

**FACTORS INFLUENCING COMPLETION OF CONSTRUCTION PROJECTS
FUNDED BY CONSTITUENCY DEVELOPMENT FUND (CDF) IN SECONDARY
SCHOOLS: THE CASE OF KWANZA CONSTITUENCY-TRANS NZOIA COUNTY,
KENYA.**

BY

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Award of the Degree of Master of Arts in Project Planning and Management of the
University of Nairobi.**

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DECLARATION

This is my original work and it has not been presented for an award in any other university.

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L50/73515/2014

This research project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

This research project is dedicated to my parents Julius Nakitare and Bridgit Mulati both of whom had an exceptionally deep passion for education, to my wife Issabelah Nasimiyu for her continuous encouragement, to my two sons Felix Simiyu and Fergul Watitwa who were missing my direct care during my study and lastly to all those who give of themselves so that others may live, you have ever been my inspiration.

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LIST OF ABBREVIATION AND ACRONYMS

- AWP** : Annual work plan
- CDF** : Community Development Fund
- CDFC** : Constituency Development Fund Committee
- CG** : County Government
- CRC** : Citizens Report Cards
- ILO** : International Labor Organization
- MP** : Members of Parliament
- NTA** : National Taxpayers Association
- PIP** : project Implementation Plan.
- PMC** : Project Management Committee
- RDT** : Resource Dependency Theory

ABSTRACT

CDF was established through the Constituency Development Fund Act, 2003 and amended in 2007 with the goal of fighting poverty at the grassroots level. All the constituencies in the Republic of Kenya have been receiving funds meant to establish and improve existing public utilities such as classrooms, dispensaries, roads, and dormitories, open air markets especially since 2007. However in Kwanza constituency, some projects stalled along the way or even before commencement, mostly called white elephant projects. As a result, some remain unutilized especially due to non-completion or partial completion. It is in this perspective that this study investigated the factors influencing timely completion of CDF construction projects in schools in Kwanza constituency. The research objectives were to examine the extent to which economic risks influence timely completion of CDF funded construction projects in secondary schools in Kwanza Constituency, to assess the extent to which community participation influences timely completion of CDF funded construction projects in secondary schools in Kwanza Constituency, to establish how availability of funds influences timely completion of CDF funded construction projects in secondary schools in Kwanza Constituency, to determine how technical competence of the project managers influence timely completion of CDF funded construction projects in secondary schools in Kwanza Constituency. This study adopted a descriptive research design. The target population consisted of the project implementers and project beneficiaries selected from the incomplete CDF construction projects in Kwanza constituency. Purposive sampling technique was used to sample the project implementers who were the key informants in this study. The simple random technique was adopted in recruiting the project beneficiaries to participate in this study. The implementers involved the project managers, project Engineers and local representatives of the CDF projects. On the other hand, the beneficiaries involved were teachers and students in schools where the incomplete CDF projects were situated. Data was collected by use of questionnaires and interview methods from a sample of 24 implementers and 120 beneficiaries. The data collected was analyzed by both quantitative and inferential statistics. The study results were presented by the use of tables, bar graphs, and pie charts. The study established that Economic risks, Community participation, Availability of funds and Technical competence significantly influenced the timely completion of the CDF construction projects in Kwanza constituency. In this regard, community participation, availability of funds and technical competence all had a positive effect on timely completion of CDF construction projects while Economic risk alone had a negative effect. Apart from concluding that the four factors had an effect on timely completion of the CDF construction projects, the study also noted that Government procedures for disbursement of funds are bureaucratic, and thus most CDF projects once approved by BOM await a longer period before actual release of funds. The study made recommendations that the Government of Kenya should ensure that the largest proportion of the CDF funds are allocated to development projects such as schools, roads, and health facilities. The government through the concerned Ministry and Departments like CDF should consider the procedure/ process for remitting funds for school construction projects while members of the public should be involved in identifying development projects that ought to be funded using the CDF kitty at the constituency level. Publicity should be given to CDF project processes, structure of CDF revised to make it more inclusive by clearly stating the position and role of the general public, regulatory guidelines concerning financial literacy in CDF committees as well as other stakeholders put in place, CDF implementers at the constituency level be trained and the CDF Committees cleared of any vested political interests in CDF project

CHAPTER ONE: INTRODUCTION

1.1 Background to the study

Developing countries have a higher rate of low project performance than developed countries (Lim and Alum, 1995). Most researchers have discussed the increased challenges and decreasing performance of the construction industry (Casler & Gallatin, 1997; Teicholz et al., 2001). The major indicators of performance in construction projects were identified as time, cost and quality (Mckim et al., 2000; Atkinson, 1999). These indicators are driven by factors that can be used to ascertain the strengths and weaknesses in project performance (Marteralla, 2007). These factors may be pitfalls or success factors. According to Olav et al., (2007), success factors were considered as the opposite of pitfalls. This research is focused on success factors influencing project performance. Cookie (2002) defined project success factors as input to the management system that leads directly or indirectly to the project success. The identification of these success factors has become a critical issue facing project managers (Motwani et al., 1995).

Evidence shows that most construction projects in developing countries suffer overrun in cost and time. Iyer and Tha (2006) revealed that 40% of Indian Construction projects are facing time overrun ranging from 1 to 252 months. Ugandan Construction Industry experiences cost and time overruns (Mubiru, 2001). Construction delay and cost overruns are cogitated as frequent project problems in Vietnam government-related funded projects (Ministry of planning and investment, 2003). Adenikinju (2005) graded productivity performance in Nigeria to be below average. His findings revealed technical inefficiency as a major influence on the decline. The result showed that technical efficiency declined by -1.29 percent per annum for the period of 1962 – 2000 while technical change declined by -1.01 percent annually over the same period. Most researchers have studied critical project success factors influencing projects in both developed and developing countries. Although Nigerian economic system possesses most of the characteristics associated with developing countries, the trend differs. Iyer and Tha (2006) emphasized that project factors differ from one project to another. Nigerian Construction Industry has witnessed decline in diverse construction projects over the years; this research is limited to large construction projects with a minimum budget of N100million. Following the definition of large construction projects by Long et al. (2004), the selected large construction

projects were projects with total budget of over \$1million which is equivalent to over N140 million.

In Kenya, CDF was established through the Constituency Development Fund Act, 2003 and amended in 2007 with the goal of fighting poverty at the grassroots level. Kenya has devolved funds to the local level with the aim of bringing services and development projects close to its citizens given its development blue print; Vision 2030. However a report by the Controller and Auditor General in Kenya Gazette 2010 uncovered project delays, abandonment and misappropriation of Constituency Development Funds (CDF) in 16 Constituencies. In spite of this, other constituencies were reported as posting remarkable performance in their projects. Political, social and economic factors have played a significant role in the implementation of CDF projects in the constituencies (Simiyu, Mweru & Omete, 2014). This could also affect the delivery time of construction projects in the constituencies. According to Okungu (2008), 70% of the constituencies have reported mismanagement, theft, fraud and misappropriation, and that CDF issues are of political nature. Ongoya and Lumallas, (2005) were of the view that, CDF has the potential of being used by politicians to build their reputation in their constituencies and mobilize political support. The fund has no specific development agenda; hence, it stands out as a political tool according to Gikonyo (2008). Wamugo (2007) further points out that the success of the fund is pegged on the character and the commitment of the area Member of Parliament to use the fund for general development in his constituency. The key objectives of the CDF funds are to finance projects with immediate social and economic impact on the citizens, with a view of improving lives, alleviating poverty and bringing general development (IEA, 2006). According to Kimenyi (2005), CDF is designed to fight poverty through the implementation of development projects at the local level, and particularly, those that provide basic needs such as education, healthcare, water, agricultural services, security, and electricity.

