PROJECT CONSTRAINTS MANAGEMENT AND COMPLETION OF CONSTITUENCY DEVELOPMENT FUND PROJECTS IN NAIROBI CITY COUNTY, KENYA.

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS, ECONOMICS AND TOURISM IN PARTIAL FULFILMENT FOR THE AWARD OF DEGREE IN MASTER OF BUSINESS ADMINISTRATION (PROJECT MANAGEMENT) OF KENYATTA UNIVERSITY

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DECLARATION

Declaration by candidate:

I declare that this research project is my original work and has not been presented for any award in any other university.

Sign_____

Date_____

MARY KINANU KINOTI

D53/CTY/OL/32065/2016

Declaration by Supervisor

I confirm that the work in this project is done by the candidate under my supervision as the appointed university supervisor.

Sign_____

Date_____

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DEDICATION

I dedicate this work to God the Father by whose guidance I have been able to reach this far. My mum who is a cancer warrior has been my source of inspiration and strength.

ACKNOWLEDGEMENT

Without the support and encouragement of many people, I would not have been able to write this project. I would like to thank Dr. Paul K. Sang for his objective advice and friendly support throughout the writing process. I would also like to thank the management and professors at the University. Finally, I congratulate all my friends for their encouraging words and for giving me strength even though I am in the process of writing suggestions.

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ABBREVIATIONS AND ACRONYMS

BOM	Board of Management
CDF	Constituency Development Funds
GOK	Government of Kenya
IEA	Institute of Economic Affairs
NACOSTI	National Council of Science, Technology and Innovation
NMC	National Management Committee
NTA	National Taxpayers Association
PM	Project Management
QA	Quality Assurance
QC	Quality Management
SPSS	Statistical Package for Social Sciences
SWOT	Strengths, Weaknesses, Opportunities and Threats
TQM	Total Quality Management

OPERATIONAL DEFINITION OF TERMS

Cost Management	involves the evaluation of actual cost and standard cost in the determination of project profitability.
Project Completion	refers to the delivery of the CDF project to secondary schools within the time limit specified in the contract or agreement between the parties.
Quality Management	is considered in terms of process quality, product quality, and organizational quality
Resource Management	is the aspect of project management that deals with the human, financial, allocation, and resource requirements of a project.
Time Management	refers to the way project managers plan projects and activities on time.

ABSTRACT

Due to fundamental flaws in its legal framework, the constituency development funds' implementation is marked by controversies and hostility. For example, the constituency development funds' design discourages integration with current development mechanisms, leading to overlap and, occasionally, double funding. Additionally, the fund is managed in an undemocratic manner with little accountability. Project completion has been delayed as a result of this. Therefore, the purpose of this study was to examine how constituency development fund projects in Nairobi City County were completed and how project constraints were managed. Specifically, the study sought to determine the influence of time, quality, cost, and resource management on the completion of Constituency Development Fund projects. The study was anchored on Crosby's quality theory, the stakeholder theory, and Deming's theory of total quality management. Both descriptive and explanatory research designs were adopted. The unit of analysis was seven secondary education projects funded through the constituency development funds in Roysambu Sub-County between the years 2015 and 2019. The unit of observation was 84 project management committee members. Because the target group is small, a census was done. To gather primary data, a structured questionnaire was utilized. Utilizing descriptive statistics like means and percentages, the data was examined. The correlation between the independent and dependent variables was ascertained using Pearson correlation and regression analysis. The findings indicated that time management, quality management, cost management, and resource management had a positive and significant influence on completion of Constituency Development Fund projects. The study concluded that prioritization of projects based on their needed enhanced their completion. Timely allocation of resources during project implementation enhanced project success. Lack of quality checks during project implementation delayed project success. Further, regular budget review and regular review of various projects for various projects enhanced project success. The study recommended that the project managers in various constituency projects should ensure that the goals of the projects are set early enough so as to enhance project success. The project managers should ensure they employ qualified quality assurance officers who can be able to do standard quality checks of projects. The study suggested that constituency managers have a clear vision and objectives that place a priority on resource mobilization. Additionally, it is advised that the government constantly make sure to allocate enough funding for the projects in order to improve its completion.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The project completion period is increasingly becoming an important issue for stakeholders (Mok, Shen & Yang, 2015). This creates stress in project management from issues such as cost overruns, inflation, customer (sponsor) pressure, and possible disputes and claims leading to legal proceedings or arbitration. Delaying the completion of significant projects is a worldwide occurrence. Due to the delay, the project's funding does not reach their intended beneficiaries, which results in cost and time overruns (Mwirabua & Mohinder, 2020).

A key component and criterion of project success is frequently timely project completion. Projects are increasingly being used as the building blocks for organizational strategic management (Gaturu & Muturi, 2014). A project's success depends on how long it takes to complete from beginning to end. School projects call for the execution of carefully designed procedures that transform financial, human, and material resources into goods or services that benefit pupils, educators, and other stakeholders (Eskerod, Huemann & Savage, 2015).

According to a report published in the US by the chairman of the Standish Group, construction projects did not satisfy the builders (CHAOS, 2009). According to the research, 32% of projects were finished on time, on budget, and at the required quality level; 44% of projects were late, over budget, and with fewer features; the results were questionable; and 24% of projects were canceled before delivery due to failure.

In Palestine, the lack of materials was the most important factor in implementation, which hindered project completion (Salunkhe & Patil 2014). Rising material prices, the availability of resources as planned throughout the project's life cycle, the average delay due to closures resulting in material shortages, the availability of highly experienced and qualified employees, the quality of equipment and raw materials in project companies, and project managers' leadership skills were among the other factors they identified.

Nigeria also has problems with project delays and performance. Aje, Adedokun and Ibironke (2014) point out that one of the most serious problems is project cost overruns so that projects are completed in larger numbers than the original amount. In Tanzania, the CDF was introduced in 2009 as an independent mechanism that directs a certain part of the state budget to constituents to finance small local development projects, most of which are elected by parliamentarians (Tsubura, 2014). These projects cover the education sector, in particular the construction of school infrastructure and renovations. Following the federal government's disbursement of funding, a school management committee identifies and assigns school-specific projects based on priority (Sambasivan et al., 2017).

In Kenya, educational projects such as the construction of laboratories, the concept of school equipment in Kenya, construction of classrooms, information and communication technology, construction of canteens, water supply, etc. to adversity or worse, never to be exceeded. steps on the document. Therefore, the successful completion of the project largely depends on good governance and organization as well as close coordination between requirements and specialized agencies at the local level (Ndagi, 2013).

1.1.1 Project Completion

A project is a brief endeavor taken on by a team of people to develop a special good or service within a set time frame and budget in order to produce a quantifiable result (Babalola et al., 2015). Project completion is defined as the delivery of the project within the deadline set out in the contract or as agreed between the parties (Kahiga, 2015).

Completing projects on schedule is a major contributor to a company's competitive advantage (Enshassi, Ayash & Mohamed, 2018). This is founded on the understanding that the ability to meet production targets within the allocated time determines whether or not goals are met. Despite the fact that timely project completion is one of the success elements, it is critical to manage each project individually (Khan & Al Maktoumi, 2020). Barata (2014) measures project completion as the actual completion of the project following the project's strategic plan. Langat (2015) operationally completed a project with incomplete classrooms, incomplete toilets, and incomplete gates. As a

proxy for project completion, Kahiga (2015) employs the completion time (days, weeks, months, or years) before and after the intended period.

1.1.2 Project Constraints Management

Project time management depends on how the project manager implements project plans and activities (Chin & Hamid, 2015). Managers must set deadlines for project tasks. This deadline must be followed to the letter. Setting a deadline, though, is useless if management plans to postpone it. Timing problems can only be solved by a project manager with focus and concentration. Another method for project managers to address time management challenges is to delegate responsibility (Brewer & Dittman, 2013). As a result, efficient time management can reduce the amount of time lost during the course of a project.

Project cost management involves estimating actual costs and standard costs to determine project profitability (Smith, 2016). Actual costs are used to break down the costs connected with a project. This aids the management team in determining if the project's production processes are operating at peak efficiency. The distinction between actual and standard costs is obvious. When working with standard costs, it accepts standard values and tracks resource consumption using those values. Tracking is done in terms of hours or units used. Actual costs, on the other hand, relate only to the costs incurred during the project and not to the units produced.

Quality management can help improve project implementation. Quality has three dimensions. This is seen in terms of process quality, product quality, and organizational quality (Azman, Ramli & Zawawi, 2018). All these dimensions are of interest to any researcher who wants to improve company performance. The efficacy of quality management tools in strengthening the three dimensions is dependent on the project management aspects of the implementation process. As a result, continuing project quality is communicated in order to measure stakeholder satisfaction.

A component of project management known as resource management deals with the allocation of resources, including human, financial, and project resources (Bowen, 2015). It involves locating resource-based activities, planning resource allocations, monitoring resource use and productivity, optimizing allocations, and calculating

resource efficiency. Tasks involving labor, machinery, money, and materials must be planned, allocated, and scheduled (Haugan, 2014).

1.1.3 Constituency Development Fund Projects

The CDF was formed by the CDF Act of 2003, with the primary goal of combating low-level poverty by delivering at least 2.5 percent of normal government development funds to citizens and lowering poverty. The CDF Act, which had been updated in 2007, was abolished in January 2013 and replaced with the 2013 CDF Act, which complies with the 2010 Kenya Constitution.

