). The contribution of human factors in the performance of construction
- Muguiyi, M.W.(2012), Factors influencing performance of contractors of Government funded Building projects in Kirinyaga county: Extra Mural Studies, University of Nairobi
- Mue, K. R (2009) Factors influencing completion of public building construction projects in Machakos county, Kenya.
- Mugenda,O.Mugenda. (2003). Research methods Quantitative and Qualitative Approaches. Nairobi: ACTS.
- Munywoki, D. L (2014) Factors influencing completion of construction projects. A case of construction projects in Nairobi Kenya.
- Muya, M., Kaliba, C., Sichombo, B., & Shakantu, W. (2013). Cost escalation, schedule overruns and quality shortfalls on construction projects: The case of Zambia. International Journal of Construction Management, 13(1), 53-68.projects in Kenya (Doctoral dissertation, University of Nairobi).

National Police Service Act (2011). Government press. Nairobi

- Ngacho, C., & Das, D. (2014). A performance evaluation framework of development projects: An empirical study of Constituency Development Fund (CDF) construction projects in Kenya. International Journal of Project Management, 32(3), 492-507.
- Nguyen, N. M. (2007). The Challenges of transferring modern project management principles and methodologies to developing countries. Proceedings 2007 PMI Global Congress.Hong Kong: PMI.

Nyakazeya, P. (2012). Construction sector to grow. Financial Gazette, 22, 16.

- Nyambura, N. M (2015) Factors influencing completion of building projects in Kenya,ministryof land,Housing and urban development, Nairobi County.
- Ochieng, E. G., & Price, A. D. F. (2010). Managing cross-cultural communication in multicultural construction project teams: The case of Kenya and UK. International Journal of Project Management, 28(5), 449-460.

- Ochieng, F., & Ruth, T. (2013). Factors influencing management of CDF projects: A case of Ainamoi Constituency, Kericho County. International Journal of Science and Technology, 2(1), 1-15.
- Ogunsanmi, O.E. (2013), Effects of procurement related factors on construction project performance in Nigeria.
- Oino, P. G., Auya, S., &Luvega, C. (2014). Women Groups: A Pathway to Rural Development in Nyamusi Division, Nyamira County, Kenya. International Journal of Innovation and Scientific Research, 7(2), 111-120.
- Olaoluwa, O., &Adeyemi, A. Y. (2009). Effects of placing methods on concreting productivity. In Proceedings of The Botswana Institution of Engineers (BIE) Conference, Gaborone, Botswana (pp. 154-161).
- Ondari, P. O., &Gekara, J. M. (2013).Factors influencing successful completion of roads projects in Kenya. International Journal of Social Sciences and Entrepreneurship, 1(6), 26-48.
- Ondego, B., &Moturi, C. (2016). Evaluation of the Implementation of the e-Citizen in Kenya. Evaluation, 10(4).
- Oyewobi,L.O., Abdullahi, M.A. and Mwokobia, L.,( 2011), Impact of corruption on effective project delivery of building projects in Abuja. Interdisciplinary Journal of Contemporary Research in Business. Vol.3 issue 3, p1051
- PMBOK Guide, Project Management Book of Knowledge Guide
- Rahaman, M. M. (2011). Access to financing and firm growth. Journal of Banking & Finance,35(3), 709–723.
- Rajablu, M., Marthandan, G., Yusoff, W.F.W., (2015).Managing for Stakeholders: The Role of Stakeholder-Based Management in Project Success. Asian Social Science, 11, 111-125.
- Ralph, A. O. and Iyagba, R. (2012), Factors affecting contractor's performance: A Comparative Study of Non value- Adding Activities in Nigeria and Indonesia. Journal of Emerging Trends in Economics and Management Sciences (JETEMS), 3(5): 467-474
- Ransley, (2009), Kenya Police Reform Reports

- Ringera, J. K. (2015). Factors influencing completion of selected Kenya police service housing projects in central Kenya (Doctoral dissertation, University of Nairobi).
- Saleh, S. A. S. (2008), Factors affecting performance of construction projects in the Gaza strip: The Islamic University- Gaza, Palestine
- Salthouse, T. (2012).Consequences of age-related cognitive declines. Annual Review of Psychology, 63, 201.
- Sambasivan, M., & Soon, Y. W. (2010). Causes and effects of delays in Malaysian construction industry. International Journal of project management, 25(5), 517-526.
- Schwalbe, K.(2010), The value of project Management: Information Technology Project Management. Microsoft.
- Scottish Capital Investment Manual, (2011), Common project failures and remedies (www.scim.scot.nhs.uk)
- Shehu, Z., &Akintoye, A. (2010). Major challenges to the successful implementation and practice of programme management in the construction environment: A critical analysis. International Journal of Project Management, 28(1), 26-39.
- Siemens, G. (2014). Connectivism: A learning theory for the digital age.
- Soham, M., & Rajiv, B. (2013). Critical factors affecting labour productivity in construction projects: case study of south gujarat region of india. International Journal of Engineering and Advanced Technology, 2(4), 583-591.Turner, J. R. (Ed.). (2013). Contracting for project management. Gower Publishing, Ltd.
- The Constitution of Kenya (2010). Government press. Nairobi
- Universal Declaration of Human Rights-UDHR (1948)
- Whitty, S. J. and Maylor, H. (2009), "And then came Complex Project Management (revised)", International Journal of Project Management, Vol. 27 No.3, pp. 304-310.Harris, F., Xia, B., & Chan, A. P. (2012).Measuring complexity for building projects: a Delphi study. Engineering, Construction and Architectural Management, 19(1), 7-24
- Yumi, S. and S. Beaudy, (2007), Monitoring and Evaluation, Small grants programme: World Bank.