1.2 Statement of the Problem

Ideally, CDF projects should be geared towards improving the livelihood of the constituents through addressing their social, economic situation. However, this has not always been the case. Despite increased allocations, there have been projecting delays especially in CDF funded construction projects that have seen constituents express their frustrations (Nyamori, 2009). Also according to Kwanza CRC (2015) report, 7% of total CDF funds allocated to the projects were

wasted on badly implemented projects and 12% were wasted on abandoned CDF projects. Some of the abandoned and delayed projects include, among others, ST. FRANCIS secondary school dining hall which was first initiated in the year 2012, however the project is only 70% complete and is not in use by the students. Reports on the ground indicate that the project lacks ownership by the school parents and teachers association (PTA) since the money to complete the project was released recently by the Catholic Church who is the sponsor of the school and instead the money was channeled to purchase school bus which was the priority. This has led to vandalism of some of the already installed equipment and the project has virtually delayed to be completed. This study therefore sought to establish factors that influence timely completion of CDF funded construction projects in Kwanza Constituency.

Table 1.1: CDF projects implementation status year 2015

PROJECT NO.	PROJECT NAME	EXPECTED COMPLETION	ACTUAL COMPLETION	STATUS OF PROJECT
CDF/KW/2013-2014	St. Cecilia Girls sec. school 2 classrooms	Dec.2014	Not started	Incomplete
CDF/KW/001/2013-2014	St. Francis sec. school. Dining hall	Dec. 2014	Incomplete	68% complete and in use
CDF/KW/034/2013-2014	Naifarm sec. school. laboratory	Dec 2014	incomplete	80% complete and not in use
CDF/KW/011/2013-2014	Luuya sec. School 2 Classrooms	Dec 2014	Incomplete	73% complete and in use
CDF/KW/092/2013-2014	Sarura Sec. School 2 classrooms	Dec 2014	incomplete	70% complete and in use
CDF/KW/084/2013-2014	Kwanza Girls sec school. laboratory	Dec 2014	ongoing	65% complete and not in use
CDF/KW/017/2013-2014	Kitum Sec School Dormitory	Dec. 2014	ongoing	70% complete and in use
CDF/KW/020/2013-2014	Sabwani Sec School 2 classrooms	Dec. 2014	ongoing	73% complete and not in use

(Source: Citizens CDF Report card for Kwanza constituency, 2015)

1.3 Purpose of the Study

The purpose of this study was to establish factors influencing completion of construction projects funded by Constituency Development Fund (CDF) in secondary schools. The study was carried out in Kwanza Constituency – Trans Nzoia County, Kenya.

1.4 Objectives of the Study

The Study was guided by the following objectives:

1. To examine the extent to which economic risks influence completion of construction projects funded by CDF in secondary schools in Kwanza Constituency.
2. To assess the extent to which community participation influence completion of construction projects funded by CDF in secondary schools in Kwanza Constituency.
3. To establish how availability of funds influence completion of construction projects funded by CDF in secondary schools in Kwanza Constituency.
4. To determine how technical competence of project managers influence completion of construction projects funded by CDF in secondary schools in Kwanza Constituency.

1.5 Research Questions

The study sought to answer the following research questions:

1. To what extent does economic risk influence completion of construction projects funded by CDF in secondary schools in Kwanza Constituency
2. How does community participation influence completion of construction projects funded by CDF in secondary schools in Kwanza Constituency
3. To what extent does availability of funds influence completion of construction projects funded by CDF in secondary schools in Kwanza Constituency
4. To what extent does technical competence of project managers influence completion of construction projects funded by CDF in secondary schools in Kwanza Constituency

1.6 Research Hypothesis

According to Kothari (2004), hypothesis is a mere assumption or supposition to be proved or disapproved or a formal question that a researcher intends to resolve.

The following are the Null hypotheses that were tested in the study:

H₀1: Economic risks do not significantly influence timely completion of CDF funded Construction Projects in Secondary Schools in Kwanza Constituency.

H₀2: Community participation does not significantly influence timely completion of CDF funded Construction Projects in Secondary Schools in Kwanza Constituency.

H₀3: Availability of funds does not significantly influence timely completion of CDF funded Construction Projects in Secondary Schools in Kwanza Constituency.

H₀4: Technical competence does not significantly influence timely completion of CDF funded Construction Projects in Secondary Schools in Kwanza Constituency.

1.7 Significance of the Study

The study was intended to come up with information on perceived factors influencing timely completion of CDF funded construction projects in secondary schools in Kwanza Constituency. In this regard, the study was of importance to some individuals:

First, this study is important to the CDF Management Committee which oversees the CDF projects in Trans-Nzoia County. The study came up with substantial remedies that can adequately be adopted by the CDF Management Committee to improve the performance of the construction projects in the area. Also, the study was important to the Trans-Nzoia County Government since it outlined the major hindrances and obstacles to CDF-based projects in Nzoia County by further bringing out an understanding of the problem and provides adequate remedies and solutions to these obstacles.

The study is of great significance to the Government of Kenya since the findings made in this study are an important source of information to the Government on incessant failure and abandonment of some construction projects at Constituency level. Further, recommendations made in this particular study stated that that the Government of Kenya should ensure that the largest proportion of the CDF funds are allocated to development projects such as schools, roads, and health facilities. Also, the government through the concerned Ministry and Departments like CDF consider revising the procedure/ process of remitting funds for school construction projects while members of the public should be involved in identifying development projects that ought to be funded using the CDF kitty at the constituency level.

1.8 Delimitation of the study

The study was conducted in Kwanza Constituency and sought to establish the factors influencing timely completion of CDF construction projects in secondary schools in Kwanza constituency. Kwanza constituency was selected by the researcher following the fact that it is one of the constituencies in Trans-Nzoia County with a big number of stalled CDF construction projects.

The researcher being a native of Kwanza Constituency therefore understands the local language and knows the place very well. The period under scrutiny was from 2009 to 2016. This period was chosen because the literature and the information is current making it more relevant regarding the problem under investigation.

1.9 Limitation of the Study

The study was confined to Kwanza Constituency which is just one out of 290 constituencies in Kenya. In this regard, a generalization of the findings made in this study to other constituencies in Kenya was difficult since the sample used in the study was confined to Kwanza Constituency.

The issue of confidentiality was a problem to the researcher during data collection. This is because persons working under the CDF funded projects in Kwanza constituency feared disclosing vital information regarding CDF projects for fear of being victimized by their superiors. However, the researcher assured the respondents of their complete anonymity in the research process. On the same note, the researcher used codes for the name of the study respondents.

The researcher also faced the challenge of finding the right individuals to participate in the study for most of the individuals working or have worked for CDF funded projects in Kwanza Constituency were unwilling to participate in the study. In this case, the respondent tried to employ the incentive methods as well as engage the respondents outside the place of work.