The National Steering Committee has adopted the same management program for all CDF schools in Kenya, including schools in Ryosambu District (NMC). Under the Education Act, Cap211, the school is officially authorized and has a Board of Directors (BOM) (GOK, 1987). The impact of management on project costs, the impact of interests on CDF project management, the impact of community participation on CDF project management, the impact of fund management on CDF project management, and the impact of the CDF project management committee all have an impact on the specifications in CDF project management (Simiyu, 2015).

1.2 Statement of the Problem

A parliamentary bill, CDF ACT, (2003), established the CDF, which was updated in 2013, CDF ACT, 2013. (2013). The goal is to transfer national resources to local communities for economic development and to allow local communities to participate in socio-economic activities that are connected to their growth (Barasa, 2014).

The legal system's fundamental weaknesses have led to controversy and hostility around the funds' implementation. For example, the CDF's architecture does not encourage integration with current development structures, which leads to overlap and, occasionally, double funding. Additionally, the fund is managed in an undemocratic manner with little accountability (NTA, 2016). A 2015/2016 report by the National Taxpayers Association (NTA) also stated that 40 percent of CDFs could not be considered, 20 percent of projects were unsuccessful, and only 5 percent were completed. The Economic Survey Report (2016) shows that the implementation of NG-CDF projects in Kenya is on average 42%. In addition, a survey conducted by the Institute for Economic Affairs (IEA) in 25 constituencies to determine public

participation in the CDF development process showed that only 38.7% participated in project selection and priority (IEA, 2018).

Past literature investigated the link between project constraints management and project completion. For instance, studies such as Kahiga (2015), Barasa (2014), and Langat (2015) have analyzed factors that determine the completion of projects. However, there is scanty information on the impact of project constraints administration on CDF project completion in Roysambu Sub-County. The current research, therefore, aimed to bridge the underlying research gap.

1.3 Research Objectives

1.3.1 General Objectives

To investigate management of project constraints and completion of CDF projects in Nairobi City County.

1.3.2 Specific Objectives

i. To establish the influence of time management on the completion of constituency development fund projects in Nairobi City County.
ii. To examine the influence of quality management on the completion of constituency development fund projects in Nairobi City County.
iii. To determine the influence of cost management on the completion of constituency development fund projects in Nairobi City County.
iv. To evaluate the influence of resource management on the completion of constituency development fund projects in Nairobi City County.

1.4 Research Questions

i. What is the influence of time management on the completion of constituency development fund projects in Nairobi City County?
ii. What is the influence of quality management on the completion of constituency development fund projects in Nairobi City County?
iii. How does cost management influence the completion of constituency development fund projects in Nairobi City County?
iv. To what extent does resource management influence the completion of constituency development fund projects in Nairobi City County?

1.5 Significance of the Study

The research findings are valuable to non-governmental groups as information for project implementation in other community development programs that do not require government support. NGOs working with CDF offices in different constituencies may also use the information to decide how to contribute from their CDF partners to project efforts.

Governments may benefit from the research numbers because they may draw lessons from the findings and use them to develop new guidelines for managing future CDF programs. Government benefits from this study may cover all levels of government operations down to the lowest level of the development unit, the constituents.

The CDF Board of Directors may be the direct beneficiaries of this outcome. By studying the projects managed by the Nairobi City Council, it may form an assessment guide in which the Steering Committee may use the results to reflect their performance in previous projects and create room for improvement. Therefore, the results of this study are a useful tool for evaluating past projects in Kenya.

In addition, this research provides much-needed empirical evidence in the field of project management. In particular, empirical evidence is created to support or challenge the effects of management, quality management, and project completion time. The findings back up the notion and offer concrete data for potential future research topics.

1.6 Scope of the Study

This study looked into the management of project constraints and the completion of CDF projects in Nairobi City County, Kenya. The study focused on projects in Roysambu Sub-public County's secondary schools. The key dimensions included – time, quality, cost resource management. In terms of time, the study took place from January to August 2022. This gave us time to gather the necessary information, analyze it, and write a report.

1.7 Limitations of the Study

This study was limited to Roysambu Sub-County and may not be condensed to other sub-regions across the country. Future scientists however, have the opportunity to concentrate on other fields. This study was intended for school project staff and was difficult to access. However, the researcher agreed in advance with the management of the facility and thus was able to arrange a meeting with the participants. Respondents were also reluctant to provide information. However, the researcher assured them of confidentiality.

1.8 Organization of the Study

Chapter one discussed the basics of research and research problem. Chapter two discussed theories related to the research constructs and also reviews studies in a similar field. The approach that was employed in this study was described in depth in chapter three. The study's findings and discussion were provided in the fourth chapter, and the summary, conclusions, and recommendations were highlighted in the fifth chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section highlighted the pertinent research that was connected to the objectives of the study. The paper featured a conceptual framework, an empirical review, a description of research gaps, and a theoretical summary.

2.2 Theoretical Review

The study supported by Crosby's quality theory, the stakeholder theory, and Deming's theory of total quality management

2.2.1 Crosby's Quality Theory

Crosby (1989) proposed that management engagement is critical for improving production quality, but each participant must do his or her share and be accountable (Evans & Lindsay, 1993). Crosby believes that the failure of the quality system is due to a lack of management and dedication. Quality is defined as the development, design, production, marketing, and servicing of goods and/or services that are the most cost-effective and usable for consumers. To accomplish these aims, all aspects of the organization (top management, offices, factories, and individual divisions such as manufacturing, architecture, engineering, analysis, planning, consumer forecasting, governance, accounting, inventory, warehousing, advertising, servicing, employees, labor relations and public affairs) must work together (Evans & Lindsay, 1993).

Therefore, quality management helps companies to determine where to invest time and money to ensure the achievement of cost-oriented quality and to differentiate products/services from competitors. This means ensuring that each phase of the development cycle is anchored to customer needs and functioning within the development process to facilitate the use of tools, techniques, and other internal experiences at the right point in time (Costin, 1994).

Therefore, the current study drew majorly on the theory based on the principle that to ensure quality is achieved and maintained, the leadership has to be accountable for the whole process. In addition, the theory advocates that quality management is a derivative of each stakeholder's role at each phase of implementation to ensure that the process is

effective and delivery of services is timely not only or quality. It informed this research on the relationship between time management, resource management, and CDF project completion.

2.2.2 Stakeholder Theory

Mitroff (1983) proposed the theory, which examines morals and values in organizational management, such as corporate social responsibility, the market economy, and social contract theory. As shown by Mitroff, the fundamental concept of the Stakeholder Theory is that the aim is to involve a stakeholder in quality readiness, and action. The management or organizations acting more in line with stakeholder theoretical values tend to be constructive or at least welcoming when coping with both high importance (Mitroff, 1983).

The stakeholder model, for example, allows managers to pay close attention to a specific stakeholder to the degree that the stakeholder is directly or potentially at risk of damage or injury caused by the decisions and activities of the organization (Alpaslan, Green & Mitroff, 2009). The priorities of all stakeholders have an inherent value, and it is presumed that no group of interests dominates the others (Donaldson & Preston, 1995).

As stated by Leisyte and Westerheijden (2014), the strength of the stakeholder group is related to the duty to maintain knowledge and standard of education and maybe of high standing in community or industry via practical or normative means. An influential stakeholder has a significant voice in policy creation and affects the improvements that have been made. The credibility of the stakeholder group can be interpreted as generally held desires to be reflected in the different governing bodies or program committees. Finally, the urgency of the stakeholder implies the involvement and engagement of the stakeholder in discussions, the submission of suggestions and comments, and the follow-up of intervention reports, such as program development.

Employee training and empowerment improves the relationship between the company and other stakeholders and creates synergies across the supply chain (Sergio, 2011). Another example is unrealistic deadlines as incomplete information on supplier and stakeholder qualifications can lead to poor selection (Ngambi & Nkemkiafu, 2015). This ensures that the stakeholders' involvement in the project affairs is recognized and

they have a say in ensuring the processes adhere to the quality of the services. Therefore, this theory advises the current study on the importance of engaging all players of the CDF projects towards ensuring that quality management is in place and that every stakeholder is fully engaged in the process. This ensures that the whole system is in sync and processes operate smoothly. As a result, the theory explains the link between project quality management and project completion.

2.2.3 Deming's theory of total quality management

TQM as defined by Deming, is based on 14 management concepts. It is well-known for its good value for money, which is proportionate to the product of labor input and overall cost. When a corporation seeks to save costs, the problem is that costs rise as efficiency decreases (Anderson, Rungtusanatham & Schroeder, 1994). This is the same basis for continuous improvement that can help improve quality while lowering costs (by reducing waste, recycling, labor, and litigation while increasing customer loyalty). Deming argued that the production process is not a series of discontinuous processes, but a complete system, and when you look at it as a whole, the possibility of increasing efficiency is easier to see.

The four points of Deming's framework are as follows: System Appreciation-understanding how the organization's procedures and structures work; Variety Information-understanding the differences that exist and the causes of variety; Information Theory-understanding what should be understood and Psychology Knowledge-understanding human behavior (Rungtusanatham, Ogden & Wu, 2003).

The principle is important in this research as the emphasis has been placed on managing the expenses arising in the company operations and the benefits it has on improving the efficiency of operation and the final output of the company. Cost is to reduce the efficiency and thus, with an increase in costs, the company is subjected to poor quality delivery of services and products. This theory, therefore, informed the relationship between cost management and the completion of projects.

2.3 Empirical Review

A literature review is necessary because it demonstrates how the research project connects to earlier studies. This shows the uniqueness and importance of the research

question and, in particular, how it differs from other studies (Long, 2014). In this section, previous studies related to the study variables are reviewed.