- Zami, M. S. (2011). Potentialities of contemporary earth construction addressing urban housing crisis in Africa–A lesson from Zimbabwe. Plenary Paper Session I: Water, 66.
- Zulu, S., &Chileshe, N. (2010). Service quality of building maintenance contractors inZambia: a pilot study. International Journal of Construction Management, 10(3), 63-81.

## **Appendix I: Letter of Transmittal of Data Collection instruments**

Jacinta Kalondu Mutua P.O. Box 146-01000 Thika, Kenya.

## TO WHOM IT MAY CONCERN

Dear Sir/ Madam,

# **RE: Factors Influencing performance of Selected Kenya Police Housing Projects; A** <u>Case of Kiambu County in Kenya</u>

I am a student at The University of Nairobi undertaking M.A Project planning and Management. I intend to carry out a research on the **Factors Influencing performance of Selected Kenya Police Housing Projects; A Case of Kiambu County.** 

You are being requested to take part in the in this research project. I therefore request you to willingly respond to the questionnaire. Information that you will provide is intended for academic purpose only and will be treated as confidential.

Thanks in advance.

Yours faithfully

Jacinta Kalondu Mutua

## **Appendix II: Questionnaire**

This questionnaire is designed to gather information regarding the factors influencing the performance of selected Kenya police housing projects; a case of Kiambu County Kenya.. Kindly respond as appropriate.

Date.....Interviewer....

Location.....

Questions	Codes	Response
Gender of Respondent	1=Female; 2= Male	
Age of Respondent	Below 20	
	20-25	
	26-30	
	31-35	
	36-40	
	40-45	
	Above 45	
How long have you been in	Below 1 Year	
construction projects	1 – 5 Years	
	6 – 10 Years	
	11 – 15 Years	
	Over 15 Years	

## 1. Bio-Data

## 2. Project Planning

To what extent do you agree or disagree with the following statements?

Statement	1=Strongly	2=Disagree	3=Neutral	4=Agree	5=Strongly
	Disagree				Agree
Successful performance of					
housing projects involves					
performing the activities					
of the project according to					
the plan					
Planning is critical for					
performance of					
construction projects					
There is lack of proper					
channels to address project					
management					
Planning makes it possible					
to manage risk associated					
with construction					
Monitoring status reduces					
the cost construction					
Planning enhance					
communication within the					
constriction project					

# 3) Project Control

To what extent do you agree or disagree with the following statements?

Statement	1=Strongly	2=Disagree	3=Neutral	4=Agree	5=Strongly
	Disagree				Agree
Budgeting and fund					
release influence					
performance of national					

police houses			
Scheduling is critical in			
performance of			
construction of projects			
Team structure influence			
performance of			
construction project			
All construction projects			
should have control			

# 4) Motivation of Project Team

What extent do you agree or disagree with the following statements?

Statement	1=Strongly	2=Disagre	3=Neutral	4=Agree	5=Strongly
	Disagree	e			Agree
Employee motivation					
impacts performance of					
construction projects.					
Character of a workmate					
influence performance of					
construction projects					
Job security increases					
motivation of employees					
Team motivation has					
enhanced equity in					
construction projects.					

# 5) Competency of project team members

What extent do you agree or disagree with the following statements?

Statement	1=Strong	2=Disagr	3=Neutral	4=Agree	5=Strongly
	ly	ee			Agree
	Disagree				
Defects cause project delay					
Clients are satisfied with					
construction projects					
Contractors use updated					
technology to construct the					
houses					
Contractors take less time to					
complete the police houses					

## Thank You

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	375
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

# Appendix III: Krejcie and Morgan Table

TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

Note: "N" is population size "S" is sample size.]

Krejcie, Robert V., Morgan, Daryle W., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.

# Appendix IV: University letter

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iour Ref. Dur Ref.	Maio Campas Ganihi Wang, Grand Elour P.O. Intr 20127 S. A. 18 O. U. T
Letephone: 318262 Kat. 638	25* September, 2017
REF: UON/ODe1/NLC/29/303	
RE JACINTA KALONDU MUTI	UA - REG NO: 150/86424/2016
The above named is a studer Learning Campus. School of Learning pursuing Master of	at at the University of Nairobi Oper, Distance and e- Open and Distance Learning, Department of Open Aris in Project Planning and Management. arch contribut. "Influence of Determining Factors on
Performance of Selected I Kenya." Any assistance given to her wi	Kenya Ponce Projects: A Case of Roman Comp.
CAREN AWILLY CENTRE ORGANIZER NAIROBI LEARNING CENT	TRE

#### **Appendix VI: Authorization letter**



#### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone (254-20-221347), 2241-349,5310571,2215420 Fax - 234-20-318245,318219 Email og@nacesti.go.ke Webelle : www.nacesti.go.ke When reglying picase quote NACOSTI, Leper Kahere Off Waiyaki Way P.O. Bax 20523-00100 NAIROBI-KENYA

Ref No. NACOSTI/P/18/33443/26306

Date 2nd November, 2018

Jacinta Kalondu Mutua University of Nairobi P.O. Box 301970-00100 NAIROBI

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "Influence of determining factors on performance of selected Kenya Police Housing Projects: A case of Kiambu County of Kenya" I am pleased to inform you that you have been authorized to undertake research in Kiambu County for the period ending 2<sup>nd</sup> November, 2019.

You are advised to report to the County Commissioner and the County Director of Education, Kiambu County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

## (CODFREY P. KALERWA MSc., MBA, MKIM FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner-Kiambu County.

The County Director of Education Kiambu County.

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#### **Appendix V: NACOSTI Research Permit**