1.10 Basic Assumptions of the Study

The researcher assumed that factors; economic risks, community participation, availability of funds and technical competence had an influence on timely completion of the CDF funded construction projects in Kwanza Constituency. It was also assumed that there would be availability of current information or data of the selected projects in the CDF offices. The researcher also assumed that there was availability of reference materials regarding the study and last but not least the researcher assumed that the research would be completed on time.

1.11 Definition of significant Terms

Availability of Funds: Access to monetary resources to enable successful completion of construction project.

Community Participation: Active participation of individuals in implementing construction projects for their communities.

Construction Projects: These are public utilities like buildings (hospitals/schools/water points) financed and constructed by CDF to give services to locals in Kwanza Constituency.

Technical Competences: Ability of a project manager to oversee a construction project up to completion level

Timely completion: Completion of project within a set time, allocated budget, scope and within required standards.

1.12 Organization of the Study

The study is organized into five chapters. Chapter One consists of introduction, background of study, statement of problem, purpose of study, limitation, basic assumption, definition of significant terms and organization of study. Chapter Two has the literature review on thematic areas. Chapter Three dealt with research methodology tackling; research design, target population, sampling procedure, research instrument and data collection and analyzing. Chapter Four contains data analysis and presentations based on the research objectives. Various tools of analysis will be employed based on the operationalization of the variables. Chapter Five consists of the summary of the findings of the research, conclusions relating to the research objectives and recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter two reviews literature on previous studies relevant to the study. It brings out the theoretical, conceptual and empirical understanding of the variables in the study and brings out gaps to be filled by this research. Every indicator of the independent variable is separately related with timely completion of construction projects.

2.2 Timely completion of construction projects

Completion of construction projects is all about the success of the project management process and the success of the project itself. Cookie-Davies (2002) distinguishes between project management success (usually measured against time, cost and quality) and project success (measured against the objectives of the project). He further distinguishes success criteria as the measures against which success or failure of a project is measured while success factors are the inputs that lead either directly or indirectly to the success of the project. Ashley et al., (1987) defined project success as results better than expected or normally observed regarding cost, schedule, quality, safety and participant satisfaction. Their study pioneered an investigation of the factors which were most influential in successfully completing construction projects. In Africa, the challenge of timely project delivery can take multiple dimensions depending on the project's environment. In Ghana, Frimpong al., (2003) identified five factors as the major causes of delays to projects. These include monthly payment difficulties to contractors, poor contract management, material procurement difficulties, poor technical performance and material price escalations. Poor professional management, fluctuation of prices, rising cost of materials and poor site management have also been identified as factors causing a delay in project completion time. To forestall the challenge of timely project delivery, Meredith and Mantel (2011) recommends that project time management is a key priority for the contractors and that the appointment of a registered project manager for each contract should be a mandatory condition of tender. According to Frimpong et al., (2003) major delay occurs during project implementation phase. Hence factors such as monthly payment difficulties, poor contractor management, material procurement, poor technical performances and escalation of material prices contributed during construction of groundwater projects in developing countries.

2.3 Economic Risks and Timely Completion of Projects.

Project financing may be exposed to project specific risks that may be difficult to diversify thus requiring lending institutions to adopt strategies that protect them from such risks. One of such strategies is the giving of non-recourse loans that are believed to reduce the potential for risk contamination. In project finance, in most cases, loans for the project are made on a non-recourse or limited recourse basis such that if the expected stream of income fails to materialize, the loan does to pass to the project operators or sponsors (Loke, 1998). However, non-recourse loans still expose lenders to risks that are specific to projects. Other popularly used strategies are the adoption of innovative risk-sharing structures, adoption of alternative sources of credit protection, the introduction of new capital market instruments and broadening of investors' base (Esty, 2003). The latest development in responding to economic risks in project financing is the integration of project and corporate financing where lenders do not have recourse to sponsors and project specific risks are diversified away by financing a portfolio of assets as opposed to a single venture. Closely related to integration is an introduction of explicit and implicit political risk guarantees, credit directives and new insurance products against financial risks associated with project financing (Mrerton, 1974).

Engel et al. (2010) identified commercial risks that may affect economic operations of a project. Such factors include; construction delays that may lead to cost overruns increase in operating and maintenance expenses, changes in the price of inputs that may force the project's budget to be altered affecting its financial ability and other general risks that emanate from within the project. However, Farmer capacity and agricultural productivity are themselves only one determinant of the private-sector's ability to enforce financial obligations of project participants. Other factors such as overall incentives for farmers to meet obligations under the scheme, the design of land arrangements such as the terms of access to consolidated land, selection of farmers for high potential allocations, and procedures to incentivize farmers who do not pull their weight are also factors to consider (Bank, 1994).

Sorge (2004) conducted a study titled ‘the nature of credit risk in project finance’. He suggested that a deeper understanding of the risks involved in project finance is inevitable and that project management practitioners and policy makers must be fully informed of potential risks in project financing and the potential mitigation measures. He suggested that further research is conducted on how to implement risk sensitive capital requirements that provide market participants with incentives for prudent and efficient allocation resources. He also suggested that further study is done to establish the role of project financing in economic growth, especially in emerging economies. From the study conducted by Loke (1998) on risk management and credit support in project finance, from the research findings, it was clear that cross-border project finance requires the project counsel to traverse the different paradigms found in the diverse legal systems with which the project finance is connected. The following factors must be considered; assets over which the security interests can be taken, types of security interests, execution against the secured property, issues about perfection of security interests and private international issues.

According to Harvey (2012), economic risks have a direct impact on financing activities of any kind. These effects are more evident when international financing is at play because of the foreign economic factors that present risks that are beyond the project financiers and the project developers. For successful financing, it is important to mitigate economic risks. This can be done through international mutual funds which present diversification or investing in a variety of countries, instruments, currencies, or international industries. It is, however, important to note that not in all cases are economic risks disastrous as they may present an opportunity to for investors and project financiers to participate indirectly in foreign exchange markets (Loke, 1998).

2.4 Community participation and Timely Completion of CDF construction Projects.

The concept of community project ownership is viewed as a basis for project success. The World Bank (2004) defines participation as “a process through which stakeholders’ influence and share control over development initiatives, and the decisions and resources which affect them”. The concept of community participation originated about 40 years ago from the community development movement of the late colonial era in parts of Africa and Asia. To colonial administrators, community development was a means of improving local welfare, training people

in the local administration and extending government control through local self-help activities (McCommon, 1993). However, during this era, the policy failed to achieve many of its aims primarily due to the bureaucratic, top-down approach adopted by the colonial administrations (McCommon, 1993). Once people are involved in a project in some way, maintaining ongoing commitment can become the next challenge. Action research can be a very useful way of dealing with problems such as this. By working through strategies and evaluating their effectiveness regarding building and maintaining participation on an ongoing basis, a project team can come up with solutions that work best in the local situation.

But the fact that it is so often used to indicate different things or that it conceals what is often no more than a tokenistic acknowledgment of local preferences, should not, in turn, mean that it is rejected. Like the concept of sustainable development, it is better to see the term ownership as a principle to which organizations and individuals working in development with local people should aspire. Though imperfectly realized, it is an ideal against which practical efforts should constantly be measured. This objective should be realized through a process of empowerment which gives the poor control over their lives and increases their ability to mobilize sufficient development resources. In this endeavor, Thwala (2001) asserts that public participation in the planning and management of developmental projects is crucial to their lasting success. However, communities have had little say in the provision of water and decision-making processes in South Africa. A privileged minority dominates access to water resources while the majority of the population enjoys little or no water security.