2.3.1 Time Management and Project Completion

Sanchez and Terlizzi (2017) sought to identify time management practices in which organizations can optimize IP development project CTPMS. The study used a hierarchical model to analyze 899 SI initiatives from top banks and discovered that project duration and delay had a favorable influence, while team size and distribution had a negative impact. The findings can be used to help with things like allocating team members and determining priorities, among other things. However, this study reveals content gaps as the focus is on the IP development project CTPMS, while the current study seeks to transfer the results to a CDF project in the Nairobi City District, Kenya.

Chin and Hamid (2015) tried to examine the practice of time management of construction projects using construction planning, recording, and monitoring in Indonesia. The findings revealed that project time management aided in the completion of building projects. In addition, the project manager is in charge of the most important aspects of the planning method declaration and project planning talks. However, because this study focused on initiatives in Indonesia, which is a different environment than Kenya, it has a contextual gap.

Aggor (2017) examined the connections between project success criteria and budget in Ghana's construction sector. For this study, 116 project managers were chosen at random from a group of construction industry workers in Ghana's Greater Accra area. The results showed a marginally positive connection between the project budget and the independent factors (time, quality, safety, environmental impact, and location conflicts). In Ghana's construction business, paying attention to important performance metrics like timing, disputes, and environmental implications can help enhance project outcomes. The study was, however, conducted in the Ghanian building construction sector and provided little evidence on the CDF projects.

2.3.2 Quality Management and Project Completion

Kwasira, Wambugu and Wanyoike (2016) examined quality management measures for the successful completion of construction projects in Nakuru. All quality management, quality assurance, quality improvement, and quality planning procedures have a strong

and favorable link with the successful completion of building projects, according to the findings. To measure the link between variables, the research used a descriptive research approach, which is inappropriate.

Meijer and Visscher (2017) examined the effect of structural quality management in seven specially selected European countries. This report is based on a series of desktop research initiatives conducted in seven European nations from 2010 to 2016. According to the report, quality management is becoming increasingly privatized, and the management framework outlines the control and compensation mechanisms throughout the construction process. Process management highlights the security implications of complex structures. The quality of the constructors is put under far less scrutiny. However, because the study used desktop research, it has a methodological flaw. The current study employed an explanatory research design.

Salvi and Kerkar (2020) investigated the impact of quality assurance and quality management on the effectiveness of construction projects and management. Internal quality management (QC) and quality assurance (QA) are becoming more crucial for project managers, according to studies. Installed system flaws or breakdowns can result in exorbitant charges. Quality assurance and internal management are key components of every building process to promote project standards and uniformity. Due to considerable improvements, significant technology breakthroughs, and high consumer expectations, the necessity for QA and QC in building projects has expanded significantly in recent years. Because QA and QC ensure that the building process is consistent and that materials are used effectively, consumers benefit from these processes because they save a lot of money. The study has a conceptual flaw because it didn't concentrate on getting projects finished.

Lou, Xu and Wang (2017) evaluated design features and difficulties in project quality management. The quality of project construction is increased by pre-management, process management, and post-management by merging BIM and AR technologies in specific applications during the construction stage. The use of BIM technology and construction quality management for future urban complexes intends to establish a benchmark and improve project quality and production efficiency in the construction sector. This study demonstrates that quality data collected by construction management

professionals are the foundation of construction quality management. However, this study presents a gap in content as it does not focus on project completion.

The goal of Ljevo, Vukomanovi, and Debo (2018) is to simulate the impact of the project management quality management process on the quality of buildings created. This study is based on a project case with interviews for target participants in Bosnia and Herzegovina from each phase with predetermined steps. Studies show that product quality for each phase of the project is highly rated as the most important factor, namely customer satisfaction in the final phase. The qualitative elements of the PM process can be described in three additional factors, according to the results of the factor analysis of the definition and planning stages (planning and leadership, participation and teamwork, and expertise and knowledge). However, the research was conducted in Bosnia and Herzegovina, which creates context gaps.

2.3.3 Cost Management and Project Completion

Abobakr (2018) examined the need for cost management processes (before and after contract signing) in construction projects. The proposed research topics cover all cost estimation, cost management, and management processes used in several well-known construction projects. This study reviews relevant literature such as published magazines, technical documents, books, publications of various data on construction costs. The study revealed that the prestige of the developer and the expenditure were the key constraints of any mixed-use development project. The contractor must also precisely balance the desired output, the predetermined period, and the approved budget to meet the goals of the project. From the beginning of the design stage, the contractor can advise the client to develop cost management systems mechanisms so that costs can be management-led and tracked during the design and development phases. This constructive and analytical approach allows all partners (clients, vendors, and subcontractors) to consider their positions and obligations. However, the study focused on construction projects and thus the findings cannot apply to CDF projects in Kenya, therefore, presenting a contextual gap.

Faremi, Ogunsanmi, and John (2016) studied the factors that influence cost and schedule management in building projects in Lagos, Nigeria. The findings showed that the key factors impacting the cost and time management of building projects include: planning and paperwork problems, low labor quality, and financial resource

management. It is also important to prevent the low quality of work in the construction industry. Project and development management should also concentrate on the expense, efficiency, and time constraints of the project tripods, while staff employed and mobilized in construction projects should be sufficiently prepared to achieve the required cost and time efficiency. However, the study focused on construction projects in Lagos and thus the findings cannot apply to CDF projects in Kenya, therefore presenting a contextual gap.

In Sub-Saharan Africa, Gbahabo and Ajuwon (2017) investigated the consequences of project redundancy and planning delays. This study uses data from secondary sources such as strategy papers, research reports, and peer-reviewed articles in a research technique. Cost overruns and delays in infrastructure acquisition impacted project implementation, according to the findings. These include inefficient resource distribution, delays, contract conflicts, claims, and litigation, all of which contributed to the project's failure and abandonment. The research suggests building project management capacity and innovative management mechanisms such as benchmarking, public-private partnerships, and computerized cost estimation tools to estimate project costs and timelines. However, reliance on secondarily sourced data presents a limitation of generalizability of the findings since the study lacks first-hand proof from the respondents. This presents a methodological gap.

Olawale and Sun (2010) investigated the impact of cost and time as impediments to construction project management and mitigation strategies. 250 construction project businesses in the UK were surveyed, and 15 of them were then given in-person interviews. Construction project time and cost management is frequently hampered by design alterations, risk and uncertainty, inaccurate project time/duration estimates, the complexity of the job, and subcontractor failure. This suggests that project impacts are harmed by expense overruns.

2.3.4 Resource Management and Completion of CDF Projects

In Rwanda, Gachuga, Kule, and Ndabaga (2016) looked at the impact of resource management on project implementation. Budgeting, fundraising, resource allocation, and control are all specific variables. This research employs a descriptive correlation design as well as a qualitative and quantitative research strategy. Questionnaires were utilized to obtain information. The findings showed that budget control and project

implementation in Rwanda had a positive relationship. However, because it focuses on project execution and project completion, this study indicates a conceptual gap.

Mumbi (2020) investigated the effect of program constraint administration on building project completion in Kenya's Nakuru District. The impact of scope and resource management on the completion of construction projects in particular was investigated in this study. This study employs a descriptive research design. The intended audience is construction structures that have been registered. The findings revealed a positive and substantial link between scope management and project completion. The study does, however, have a methodological flaw because it used a descriptive survey research approach, which is inappropriate for relational studies.

In Kenya's urban informal settlements, Aira (2016) looked into the factors that affect how non-governmental organization (NGO) projects are implemented. The Undugu Society's 10 Kenyan initiatives are the target group. This study employs a descriptive research design with a qualitative methodology. A multi-cluster sampling approach and a targeted non-probabilistic sampling procedure were used to choose the sample. A self-administered questionnaire was used to collect data for this survey. The research showed that the Undugu community's top leadership often traveled to Kenya to attend project meetings. Stakeholder decisions have a major impact on project implementation, according to the study. Stakeholder involvement in project finance management, project progress monitoring, and fundraising was found to have an impact on project success in this study.

Muriti et al. (2017) looked at the elements that determine how quickly public works projects are completed in Trans-Nzoya County. Resource allocation, project management, project planning, and project monitoring are all things to think about. This study examines 32 of 85 projects that were either implemented by the district government or implemented within the first four years of the administration. According to the findings of this study, project monitoring and on-time project completion are inextricably linked. According to the findings, efficient resource allocation, competent project management, and stringent project monitoring are all necessary components for timely project implementation. Project planning has a negative link with the implementation of public building projects.

2.4 Summary of Research Gaps

The analysis of the research in the preceding section has produced a substantial body of literature and evidence on the impact of management, quality, and time on the completion of CDF programs. However, it has been noted that the majority of the studies have been based on the quality assessment of construction companies and as well the focus has not been on CDF projects. This presented a considerable gap that the current study found worthwhile to fill.