To achieve any desired outcome, research has suggested that the community must be actively involved; stepping into the community requires an attitude of 'do it with the people' which entails doing things with them not doing things for them or to them (Anderson & McFarlane, 2010). Anderson and McFarlane (2010) are of the argument that when things are done for people or to people, the emotional commitment is limited thus the significance of participatory development. There are various factors that will determine the participation of any given community and they include: Economic level of the community- depending on the scarcity of

resources and the unlimited wants of the society, the poorer the community, the more they will participate in the donor funded projects since there is vested personal interest resulting eventually to high level of ownership to projects (Boyes& Melvin, 2010). Geographical location- the locality of the community whether it be urban or rural will determine the participation level; urban population tend to be more exposed and learn very fast which is the opposite of rural, being slow learners and they tend to look at development projects with a lot of suspicion leading to minimal participation (World Bank, 2010).Socio-cultural and political context- is there effective leadership? Is there a community culture that is open and ready to embrace development? A community that has good leadership and governance always looks out for transparency and honesty; a sense of ownership is brought out since the community through empowerment will demand democracy (Stanfield, 2009). Population coverage- depending on the magnitude of any donor-funded project, participation is dependent on how well the community is integrated as groups or individual. Project management should ensure that they have a well laid down strategy in case the population coverage grows beyond or is below the expected figure argues Levy and Lemeshow (2011).

2.5 Availability of funds and Timely Completion of Projects

The budget limitation is consistently one of the greatest constraints to timely implementation of construction projects. While projects can often compensate for a lack of technical capacity through training and outsourcing, they cannot compensate for the lack of money. Although project delivery process does not have a stage called funding, budgetary constraints affect each stage of the process (Sullivan & Mayer, 2010). The Right of Way to a project is not identified by a project that only fulfills the environmental process, only for the policy makers to disagree with the chosen source of funding.

Gwadoya (2012) observed that financial resources for construction projects should be estimated realistically at the time of planning for the project. While it is critical to plan for project execution together, resources for each function should be separate. In practice, each project should have two separate budget lines for example the project and for its monitoring and evaluation agreed in advance with partners. Monitoring and evaluation costs associated with projects can be identified relatively easily and be charged directly to the respective project budgets with prior agreement among partners through inclusion in the project budget or Annual

Work Plan (AWP) signed by partners. Sourcing and securing financial resources for a construction project or programs can pose additional challenges.

According to Moenga (2015), it is important to allocate required funds for each construction project. It is important that partners consider the resources needed for timely completion of projects and agree on a practical arrangement to finance the associated activities. Such arrangements should be documented at the beginning of the program to enable partners to transfer necessary funds by their procedures, which could take considerable time and effort. Human resources are critical for effective implementation and timely completion of construction projects, even after securing adequate financial resources. For the high-quality execution of a construction project, there should be an excellent learning tool as well as a means to improve the program.

Essentially, the availability of funds targeted at a particular project activity is a measure of project success, especially for activities in the critical chain. In a study to determine how District hospitals in Ghana cope with the untimely release of funds, Asante et al. (2006) noted that this created serious cash flow problems for the district health managers that disrupted the implementation of health activities and demoralized the district health staff. However, based on their prior knowledge of when funds were likely to be released, district health managers adopt a range of informal mechanisms to cope with the situation. These mechanisms include obtaining supplies on credit, borrowing cash internally, and pre-purchasing materials, and conserving part of the fourth quarter donor-pooled funds for the first quarter of the next year. Although these informal mechanisms have kept the district health system in Ghana running in the face of persistent delays in funding, some of them are open to abuse and could be a potential source of corruption in the health system. The untimely release of funds, particularly during the first phase of the project, is a significant barrier to effective project delivery especially where new project staff must be recruited, and pre-requisite field supplies purchased to project kick-off activities. Feuerstein (1986) explains that locally managed and controlled funds have great potential to bring about positive development outcome at the local level especially if community participation is sufficiently enhanced and political interference reduced. It is true that there is no proper system put in place to monitor and evaluate the effectiveness of the use of these funds this is so because the appointing authority is not restricted to nominating people with such

knowledge. Grossman (2005) on his part argued that a program's effectiveness can be measured accurately only if one knows what would have happened without it.

Moenga, (2015) is in agreement that timely completion of construction projects in Kenya is increasingly becoming an issue of concern among the stakeholders in the construction industry. The most important factor influencing timely completion of construction projects in Kenya is; Financed by the contractor during the project, changes in designs by the owner or his agent during the construction, delays in contractor's payment and non-utilization of professional construction management. Also, preparation and approvals of shop drawings also contribute to the delays to a significant extent.

2.6 Technical competence of Project Manager and Timely Completion of Projects.

The project manager is responsible to a project sponsor for the overall planning, control and coordination of a project and for ensuring that a project is completed on time, on budget and that it satisfies the project sponsor's specifications. The project manager may also be responsible for assembling the project team, assessing the project's viability and securing the funds to implement the project. The project manager's role will vary from project to project According to Atkinson (1999), project managers appear to accept the 'iron triangle' of time, cost, and quality but focus more on time and budget delivery as the success criteria of projects. Project managers are likely to appreciate the risk of a project due to its uniqueness, complexity, and design features but appear not to prioritize the link between the outcomes of risks with the root causes as a result of project quality (Atkinson, 1999).

Earlier studies by Jeselskis and Ashely (1991) designed a predictive model to rate project managers' level of education and experience to understand project management success. Their model showed that success is dependent on many characteristics relating to the project managers' capability, experience, and authority. These characteristics have a direct relationship with the education level and training of the project manager. The size of the previously managed project also affects the manager's performance. The level of education and training are therefore important factors that may affect the quality of pre-project planning hence contributing significantly to its success.

A Project manager needs to work with different departments involved in the project to estimate lead times so that they meet the needs of the critical chain (Goldratt, 1997). Reiss (1993) suggests that a project is a human activity that achieves a clear objective against a time scale and that project management involves a combination of people management and management of change. Thomsen (2008) noted that it is crucial for the team to work together in an efficient and effective manner on a project to realize its critical success factors. These factors require day-to-day attention and operate throughout the life of the project and are limited in the number of areas that, if fully addressed, would ensure the successful completion of the project (Shehu and Akintoye, 2009). It is, therefore, critical that the project team leader ensures that members are aware and remain focused on these factors if the project is to be completed in time.

Otieno (2007) argues that if proper assessment and management of a project is done a project could never fail to be completed in time. Mulwa (2007) in his research of the impact of the project leader and his/her leadership style on project success intimates that literature on project success factors has largely ignored the impact of the project manager, and his or her leadership style and competence, on project success. This may be because most of the studies asked project managers their opinion and the respondents did not give it due consideration to their impact on project success. Or, it may be because the studies have not measured the impact of the project manager and, thus, not recorded it, or, it may be because the project manager has no impact. However, that last conclusion is in direct contrast to the general management literature, which postulates that the

Leadership style and competence of the manager has a direct and measurable impact on the performance of the organization or business. Thus, the authors have been commissioned by the Project Management Institute to study whether the leadership style and competence of the project manager is a success factor on projects and whether different styles are appropriate for different types of projects. Almost everyone is familiar with projects perceived as successful by those involved in their implementation, while the very same projects have been poorly received by Customers (Oser, 1967). There are other projects that consumed excessive resources and were considered internal failures, but were later hailed as successful by their customers and become a source of revenue for the company for many years (Mwabu et. al., 2002). The combination of a changing organizational environment and changing project characteristics make the role of the

project leader difficult (Kerote, 2007). Within this environment, a competent project manager is frequently regarded as having a significant impact on overall project success as well as being critical to other project elements, such as the success of the project team, including team member's motivation and creativity.

2.7 Theoretical Framework

This study was guided by stakeholder theory (Freeman (1984), Resource dependence theory (Pfeiffer 1981). These theories are relevant to this study because, for any CDF construction project to be initiated, various stakeholders and resources must be involved that is the direct beneficiaries who are community members and Government to finance the project.

2.7.1 Stakeholder theory

The stakeholder theory explains how organizations function on various constituencies with whom they are inextricably embedded. Stakeholder theory development has centered on defining the stakeholder concept and classifying stakeholders into categories that provide an understanding of individual stakeholder relationships. Freeman defined stakeholder as any group or individual who can affect or who is affected by the achievement of the firm's objectives and continues to provide the boundaries of what constitutes a stake (Waddock, 2002). He argues that a stakeholder has some form of capital, either financial or human, at risk and, therefore, has something to lose or gain depending on a firm's behavior. To these elements, Waddock (2002) adds a tie or tether that creates a bond of some sort. The stakeholder's theory of the organization requires an understanding of the types of stakeholder influence but also how organizations' respond to those influences (Waddock, 2002). Each firm faces a different set of stakeholders, which aggregate into unique patterns of influence. Thus, organizations response to their stakeholders requires an analysis of the complex array of multiple, interdependent relationships existing within the stakeholder environment. The conceptual competition within stakeholder theory, between legitimacy and power, is reflected in virtually every major theory of the firm particularly in agency, behavioral, institutional, population ecology, resource dependence and transaction cost theories (Waddock, 2002).

2.7.2 Resource Dependency Theory

Resource dependence theory suggests that power accrues to those who control resources needed by the organization, thereby creating power differentials among parties and it confirms that the possession of resource power makes stakeholder important to a firm (Hillman et al., 2009). Legitimacy is achieved if patterns of organizational practice are in congruence with the wider social system. Resource dependence theory (RDT) is concerned with how organizational behavior is affected by external resources the organization utilizes, such as raw materials (Davis & Cobb, 2010). The theory is important because an organization's ability to gather, alter and exploit raw materials faster than competitors can be fundamental to success. Some commentators encourage organizations to view customers as a resource predisposed to scarcity (Casciaro & Piskorski, 2005). In this regard, RDT is underpinned by the idea that resources are key to organizational success and that access and control over resources is a basis of power. Resources are often controlled by organizations, not under the control of the organization needing them, meaning that strategies must be carefully considered to maintain open access to resources (Casciaro & Piskorski, 2005).

2.8 Conceptual Framework

A conceptual framework is a model of representation where a researcher conceptualizes or represents relationships between variables in the study and shows the relationship graphically or diagrammatically (Orodho, 2005). The relationship between independent and dependent variables is presented in Figure 2.1.

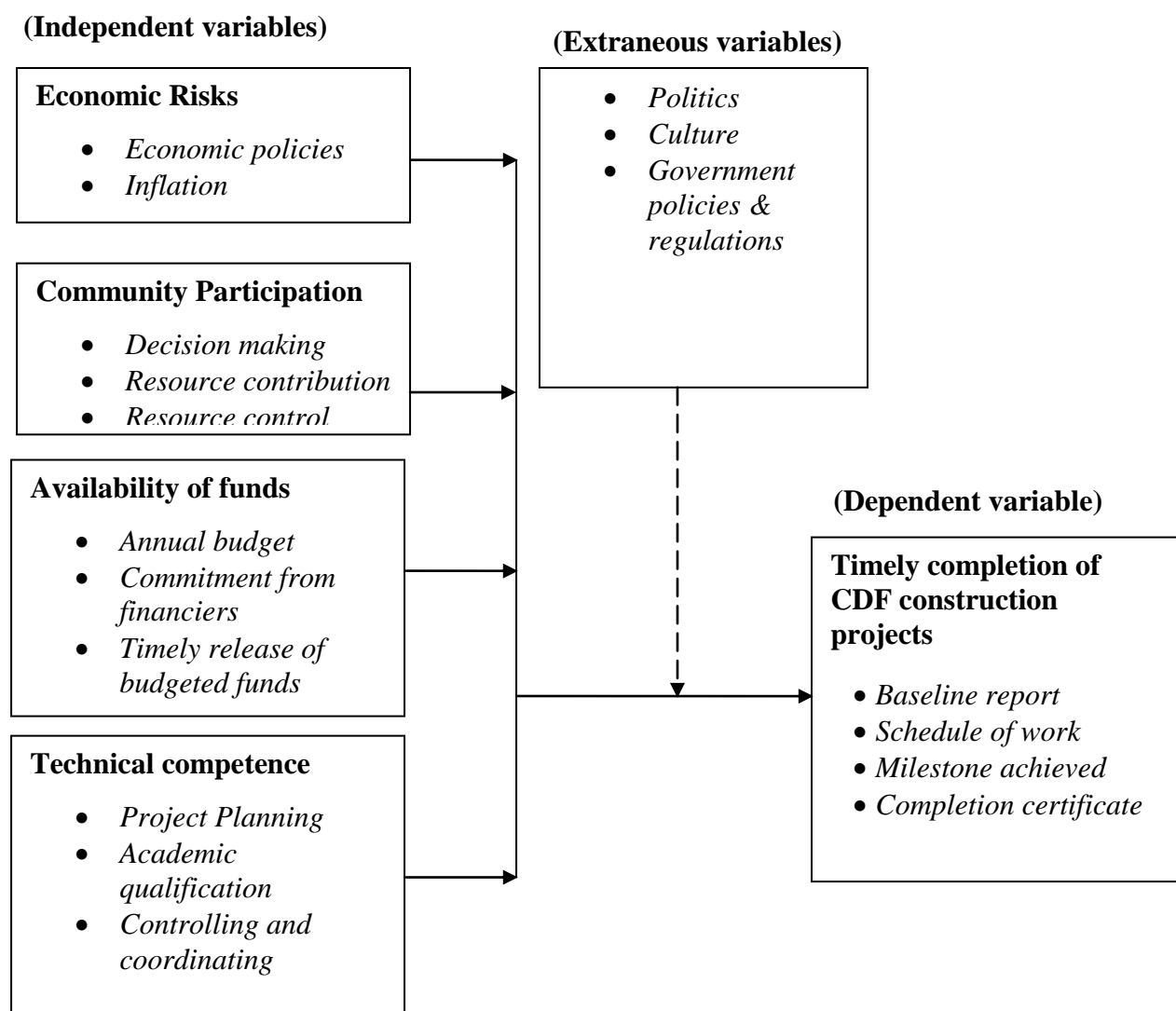


Figure 1: Conceptual framework

2.9 Research gaps

In the studies reviewed, it is evident that projects have been shown to be notorious for failing to be completed in time. The reason being many are affected by economic crisis, lack of community participation, and inadequate finances change of management this is especially pronounced in nonprofit making organizations (Guerin 2012). Atati (2014) wrote about Economic Policies and Project Financing whereby he recommended further studies to be done on economic policies. Ti Sullivan et al. (2010) did extensive research on Budget limitation, and he found out that there is a positive relationship between funds availability and timely project completion, therefore, a conclusion that budget limitations influences project implementation. In

many cases, timely completion of projects is fundamental if the project objectives and success is to be achieved. A project that is completed in time exhibits an overall efficiency of project planning, project initiation, project implementation and project management. In this regard, there is little or no specific studies that have been carried out to investigate the factors influencing timely completion of constituency development fund (CDF) funded construction projects in secondary schools in Kwanza constituency. This study, therefore, sought to fill this research gap by establishing the factors influencing the timely completion of (CDF) funded construction projects in Kwanza constituency Trans-Nzoia County, Kenya.