Table 2.1: Summary of Literature Review and Research Gaps

Author &Year	The focus of the study	Research Gap	Focus on the current study
Sanchez and Terlizzi (2017)	To identify the time project management practice through which an organization can optimize the CTPMS of IS development projects	The study however provides a contextual gap since the focus was on CTPMS of IS development projects	The current study therefore, sought to look into the completion of CDF projects in Kenya.
Chin and Hamid (2015)	To examine the practice of time management on a construction project by looking into the planning o construction works, progress records keeping, and monitoring.	Presents a contextual gap since it focused on projects i Indonesia, which is a different environment from Kenya.	The current research focused on projects in Kenya.
Aggor (2017)	To investigate the relationship between budge and project success factors i the Ghanaian building construction sector	The study was, however, conducted in the Ghanian building construction sector and provided little evidence on the CDF projects.	The purpose of this study was to apply the findings to CDF initiatives in Kenya's Nairobi City County.
Kwasira, Wambugu and Wanyoike (2016)	To examine the quality management measures on t successful completion of projects of building contractors in Nakuru town	The study utilized a descriptive research design, which is not suitable for measuring the relationship between variables.	The current study used the explanatory research design.
Meijer and Visscher (2017)	The influence of quality management of constructions in seven purposively selected European countries	Presents a methodological gap since it adopted desktop research.	This study employed an explanatory research design.
Salvi and Kerkar (2020)	The influence of quality assurance and quality management for project effectiveness in constructio and management	Present a conceptual gap since it did not focus on the completion of projects.	The current study focused on the completion of CDF projects.

Lou, Xu, and Wang (2017)	The construction characteristics and construction quality management difficulties of the project	The study presents a contextual gap because it did not focus on the completion of projects.	The current study focused on the completion of CDF projects.
Ljevo, Vukomanović and Džebo (2018)	Impact of the quality management process of the project management proces on the quality of the constructed building.	The findings are resourceful however; the study was base in Bosnia and Herzegovina thus, presenting a contextual gap.	This study, therefore, sought to look into the completion of CDF projects in Kenya
Abobakr (2018)	The necessity of cost management process (pre & post contract stage) in construction projects.	However, the study was focused on construction projects and thus the finding cannot apply to CDF project in Kenya, therefore, presenting a contextual gap.	The current study focuses on CDF projects in Kenya.
Faremi, Ogunsanmi and John (2016)	To establish the factors affecting cost and time management in construction projects in Lagos, Nigeria	However, the study was focused on construction projects in Lagos and thus th findings cannot apply to CD projects in Kenya, therefore presenting a contextual gap.	The current study, therefore, sought to look into the completion of CDF projects in Kenya
Gbahabo and Ajuwon (2017)	To investigate the effects of project cost overruns and schedule delays in Sub-Saharan Africa.	However, reliance on secondarily sourced data presents a limitation of generalizability of the findings since the study lacks first-hand proof from the respondents. This presents a methodological gap.	The current study seeks to incorporate both the use of primary and secondary data to fix the gap
Olawale and Sun (2010)	The impact of cost and time the inhibiting factors and mitigating measures in the management of construction projects	This indicates that cost overruns impact negatively the efficiency of project implication. The study however presents a contextua gap since the focus was base on construction projects in th UK	The current study sought to focus on CDF projects in Kenya.
Gachuga, Kule and Ndabaga (2016)	Effect of funds managemen on project performance in Rwanda	The study reveals a conceptual gap because it focused on project performance and project completion.	The current study focused on project completion.
Mumbi (2020)	Influence of management o project constraints on completion of building construction projects in Nakuru County, Kenya	Research presents a methodological gap since it employed the descriptive survey research design, which is not suitable in relational studies.	This study employed an explanatory research design

Aira (2016)	Factors influencing the performance of NGO proje in the urban informal settlements in Kenya.	The study reveals a contextual gap since it focused on non-Governmental organizations projects	This study targeted government-funded projects.
Murithi, Makokha, and Otieno (2017)	Factors affecting timely completion of public construction projects in Tra Nzoia County.	The indicated a contextua gap because it concentrate on projects in Trans-Nzoia County.	The focus of the current research was CDF projects in Roysambu Sub-County.

Source: Researcher (2020)

2.5 Conceptual Framework

This is a technique that helps researchers become more aware of and understand controllable variables (Osanloo & Grant, 2016). Figure 2.1 showed the conceptual framework.

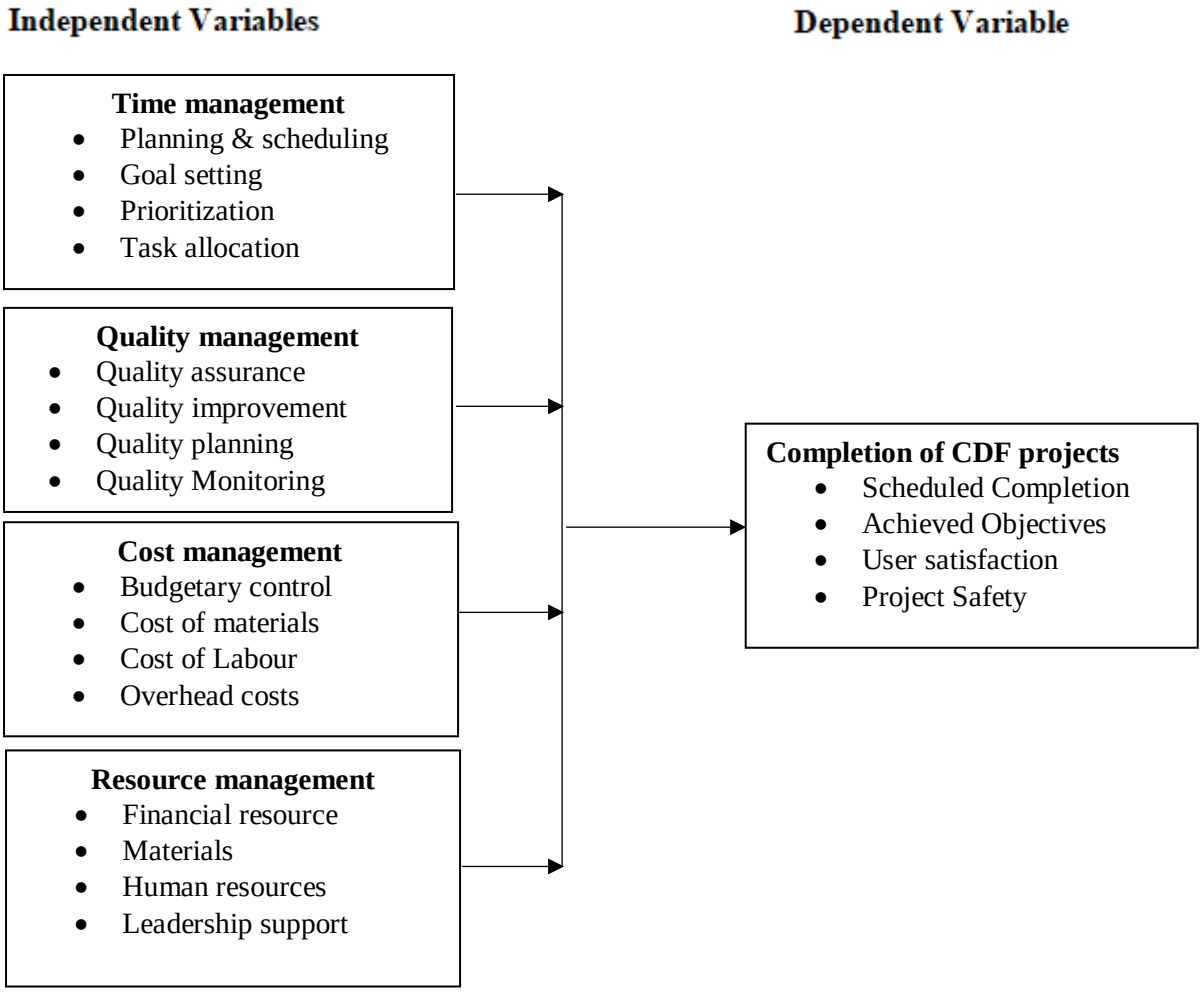

Figure 2.1: Conceptual Framework

Source: Researcher (2020)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The study's methodology is described in detail in this chapter. Included are the following: the research design, the target population, the sample size and sampling method, the data collection tool, the pilot testing, the data analysis, and the presentation.

3.2 Research Design

The research adopted both descriptive and explanatory research projects. Descriptive technique is suitable for showing the properties of the variables studied. Explanatory design is very important to determine the connection between concepts (Rahi, 2017). This research sought to establish the relationship between managing project constraints and completing a CDF project.

3.3 Target Population

The unit of analysis was seven secondary education projects funded through the CDF in Roysambu Sub-County between the years 2015 and 2019 (CDF office, 2020). The unit of observation was seven (7) PMC chairpersons and 77 members. The respondents' selection was appropriate since they were involved in the management and planning of the educational initiatives in Roysambu Sub-County.

3.4 Sample Size and Sampling Technique

A sample is a fraction of the study population and is necessary when the study population is relatively large (Etikan & Bala, 2017). Sampling is the procedure of obtaining the sample from the research population. This study target population is small, and thus a census was conducted. Therefore, all the seven secondary education projects funded through the CDF in Roysambu Sub-County between the years 2015 and 2019 was included in the survey.

3.5 Data Collection Instrument

For this project, primary data were gathered using a standardized questionnaire. Questionnaires are less expensive, time-consuming, and administratively demanding as a form of data collection. Additionally, questionnaires facilitate assembling data once

it has been gathered. The questionnaires contained closed-ended questions relating to the study variables.

3.6 Data Collection Procedures

The data collection process is essential for data collection and producing relevant data for analysis (Groves, 2009). The drop-and-pick method was later used to introduce the questionnaire. Data collection was aided by research assistants. Before starting the process, the research assistants were briefed on the process of collecting data. The training includes how to answer the respondent's questions and what to do if the respondent cannot fill out the questionnaire.