2.10 Summary of Chapter.

This chapter has discussed various studies on CDF construction projects delivery time and challenges they face. It has discussed project completion and specifically the factors that affect completion of CDF projects in other parts of the world and try to relate them to the current study. In this regard, some of the major factors believed to affect construction projects include economic risks, community participation, availability of funds, and technical competence of the project implementers. However, no single study has been undertaken to investigate these factors in Kwanza Constituency. In this case, the current study is different from the latter in the sense that the current study sought to evaluate the perceived factors influencing timely completion of CDF funded construction projects in Kwanza constituency.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology that the researcher adopted in the study. The researchers' choice was informed by the tenets advocated by Creswell (2010) for philosophical assumptions that guide the direction collection and analysis of data. The study used mixed research method. Use of mixed research methods is supported and reinforced by Mertens (2013) for their ability to facilitate an understanding of complex social phenomenon as is being investigated in the study. Research methodology, in this case, is represented regarding; research design, research population, study sample and sampling technique, research instruments, data collection procedure, validity and reliability tests and data processing and analysis.

3.2 Research Design

According to Kothari (2004), research design functions as the research blue print for measurement and analysis of data. This study adopted a descriptive survey design. A survey design as described by Mugenda & Mugenda (2008) is an attempt to collect data from members of a population to determine the current status of that population on one or more variables. The researcher adopted this design since it was an efficient method of collecting descriptive data regarding a characteristic of a sample of a population, current practices, conditions or needs. The other reason was that also the design allowed the researcher to gather information regarding the respondent's opinion, attitudes, perceptions and views in a more cost effective way (Kothari, 2004).

3.3 Target Population

According to Kombo & Tromp (2006), a population is a group of persons or elements that have at least one thing in common. For this particular study, the target population consisted of the project implementers and project beneficiaries in Kwanza Constituency. From a CDF project implementation report status released in the year 2015, 8 secondary schools CDF construction projects had not yet been completed within time. In this case, the study targeted these selected schools namely St. Cecilia girls, St. Francis, Naifarm, Luuya, Sarura, Kwanza, Kitum and Sabwani secondary. The targeted population consisted of 24 project implementers (project

manager, a project engineer and a monitoring committee member at constituency level) because of their job position, and 608 CDF project beneficiaries (teachers and form Four students) because of their longer stay in school hence more knowledgeable with the factors influencing completion of construction projects funded by CDF in their schools.

3.4 Sampling Procedure

Sampling is the process of selecting few cases to provide information that can be used to make judgments about a much larger number of cases. Saunders et al. (2012) defined sampling as the process of selecting some individuals for a study in a way that ensures selected individuals represent the target population from which they have been selected. In this case, both purposive sampling technique and simple random sampling technique were used to determine the sample size in this study. Purposive sampling was used to sample the secondary school CDF project implementers who were the key informants in the study following their job position while simple random sampling technique was used to sample the secondary school CDF project beneficiaries since it sets a platform where all the elements of a population are given equal chances (Saunders et al., 2012).

3.5 Sample Size

The sample size is an important feature of any research study in which the goal is to make inferences about a population from a sample. In practice, the sample size used in a study is determined based on the expense of data collection, and the need to have sufficient statistical power (Saunders et al., 2012). Mugenda and Mugenda (2003) recommended sample sizes of 10% and 50% of the target population for large and small numbers respectively. In this regard, the 24 project implementers were sampled by use of the purposive sampling technique where three implementers were selected in all the eight projects. On the other hand, 120 project beneficiaries (students and teachers) were sampled out for study.

3.5 Data Collection Instruments

Data in this study was collected by use of different instruments:

3.5.1 Questionnaires

Mbwesa (2006) defines data collection instruments as the techniques and tools that are used for the purpose of data collection. Research instrumentation is also about how the research tools are

deployed (Oso & Onen, 2011). For this study, primary data was collected using structured questionnaires that were issued to the respondents. Questionnaires were preferred because they were simple to administer, comprehensive and were simpler to analyze since they provide direct observations.

3.5.2 Interview

This data collection instrument was used by the researcher only to collect information from the respondents who had earlier on alerted the researcher that they could not be available to respond to the questionnaire he distributed. The researcher interviewed these respondents at their appropriate time and administered the interview guide through a face-to-face interview or via phone interview. The technique was a valuable aid in the collection of relevant information regarding factors influencing timely completion of CDF construction projects in secondary schools.

3.6 Data Collection Procedure

Before proceeding to various schools for the purpose of collecting data, the researcher sought to obtain the necessary document for the research with the assistance of the department of extra mural studies University of Nairobi. This formed a basis of seeking for a research permit from the National Council for Science Technology and Innovations. The researcher also notified the DEO by sending a letter to him asking permission to carry out research in the respective schools. Later portion of the questionnaires were administered to the respondents via email while the rest were administered through the drop and pick technique. The respondents were given a one-week time frame to complete filling in the questionnaires after which the respondent retrieved the questionnaires from the respondents for analysis.

3.6.1 Pilot Testing of Research Instruments

According to Anold et al. (2009), a pilot is a sort of a small study that helps the researcher redesign the research instrument and design a confirmatory study. The rule of the thumb was used by the researcher to determine the number of the sample size to involve in the pilot study as supported by Cresswell (2003) who stated that the 10 percent of the sample size should constitute the pilot study. In this regard, the pilot study was undertaken in a similar environment

month before the actual data collection process with an interval of two weeks. To this extent, two project implementers (10 percent of 24) and 12 project beneficiaries (10 percent of 120) took part in the pilot study.

3.6.2 Validity of the Research Instruments

Validity investigates the ability of the research instruments to measure what it is intended to. According to Kothari (2004), content validity is a function of whether the dimensions or elements of a concept have been captured. In this case, Kothari (2008) further articulates that data collected by a researcher must satisfy the topic in question for it to be said to be accurate. In this study, the researcher first ensured that the information recorded in the questionnaires was correct by issuing questionnaires that could be easily understood by the respondents.

The questionnaires were then submitted to the supervisors in the University for Evaluation. According to Borg and Gall (2008), this method is referred to as content validity. If the content under scrutiny receives support from at least three members of the panel, then it is assumed that the content validity of the study is significant. In this regard, the study instruments received support from four out of six panelists.

3.6.3 Reliability of the Research Instruments

Reliability is the extent to which results of a study are consistent over time, and there is an accurate representation of the total population under study and aims at establishing the ability of the research instruments to produce similar results over time (Golafshani, 2003). In this study, this was achieved through by computing Cronbach alpha coefficients for each variable in the data collection instrument and from the data collected during the pilot study where each of the calculated Cronbach alpha coefficients was compared with the threshold of 0.7. In this study, all Cronbach alphas computed were greater than 0.7.

3.7 Data Processing, Analysis and Presentation

According to Sanders et al. (2009), data analysis is defined as the process of organizing the raw data into useful information. Quantitative data was first checked to eliminate inconsistencies where it was then summarized and coded back into the SPSS Version 23 software for more analysis. Descriptive statistics were further derived from the data collected to garner the views of

the respondents. Analysis of the qualitative data involved content analysis where the views, ideas, feelings and opinions were evaluated. In this case, the key ideas and themes for each variable were generated and further used in data analysis and interpretation. The descriptive and inferential statistics were produced by use of Statistical Package for Social Sciences (SPSS version 23) which offers extensive data handling capability and extensive statistical analysis styles (Zikmund, 2010). The study results were then presented by the use of the frequency tables, pie charts, and other statistical charts.

3.8 Correlation and Regression Analyses

The researcher performed a correlation Analysis-Pearson Correlations at 99 level of confidence and 1 percent level of significance to show the nature of the relationship existing between the independent variables (economic risks, community participation, availability of funds and technical competence) and dependent variable (timely completion of CDF construction projects) in the perspective of both project implementers and project beneficiaries. Further, the study used a multiple regression model at 95 percent level of confidence and 5 percent level of significance to establish how independent variables (economic risks, community participation, availability of funds and technical competence) affected dependent variable (timely completion of CDF construction projects).

In this case, the regression equation was expressed as;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon \dots\dots\dots (i)$$

Where:

Y= Timely completion of CDF construction projects

β_0 = coefficient of intercept

X_1 = Economic risks

X_2 = Community participation

X_3 = Availability of funds

X_4 = Technical competence

ϵ =error term

$\beta_1 \dots \beta_4$ = regression coefficients of the independent variables

3.8 Ethical Issues

Ethical consideration in research are actions taken to ensure safety and privacy of the participants are not violated whatsoever (Resnik, 2005). These standards include voluntary participation, informed consent, and confidentiality of information, the anonymity of research participants and approval for the study from relevant authorities. The researcher first obtained a permit and research authorization letter from the National Council for Science and Technology in the Ministry of Higher Education, Science and Technology. Secondly, the researcher attached a permit approving the study to the research instrument together with the transmittal Letter from the University of Nairobi, Department of Extra mural Studies confirming that the study was legitimate, and seek permission from the Sub-County Director of Education, area Education Officer and the administration of schools. In this regard, no respondent was forced to participate in the study unwillingly, and no individual's right was infringed in the process of data collection. Further, complete anonymity of the respondents in the study was ensured.

3.9 Operationalization of Variables

Operationalization of variables entails the process of describing the operations that the research intends to apply to the measurements of the study variables (Mugenda & Mugenda, 2003). This research entailed four independent variables that included: Economic risks, community participation, availability of funds, and technical competence of project implementers and evaluation of construction project cycle. The dependent variable in this study was the timely completion of CDF funded construction projects.

Table 3.2: Operationalization of variables

Variable	Type variable	Indicators	Measurement scale	Type of data analysis
Community Economic risk	Independent	Economic policies Inflation	Five-point Likert-type scale: Ratio	Descriptive Qualitative
participation	Independent	Decision making Resource contribution Resource control	Five-point Likert-type scale :Ratio type scale; Interval	Descriptive Qualitative Quantitative
Availability of funds	Independent	Annual budget Commitment from GOK Timely release of funds	Five-point Likert-type scale: Ratio type scale; Interval	Descriptive Qualitative Quantitative
Technical competence	Independent	Project planning Academic qualification Controlling and coordinating	Two –point likert-type scale; Interval type scale Ratio:	Descriptive Quantitative Qualitative
Timely completion of CDF construction projects	Dependent	Academic qualification Professional work experience	Five-point Likert-type scale; Interval type scale Ratio:	Descriptive Quantitative Qualitative

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Introduction

The purpose of this study was to investigate the factors influencing timely completion of CDF funded construction projects in secondary schools in Kenya by establishing how economic risk, community participation, availability of funds and technical competence influence timely completion of CDF funded construction projects in secondary schools in Kenya. This chapter presents computed quantitative and inferential statistics from the data gathered by use of the questionnaires. The findings are grouped into three broad categories; background information on the respondents, descriptive statistics regarding the variables in the study and inferential statistics. Results are presented by the use of frequency tables, pie charts, and the bar graphs.

4.1 Response Rate

Questionnaires were distributed to 24 project implementers and 120 project beneficiaries. However, interviews were conducted with various project implementers who indicated that they could not find time to respond to the questionnaires distributed. The questionnaire return rates were as follows; 18 out of 24 project implementers returned their questionnaires, six were interviewed signifying a 100% return rate while 92 out of 120 project beneficiaries returned their questionnaires signifying a 76.7% return rate as indicated in Table 3.3.

Table 3.3: Response rate

	Targets	Number returned	Percentage
Project implementers	24	24	100.0%
Project beneficiaries	120	92	76.7%

The study findings in Table 3.3 revealed that 76.7 percent of the project beneficiaries' questionnaires were returned while 100 percent of the project implementers' questionnaires were returned. However, 6 of the project implementers were interviewed since they could not find time to respond to the questionnaires distributed by the respondents. All in all, the respondents still gave the relevant information required by the researcher. The findings from the eight schools were therefore used in the study.

4.2 Reliability Test

Reliability of an instrument is the ability to produce consistent and stable results. One of the most common reliability coefficients is the Cronbach's alpha which estimates internal consistency by determining how all items on a test relate to all other items and the total test - internal coherence of data. The reliability is expressed as a coefficient between 0 and 1. The higher the coefficient, the more reliable is the test. According to Malhotra (2004), a standard minimum value of alpha of 0.7 is recommended. In this study, all the alpha values were more than 0.7 as indicated in Table 3.4.

Table 3.4: Reliability test

Variable	Cronbach's Alpha	No. of items
Economic risks	.760	4
Community participation	.949	3
Availability of funds	.732	3
Technical competence	.915	6

4.3 General Information of the Respondents

This section contains the descriptive statistics regarding the respondents' gender, duration of work and education qualification.

4.3.1 Gender of the Respondents

The study findings revealed that 16 (66.7%) of the implementers were male while 8 (33.3%) were female as indicated in Table 4.5. These results implied that there was bias regarding gender representation in the composition of the CDF construction implementers in Kwanza constituency.

Table 4.5: Gender of the implementers

	Frequency	Percentage
Male	16	66.7%
Female	8	33.3%
Total	24	100.0%

Further, the study findings revealed that 41 (44.6 %) of the project beneficiaries were male while 51 (55.4%) were female as indicated in Table 4.6. These results implied that all the genders were well represented concerning the beneficiaries.