3.7 Pilot Testing

The validity and reliability of the data was determined by performing a preliminary examination of the questionnaire. 10% of the target population was given questionnaires as part of this study. As such, one secondary education project funded through the CDF in Kasarani Sub-County were piloted. William et al. (2011) asserts that a population sample of 5–10% is adequate for testing a research tool.

3.7.1 Validity of Research instrument

In this study, the content and construct validity were looked at. The moderator reviews the questionnaire to confirm its validity, and improvements are made depending on the recommendations. All indicators and metrics were designed using appropriate past knowledge to ensure constructive validity. Only relevant questions measuring certain indicators of the variables researched were included in the questionnaire.

3.7.2 Reliability of Research instrument

The instrument's dependability was evaluated using Cronbach's alpha coefficient, which looks at the internal consistency between the study components of the instrument (Cronbach, 1951). All items having a Cronbach's alpha coefficient below 0.7 were considered weak and eliminated. The maximum value for this coefficient was 0.7.

3.8 Data Analysis and Presentation

The properties of the study variables were explained using descriptive statistics such as mean and percentage. The link between independent and dependent variables was evaluated using correlation and regression analysis. Data analysis was helped by SPSS software. The results were presented using tables and graphs.

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

Where:

Y = Completion of CDF projects

X_1 = Time management

X_2 = Quality management

X_3 = Cost management

X_4 = Resource management

e = error term

β_0 = represents the constant

$\beta_{1, 2, 3, 4}$ are regression coefficients

3.9 Ethical Considerations

The researcher submitted a request to the institution for permission to undertake research. In addition, research permit were obtained from NACOSTI before data collection begins. High ethical standards are ensured by treating information collected from respondents with the greatest possible confidentiality. In addition, the target respondents were informed about the intention of the research.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the response rate, result of reliability tests, descriptive analysis for each of the study variables. In addition, inferential analysis which include correlation and regression are also presented. In chapter two, the findings are further addressed in relation to the empirical literature.

4.2 Response Rate

Table 4.1 indicates the response rate from the questionnaire.

Table 4.1: Response Rate

Response	Frequency	Percentage
Successful	72	85.71%
Unsuccessful	12	24.29%
Total	**84**	**100%**

Source: Research Data (2022)

There were 72 complete and returned questionnaires in all. This represented an overall success rate of responses of 85.71%. As a result, the response rate for this study was satisfactory. This concurs with Babbie's (2004) claim that a response rate of 85.71 percent was adequate and that a return rate of 70 percent is extremely good.

4.3 Reliability Results

Table 4.2 shows the reliability results.

Table 4.2: Reliability Results

Variable	Cronbach's Alpha	Number of items	Comment
Time management	0.701	4	Reliable
Quality management	0.731	4	Reliable
Cost Management	0.825	4	Reliable
Resource management	0.722	4	Reliable
Project completion	0.736	6	Reliable

Source: Research Data (2022)

All of the variables had a Cronbach's alpha larger than 0.7, according to the results in Table 4.2. A Cronbach alpha of 0.7 and higher is regarded as being reasonably sufficient for further study, according to Sekaran and Bougie (2013). The items measuring the variables were therefore, reliable.

4.4 Demographic Characteristics

The demographic characteristics included; gender, age of the respondents, level of education and duration worked as a member of CDF committee.

4.4.1 Gender

Figure 4.1 shows results on gender.

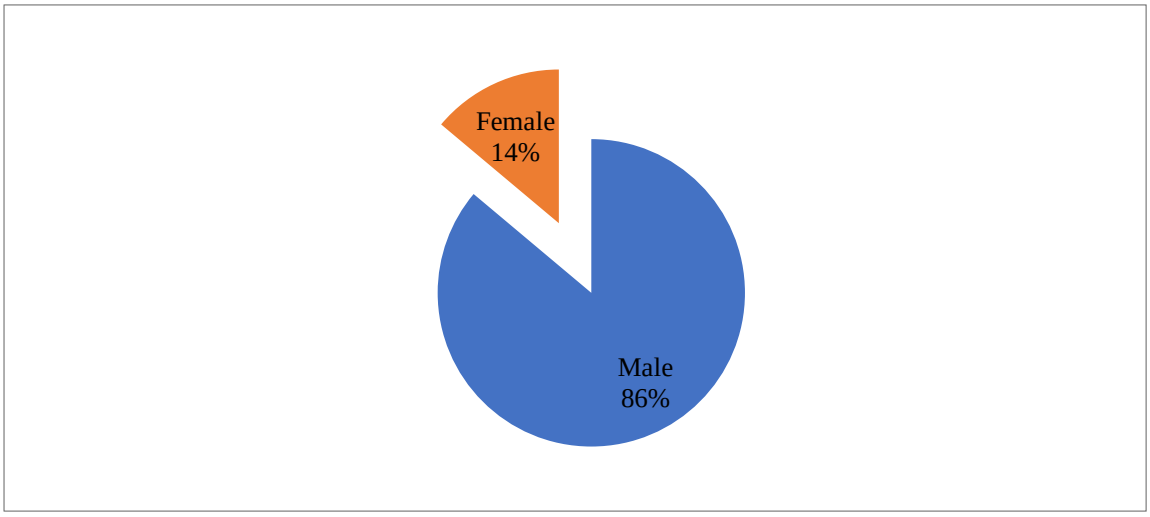

Figure 4.1: Gender

Source: Research Data (2022)

Figure 4.1 revealed that 86 percent of the respondents were men and only 14 percent were women. This suggested that men made up the majority of the project management committees for CDF projects in Nairobi County.

4.4.2 Age

Figure 4.2 indicates results on age.

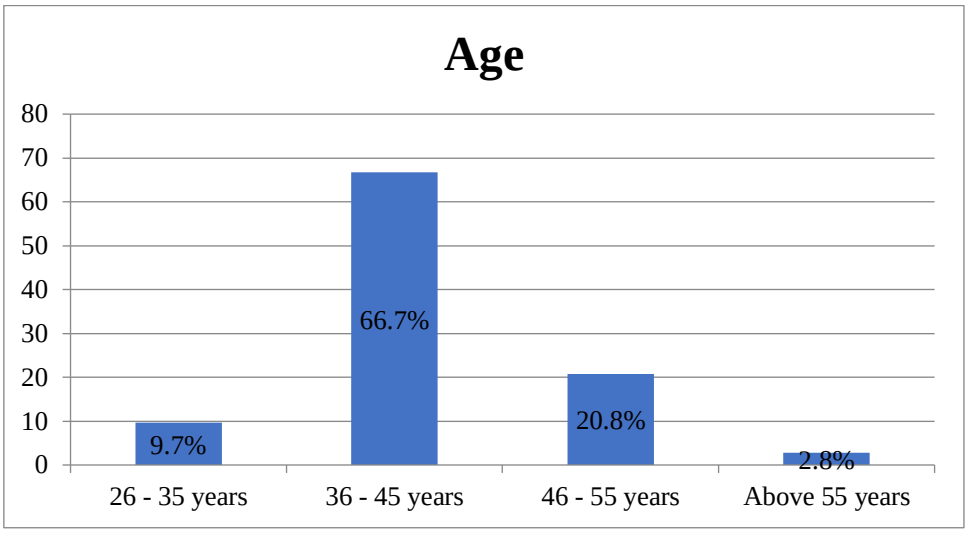

Figure 4.2: Age of the Respondents

Source: Research Data (2022)

Results in Figure 4.2 showed that majority of the respondents, 66.7% were aged between 36 – 45 years, 20.8% were between 46 – 55 years, 9.7% of the respondents were aged between 26 – 35 years while only 2.8% of the respondents who were above 55 years. This implied that most project management committee members were middle aged people and thus were energetic to enhance project success.

4.4.3 Education Level

Figure 4.3 indicates results on education level.

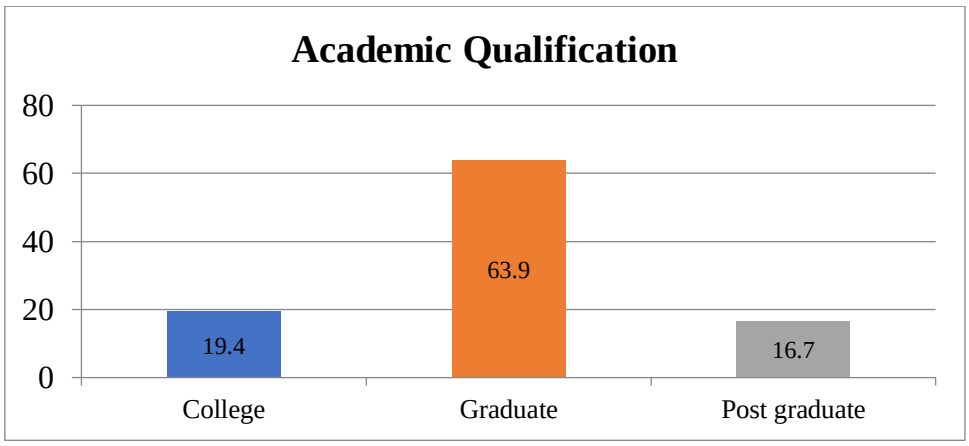

Figure 4.3: Education Level of the Respondents

Source: Research Data (2022)

Figure 4.3 showed that majority of the respondents who were 63.9% were degree graduates, 19.4% were college graduates while 16.7% of the respondents were post graduate students. This implied that most project management committee members of CDF projects in Nairobi County were educated and thus had the capacity to enhance project success.

4.4.4 Membership Duration

Figure 4.4 shows outcome on membership duration.

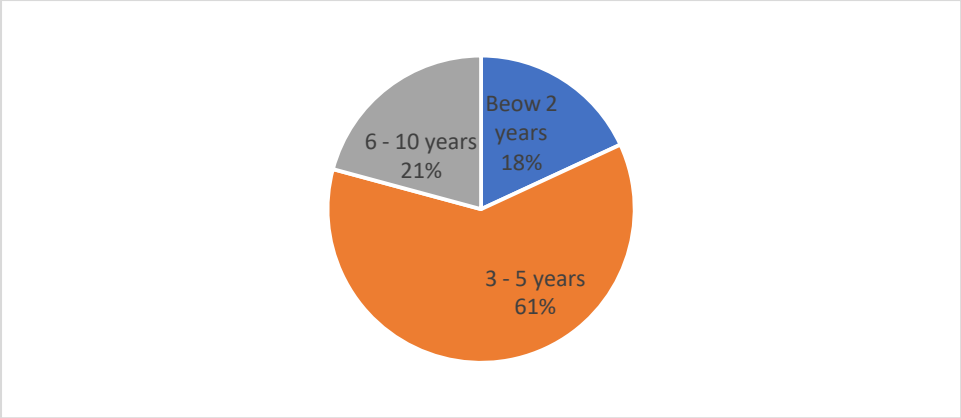

Figure 4.4: Membership Duration

Source: Research Data (2022)

Figure 4.4 indicates that most of the participants (61%) have been PMC members for 3 – 5 years, 21% indicated 6-10 years, while 18% indicated below 2 years. The term limit for membership of CDF committee is around 3years. This means that most of the respondents were either serving their final year or a second term. The findings also imply the respondents had adequate knowledge and experience on management of CDF projects and therefore, provided relevant information on the subject matter.

4.5 Descriptive Analysis

This section presents descriptive analysis results based on the study variables. The scale used was 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, and 5- strongly agree.

4.5.1 Time Management

Descriptive statistics for time management are captured n Table 4.3.

Table 4.3: Time Management

Statement	1	2	3	4	5	M	SD
There is timely planning and scheduling of secondary school projects	6.90%	8.30%	18.10 %	43.10%	23.60%	3.68	1.14
There is timely goal setting of secondary school projects	63.90%	5.60%	5.60%	13.90%	11.10%	2.03	1.51
There is the prioritization of secondary school projects based on need.	8.30%	1.40%	16.70 %	37.50%	36.10%	3.92	1.16
Task allocation relating to secondary school projects is done early enough.	11.10%	1.40%	16.70 %	36.10%	34.70%	3.82	1.25
Average						**3.36**	**1.27**

Source: Research Data (2022)

Results in Table 4.3 showed that most of the participants who were 66.7% agreed with the statement that there is timely planning and scheduling of secondary school projects (Mean = 3.68, Std.Dev=1.14). The majority of respondents, or 69.5 percent of those surveyed, disagreed with the statement that secondary school projects have timely goals established for them (Mean = 2.03, Std.Dev = 1.51), according to the results. Further results revealed that majority of the respondents who were 73.6% agreed with the statement that there is the prioritization of secondary school projects based on need (Mean = 3.92, Std.Dev=1.16). The majority of respondents (70.8%) agreed with the assertion that work allocation for secondary school projects is completed early enough, according to the results (Mean = 3.82, Std. Dev=1.25). The majority of respondents were neutral about the statement about time management, according to the average mean of the responses, which was 3.36; nevertheless, the answers varied, as indicated by a standard deviation of 1.27.

4.5.2 Quality Management

Descriptive statistics for quality management are captured in Table 4.4.

Table 4.4: Quality Management

Statements	1	2	3	4	5	M	SD
The secondary school projects undergo high standard quality assurance check	34.70%	22.20 %	8.30%	27.80 %	6.90%	2.50	1.39
There is regular quality improvement of the projects	6.90%	11.10 %	4.20%	34.70 %	43.10%	3.96	1.25
Quality planning of the projects is conducted regularly.	6.90%	15.30 %	8.30%	40.30 %	29.20%	3.69	1.24
Quality monitoring of the project is conducted regularly.	8.30%	5.60%	13.90 %	34.70 %	37.50%	3.88	1.22
Average						**3.51**	**1.28**

Source: Research Data (2022)

The results in Table 4.4 showed that most of the participants who were 56.9% agreed with the statement that the secondary school projects undergo high standard quality (Mean = 2.50, Std. Dev=1.39). Additional findings revealed that the majority of respondents, or 77.8%, agreed with the assertion that projects often enhance their quality (Mean = 3.96, Std. Dev=1.25). The majority of respondents, or 69.5 percent of them, agreed with the assertion that projects' quality planning is done on a regular basis (Mean = 3.69, Std. Dev = 1.24), according to the data. Further findings revealed that the majority of respondents (72.2%) agreed with the statement that the project's quality is regularly monitored (Mean = 3.88 Std. Dev = 1.22).

The majority of respondents agreed with the statement on time management, as indicated by the average mean of the responses of 3.51; nevertheless, the answers varied, as indicated by a standard deviation of 1.28.

4.5.3 Cost Management

Descriptive statistics for cost management are captured in Table 4.5.

Table 4.5: Cost Management

Statements	1	2	3	4	5	M	SD
There is regular budgets review for various projects	11.10%	0.00%	4.20%	19.40 %	65.30%	4.28	1.28
There is a regular review of the cost of materials for various projects	6.90%	4.20%	11.10 %	25.00 %	52.80%	4.13	1.20
There is a regular review of the cost of labor for various projects	8.30%	2.80%	6.90%	20.80 %	61.10%	4.24	1.23
There is a regular review of overhead costs for various projects	9.70%	1.40%	8.30%	26.40 %	54.20%	4.14	1.25
Average						**4.20**	**1.24**

Source: Research Data (2022)

The majority of respondents, or 77.8%, agreed with the statement that there is a frequent budget review for different projects, according to Table 4.5 (Mean = 4.13, Std. Dev = 1.20). Additionally, the majority of respondents, 81.90 percent, agreed that the cost of materials for different projects is often reviewed (Mean = 4.24, Std. Dev = 1.23). Further findings revealed that the majority of respondents (80.6%) agreed with the statement that overhead expenses for different projects are reviewed on a frequent basis (Mean = 4.14, Std. Dev = 1.25).

The majority of respondents agreed with the statement on cost management, as indicated by the average mean of the responses of 4.20; nevertheless, the answers varied, as indicated by a standard deviation of 1.24.

4.5.4 Resource Management

Table 4.6: Resource Management

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std.Dev
Financial resources are essential to the successful completion of projects.	6.90%	0.00%	20.80%	19.40%	52.80%	4.11	1.17
Human resources are essential to the successful completion of projects.	8.30%	5.60%	26.40%	29.20%	30.60%	3.68	1.21
Materials are essential to the successful completion of projects.	12.50%	4.20%	13.90%	22.20%	47.20%	3.88	1.38
Leadership support is essential to the successful completion of projects.	6.90%	11.10%	13.90%	26.40%	41.70%	3.85	1.27
Average						**3.88**	**1.26**

Source: Research Data (2022)

The results in Table 4.6 showed that most of the participants who were 72.2% agreed with the statement that financial resources are essential to the successful completion of projects (Mean = 4.11, Std. Dev=1.17). Further findings revealed that the majority of respondents (84.7%) agreed with the statement that human resources are necessary for projects to be completed successfully (Mean = 3.68, Std. Dev = 1.21). The majority of respondents, or 69.4 percent of the sample, agreed with the assertion that materials are necessary for projects to be completed successfully (Mean = 3.88, Std. Dev = 1.38). The majority of respondents, 68.1 percent, agreed with the statement that leadership support is necessary for projects to be completed successfully (Mean = 3.85, Std. Dev =1.27), according to additional results.

The majority of respondents agreed with the statement on resource management, as indicated by the average mean of the responses of 3.88; nevertheless, the answers varied as indicated by a standard deviation of 1.26.

4.5.5 Completion of CDF Projects

Descriptive statistics for project success are captured in Table 4.7.

Table 4.7: Completion of CDF Projects

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std.Dev
Projects are completed according to the set timelines	11.10%	2.80%	6.90%	34.70%	44.40%	3.99	1.28
Projects are completed according to the cost/budget provisions	9.70%	0.00%	16.70%	29.20%	44.40%	3.99	1.23
Projects are completed according to the intended quality standards.	9.70%	2.80%	27.80%	27.80%	31.90%	3.69	1.23
Projects are completed according to the set technical requirements where; fatalities do not occur, and accidents are not reported.	11.10%	15.30%	13.90%	31.90%	27.80%	3.5	1.34
Projects are completed according to set objectives	11.10%	11.10%	15.30%	25.00%	37.50%	3.67	1.37
Projects are completed to user satisfaction	8.30%	4.20%	12.50%	40.30%	34.70%	3.89	1.18
Average						**3.79**	**1.27**

Source: Research Data (2022)

Results in Table 4.7 showed that most of the participants who were 79.1% agreed with the statement that projects are completed according to the set timelines (Mean = 3.99, Std. Dev=1.28). More results revealed that 73.6 percent of respondents (Mean = 3.99, Std. Dev = 1.23) agreed that projects are finished in accordance with cost and budgetary provisions. The majority of respondents, or 59.7 percent of the sample, agreed with the assertion that projects are executed in accordance with the planned quality standards (Mean = 3.69, Std. Dev = 1.23), according to the data. The majority of respondents, or 59.7% of those who responded, agreed with the statement that projects are finished in accordance with the established technical standards, where no fatalities occur and no accidents are reported (Mean = 3.50, Std. Dev = 1.34). The majority of respondents,

who agreed with the assertion that projects are finished in accordance with established objectives, were found to be 62.5 percent of the respondents, according to the results (Mean = 3.67, Std. Dev=1.37). Further results showed that most of the respondents who were 75.0% agreed with the statement that projects are completed to user satisfaction (Mean = 3.89, Std. Dev=1.18).

The majority of respondents agreed with the statement about project success, as indicated by the average mean of the responses of 3.79; however, the responses varied, as indicated by a standard deviation of 1.27.

4.6 Inferential Statistics

4.6.1 Correlation Analysis

Table 4.8 shows the correlation results on the relationship between the study variables.

Table 4.8: Correlation Results

	Completion of Projects	Time management	Quality management	Cost Management	Resource management
Completion of Project	1				
Time management	.734**	1			
	0.000				
Quality management	.657**	.633**	1		
	0.000	0.000			
Cost Management	.740**	.682**	.569**	1	
	0.000	0.000	0.000		
Resource Management	.554**	.451**	.398**	.407**	1
	0.000	0.000	0.001	0.000	

Source: Research Data (2022)

Table 4.8's findings revealed a substantial positive and significant link between time management and CDF project completion ($r=0.734$, $p<0.05$). This suggested that better time management is associated with better CDF project completion. These findings

agreed with Chin and Hamid (2015) who indicated that project time management aided in the completion of building projects.

Additionally, the findings show that quality management and CDF project completion showed a substantial positive association ($r=0.657$, $p<0.05$). This implied that a rise in quality management is associated with a rise in CDF project completion. The study findings agreed with Ljevo, Vukomanovi, and Debo (2018) who indicated that product quality for each phase of the project is highly rated as the most important factor, namely customer satisfaction in the final phase

Further, there was a substantial positive and significant link between quality management and CDF project completion ($r = 0.750$, $p<0.05$). This suggested that a rise in quality management is linked by a rise in CDF project completion. These findings agreed with Gbahabo and Ajuwon (2017) who indicated that cost overruns and delays in infrastructure acquisition impacted project implementation.

Finally, there was a substantial positive and significant link between resource management and CDF project completion ($r = 0.554$, $p<0.05$). This implied that better CDF project completion rates are associated with better resource management. The findings agreed with In Rwanda, Gachuga, Kule and Ndabaga (2016) who revealed a positive relationship between funding allocation and project implementation.

4.6.2 Regression Analysis

This section presents the regression outcome.

Table 4.9: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842a	0.709	0.692	0.46502

Source: Research Data (2022)

Table 4.9 indicates that the four predictor variables in this study explain 71% ($R^2=.709$) of total variations in completion of CDF projects. The results imply that the model applied to link the relationship of the variables was satisfactory. The validity of the model was also validated using Analysis of Variance (ANOVA) and results are shown in Table 4.10.

Table 4.10: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	35.302	4	8.825	40.812	.000[b]
Residual	14.488	67	0.216		
Total	49.79	71			

Source: Research Data (2022)

A p value of 0.000, which is less than the crucial p value of 0.05, supports the statistical significance of the entire model, according to Table 4.10. An F statistic of 40.812, which suggests that project constraints management components were effective predictors of CDF project completion, lends support to this. Table 4.11 displays the regression coefficient results.

Table 4.11: Regression of Coefficient

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.331	0.289		1.143	0.257
Time management	0.271	0.100	0.272	2.704	0.009
Quality management	0.192	0.085	0.199	2.253	0.028
Cost management	0.28	0.073	0.357	3.816	0.000
Resource management	0.186	0.068	0.207	2.742	0.008

Source: Research Data (2022)

Regression findings in Table 4.11 reveal that time management had a substantial positive influence on completion of CDF projects (β=0.271, p=0.007<.05). This implied that time management contributes significantly to completion of CDF projects. The findings agreed with Aggor (2017) who found a positive relationship between the project budget and time management.

Results also showed that quality management had a substantial positive influence on completion of CDF projects (β=0.192, p=0.028<.05). This implied that quality management contributes significantly to completion of CDF projects. The findings agreed with Salvi and Kerkar (2020) who indicated that consumers benefit from quality

management because it ensures that the construction process is consistent and that materials are used efficiently, resulting in significant cost savings.

The findings further indicate that cost management had a substantial positive influence on completion of CDF projects (β=0.280, p=0.000<.05). This implied that cost management contributes significantly to completion of CDF projects. The findings agreed with Olawale and Sun (2010) who indicated that cost management had an impact on project impacts.

In addition, results showed that resource management had a substantial positive influence on completion of CDF projects (β=0.186, p=0.008<.05). This implied that resource management contributes significantly to completion of CDF projects. The study findings agreed with Mumbi (2020) who revealed a positive and substantial link between scope management and project completion, as well as a substantial positive link between resource constraint management and project completion.

The multiple regression model was laid as below.

$$\mathbf{Y= 0.331+ \mathit{0.271}\ X_1+ \mathit{0.192}X_2+ \mathit{0.280}X_3+ \mathit{0.186}X_4}$$

Where:

Y= Project Success

X_1=Time Management

X_2=Quality Management

X_3=Cost Management

X_4=Resource Management

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This study sought to investigate the effect of project constraints management on completion of CDF projects in Nairobi City County. This chapter outlines the summary of the findings as well as the conclusion. The chapter also outlines the study recommendation based from the study findings as well as the recommended areas for further research.

5.2 Summary of the Findings

5.2.1 Time Management and Completion of CDF projects

The first goal was to ascertain how time management affected the execution of CDF programs. The majority of participants, according to the findings, said that secondary school projects are prioritized based on necessity. Results further showed that majority of the respondents indicated that task allocation relating to secondary school projects is done early enough. However, though most of the respondents indicated that there is timely planning and scheduling of secondary school projects the goal setting of those projects was not timely. Results of the correlation analysis revealed a substantial positive and significant association between time management and CDF project completion. Regression analysis revealed that time management positively impact on CDF project completion.

5.2.2 Quality Management and Completion of CDF Projects

The second objective was to assess the effect of quality management on completion of CDF programs. Further results showed that there is regular quality improvement of the projects. In addition, results showed that quality planning of the CDF projects is conducted regularly. However, though there is regular quality monitoring of the project, the checks that are done are not of standard quality. Results of the correlation analysis revealed a strong positive and substantial association between quality management and CDF project completion. Regression analysis revealed that quality management has a favorable and significant impact on CDF project completion.

5.2.3 Cost Management and Completion of CDF Projects

The third goal was to ascertain how cost management affected the completion of CDF projects in Nairobi City County. The study findings showed that majority of the respondents indicated that there is was regular budget review for various projects. In addition, most of the respondents indicated that there is a regular review of the cost of materials for various CDF projects in the county. Further findings revealed that the majority of respondents claimed that overhead expenses for various projects are routinely reviewed. Results of the correlation analysis revealed a substantial positive and significant association between cost management and CDF project completion. According to regression analysis, cost management significantly and favorably impacted CDF project completion.

5.2.4 Resource Management and Completion of CDF Projects

The fourth goal was to assess how resource management affected the successful completion of CDF projects in Nairobi City County. The results showed that most of the respondents indicated that financial resources are essential to the successful completion of projects. Further findings revealed that most respondents believed human resources were crucial to completing projects successfully. Additionally, the findings demonstrated that the most of the participants agreed with the assertion that materials are necessary for projects to be completed successfully. Further findings revealed that the majority of respondents concurred that leadership support is necessary for CDF initiatives to be completed successfully. The findings of the correlation analysis revealed a substantial positive and significant association between resource management and CDF project completion. Regression analysis revealed that resource management had a favorable and significant impact on CDF project completion.

5.3 Conclusion

The research concluded that time management had a substantial positive influence on completion of CDF projects. The study also concluded that prioritization of projects based on their needed enhanced their completion. Timely allocation of resources during project implementation enhanced project success. However, lack of timely goal setting of projected delayed completion of programs.

The research concluded that quality management had a substantial positive influence on completion of CDF projects. Lack of quality checks during project implementation delayed project success. The study also concluded that regular quality improvement of projects enhanced project success.

The study came to the conclusion that cost management had a favorable and significant impact on CDF project completion. Further, regular budget review and regular review of various projects for various projects enhanced project success. Regular review of the cost of materials for various CDF projects in the county also enhanced project implementation.

The study came to the conclusion that resource management had a favorable and significant impact on CDF project completion. The study came to the additional conclusion that both human and financial resources were necessary for projects to be completed successfully. In addition, a government that offers support to the implementation of projects facilitates completion of projects in time.

5.4 Recommendations of the Study

Most of the CDF projects were seen to lack timely goal setting which caused delay of project completion. The study therefore recommends that the project managers in various constituency projects should ensure that the goals of the projects are set early enough so as to enhance project success.

The study findings also found that the regular checks done in the CDF projects are not of standard quality. Therefore, the project managers should ensure they employ qualified quality assurance officers who can be able to do standard quality checks of projects. This will enhance project success.

The study suggests that constituency managers need to have a well-defined vision and objectives that put resource mobilization first. Planning for the budget allotted for project implementation is necessary to increase project success by making sure there is enough funding available.

It is advised that the government always make sure to allocate enough funds for carrying out the projects in order to improve their completion. Additionally, project

managers should constantly make sure that weekly updates are made to plans and financial records. The level of project completion will rise as a result.

5.5 Areas for Further Research

This study sought to determine the effect of project constraints management on completion of CDF projects in Nairobi City County. The study was only concerned with CDF projects. Other government initiatives in Nairobi County, such those involving the building of roads and water projects, could be the subject of future research. Additionally, as this study concentrated on finishing CDF projects in Nairobi City County, future scholars could focus on other counties such a Kiambu and Machakos Counties.

Many other additional parameters can be considered in the measurement of project constraints management. Since the R square was not 100%, it might imply that other additional project constraints management practices could enhance the model for completion of CDF projects in Nairobi County, Kenya. Future studies could therefore focus on other project constraints management practices such as leadership management, stakeholders' involvement.

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APPENDICES

Appendix I: Letter of Introduction

KENYATTA UNIVERSITY,

SCHOOL of BUSINESS,

P.O. BOX 43844-00100, NAIROBI,

Dear Sir/ Madam,

RE: REQUEST FOR DATA COLLECTION

I am currently a student at the postgraduate level. I intend to conduct research on the topic "**Project constraints management and completion of Constituency Development Fund (CDF) projects in Nairobi City County**". You are politely required to be honest as you respond to the questions on the questionnaire. Please, do not indicate your name or identification entity on the questionnaire.

I appreciate you beforehand for cooperating.

Yours sincerely,

MARY KINOTI

Appendix II: Questionnaire

SECTION A: PERSONAL INFORMATION

1. What is your gender?
   a) Male [ ]
   b) Female [ ]
2. What is your age bracket?
   Below 25 years [ ] 26-35 years [ ]
   36-45 years [ ] 46-55 years [ ]
   Above 55 years [ ]
3. What is your highest academic qualification?
   Secondary [ ] College [ ]
   Graduate [ ] Post Graduate [ ]
4. How long have you been a member of the Project management committee?
   Below 2 years [ ] 3-5 years [ ] 6-10years [ ] above 10 Years [ ]

SECTION B: TIME MANAGEMENT

5. Please indicate your agreement or otherwise with the following statements relating to time management. Use the following scale: 1-Strongly disagree, 2-Disagree, 3-Neutral, 4- Agree, 5- Strongly agree.

Statements on Time management	**1**	**2**	**3**	**4**	**5**
There is timely planning and scheduling of secondary school projects					
There is timely goal setting of secondary school projects					
There is the prioritization of secondary school projects based on need.					
Task allocation relating to secondary school projects is done early enough.					

SECTION C: QUALITY MANAGEMENT

6. Please indicate your agreement or otherwise with the following statements relating to quality management. Use the following scale: 1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree, 5- Strongly agree.

Statements on Quality Management	**1**	**2**	**3**	**4**	**5**
The secondary school projects undergo high standard quality assurance check					
There is regular quality improvement of the projects					
Quality planning of the projects is conducted regularly.					
Quality monitoring of the project is conducted regularly.					

SECTION D: COST MANAGEMENT

7. Please indicate your agreement or otherwise with the following statements relating to cost management. Use the following scale: 1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree,5- Strongly agree.

Statements on cost management	**1**	**2**	**3**	**4**	**5**
There is regular budgets review for various projects					
There is a regular review of the cost of materials for various projects					
There is a regular review of the cost of labor for various projects					
There is a regular review of overhead costs for various projects					

SECTION E: RESOURCE MANAGEMENT

8. Please indicate your agreement or otherwise with the following statements relating to resource management. Use the following scale: 1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree,5- Strongly agree.

Statements on resource management	**1**	**2**	**3**	**4**	**5**
Financial resources are essential to the successful completion of projects.					
Human resources are essential to the successful completion of projects.					
Materials are essential to the successful completion of projects.					
Leadership support is essential to the successful completion of projects.					

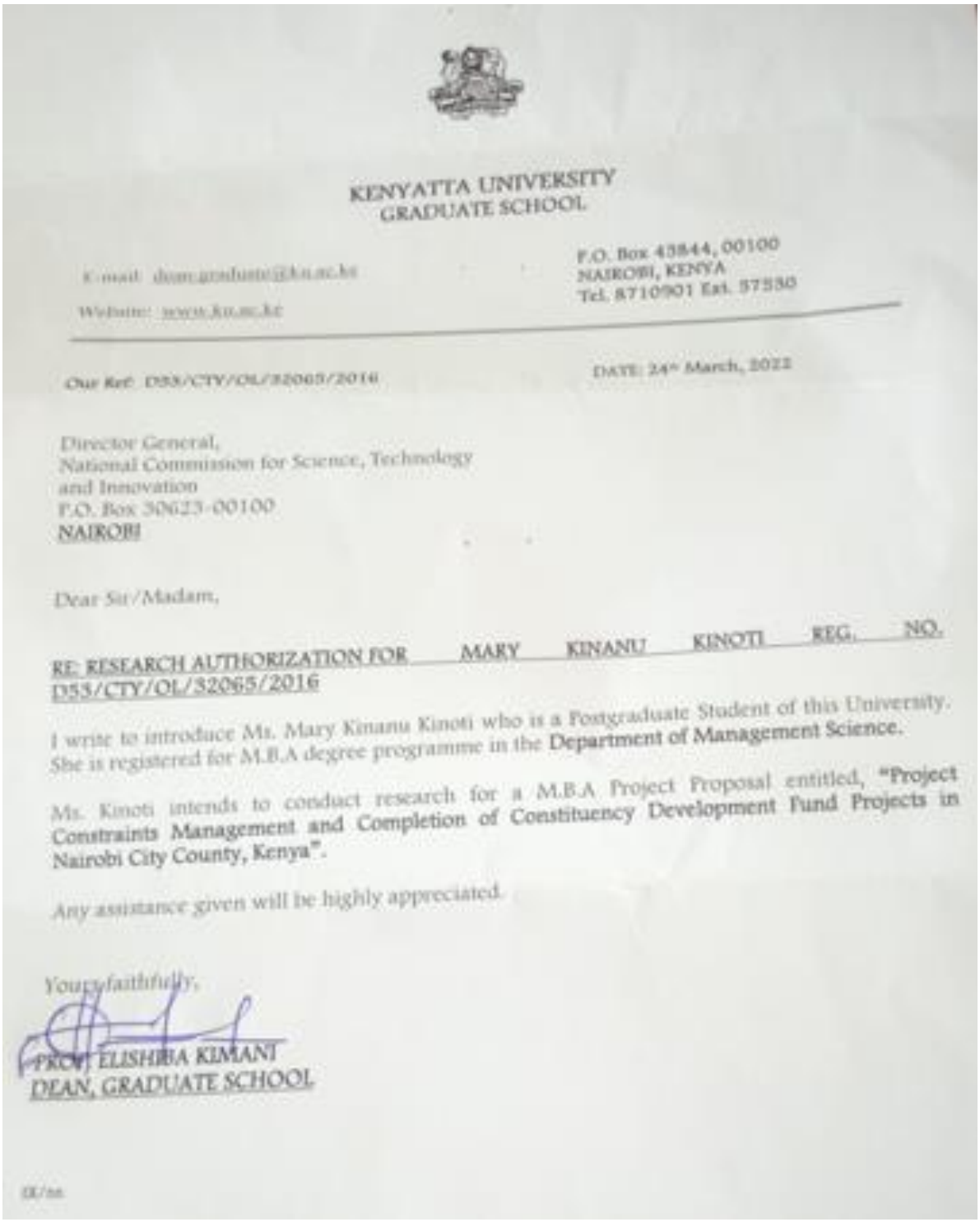
SECTION F: COMPLETION OF CDF PROJECTS

9. Please indicate your agreement or otherwise, with the following statements relating to the completion of projects. Use the following scale: 1-Strongly disagree, 2-Disagree, 3-Neutral, 4- Agree, 5- Strongly agree.

Statements on Completion of projects	**1**	**2**	**3**	**4**	**5**
Projects are completed according to the set timelines					
Projects are completed according to the cost/budget provisions					
Projects are completed according to the intended quality standards.					

Projects are completed according to the set technical requirements where; fatalities do not occur, and accidents are not reported.					
Projects are completed according to set objectives					
Projects are completed to user satisfaction					

Appendix III: Authorization Letter from Kenyatta University



KENYATTA UNIVERSITY
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P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57550

Our Ref: D53/CTY/OL/32065/2016

DATE: 24th March, 2022

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR MARY KINANU KINOTI REG. NO. D53/CTY/OL/32065/2016

I write to introduce Ms. Mary Kinanu Kinoti who is a Postgraduate Student of this University. She is registered for M.B.A degree programme in the Department of Management Science.

Ms. Kinoti intends to conduct research for a M.B.A Project Proposal entitled, "Project Constraints Management and Completion of Constituency Development Fund Projects in Nairobi City County, Kenya".

Any assistance given will be highly appreciated.

Yours faithfully,

PROF. ELISHIBA KIMANT
DEAN, GRADUATE SCHOOL

/lt

Appendix IV: NACOSTI Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 747023

Date of Issue: 08/April/2022

RESEARCH LICENSE

This is to Certify that Miss. Mary Kiiumu Kinoti of Kenyatta University, has been licensed to conduct research in Nairobi on the topic: PROJECT CONSTRAINTS MANAGEMENT AND COMPLETION OF CONSTITUENCY DEVELOPMENT FUND PROJECTS IN NAIROBI CITY COUNTY, KENYA for the period ending : 08/April/2023.

License No: NACOSTI/P/22/16747

747023

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code

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