Table 4.6: Gender of the project beneficiaries

	Frequency	Percentage
Male	41	44.6%
Female	51	55.4%
Total	92	100.0%

4.3.2 Duration of Work/Residence in Kwanza constituency

The study findings revealed the majority of the project beneficiaries 51 (55.4%) had lived in Kwanza constituency for more than three years, 14 (15.2%) for less than one year, 14 (15.2%) for 1-2 years and 13 (14.1%) for 2-3 years as indicated in Table 4.7. On the other hand, majority of the implementers; both interviewed and who responded to the questionnaires 14 (58.3%) had worked in Kwanza constituency for more than three years, 5 (20.8%) for 2-3years, 3 (12.5%) for 1-2 years while 2 (8.3%) had lived in Kwanza constituency for less than one year as indicated in Table 4.8. These results implied that most of the respondents were quite knowledgeable with the undertakings in Kwanza constituency.

Table 4.7: Beneficiaries' duration of residence in Kwanza constituency

	Frequency	Percentage
Less than one year	14	15.2%
1 -2 years	14	15.2%
2 – 3 years	13	14.1%
3 years and above	51	55.4%
Total	92	100.0%

Table 4.8: Implementers' duration of work in Kwanza constituency

	Frequency	Percentage
Less than one year	2	8.3%
1 -2 years	3	12.5%
2 – 3 years	5	20.8%
3years and above	14	58.3%
Total	24	100.0%

4.3.3 Education Qualification

From the study findings and the interview results, the majority of the project implementers 9 (37.5%) had diplomas, 7 (29.2%) had degrees, 6 (25.0%) had certificates while 2 (8.3%) had masters and above as indicated in Table 4.9. These results implied that most of the project implementers in Kwanza constituency were adequately trained.

Table 4.9: Education qualification of the project implementers

	Frequency	Percentage
Certificate	6	25.0%
Diploma	9	37.5%
Degree level	7	29.2%
Masters and above	2	8.3%
Total	24	100.0%

4.4 Descriptive and Inferential Statistics

This section contains the descriptive and inferential statistics relating to the major variables in the study; dependent variable (timely completion of the CDF construction projects) and independent variables (economic risks, community participation, availability of funds and technical competence).

4.4.1 Timely Completion of CDF Construction Projects

From the study findings indicated in Table 4.10 and 4.11, majority of project implementers (61.1%) and project beneficiaries (62.9%) agreed that there was a baseline report for CDF construction projects, minority implementers (16.7%) and minority beneficiaries (22.9) disagreed with statement while 22.2% implementers and 14.3% remained undecided. Similarly, majority of the project implementers (72.2%) and project beneficiaries (57.2%) agreed that schedule of work determines timely completion of the CDF construction funds, 16.7% of the implementers and 22.9% of the beneficiaries disagreed while 11.10% of the implementers and 20% of the beneficiaries remained neutral about the statement. Further, 55.5% of the implementers and only 14.3% of the beneficiaries agreed that all CDF construction projects had been completed within the time frame and at required standards. 33.3% of the implementers and 71.4% of the beneficiaries disagreed with the statement while 33.3% of the implementers and 14.4% of the beneficiaries remained neutral about the statement.

On a scale of 1-5, the project implementers slightly agreed with the statements on timely completion of CDF construction projects (Mean=3.61) while these responses were spread from the mean at 1.20 standard deviation. However, the project beneficiaries remained neutral on statements on timely completion of CDF construction projects (Mean= 3.10) with their responses spread from the mean at 1.17 standard deviation.

Table 4.10: Implementers' timely completion of CDF construction projects

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
There is a baseline report for CDF construction projects	0.00%	16.70%	22.20%	38.90%	22.20%	3.67	1.029
Schedule of work determines timely completion	5.60%	11.10%	11.10%	38.90%	33.30%	3.83	1.2
All CDF construction projects have been completed within time frame and at required standards	11.10%	22.20%	11.10%	33.30%	22.20%	3.33	1.372
Average	5.57%	16.67%	14.80%	37.03%	25.90%	3.61	1.20

Table 4.11: Beneficiaries’ timely completion of CDF construction projects

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
There is a baseline report for CDF construction projects	8.60%	14.30%	14.30%	48.60%	14.30%	3.46	1.172
Schedule of work determines timely completion	8.60%	14.30%	20.00%	28.60%	28.60%	3.54	1.291
All CDF construction projects have been completed within time frame and at required standards	17.10%	54.30%	14.30%	8.60%	5.70%	2.31	1.051
Average	11.43%	27.63%	16.20%	28.60%	16.20%	3.10	1.17

4.4.2: Economic Risk

The respondents were first asked if the economic risk had an influence on timely completion of CDF construction funds; 13 (72.2%) of the implementers agreed, 3 (16.7%) disagreed while 2 (11.1%). Similarly, the majority of the beneficiaries 52 (56.5%) agreed, 25 (27.2%) disagreed while 15 (16.3%) were not sure as presented in Figure 4.2.

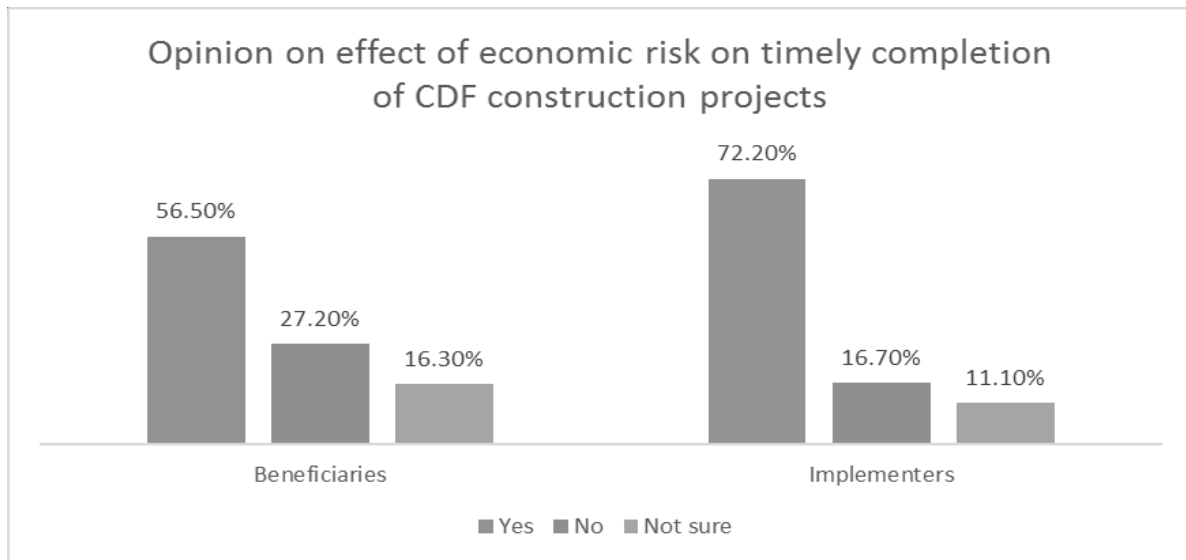


Figure 2: Opinion on effect of economic risk on timely completion of CDF construction projects

Further, the study findings in Table 4.12 and 4.13 revealed that majority of the project implementers (50%) and majority of the beneficiaries (65.7%) agreed that construction projects are affected by the economic policies, 16.7% of the implementers and 28.6% of the project beneficiaries disagreed while 33.3% of the implementers and 5.7% were undecided. Further, 66.7% of the implementers and 57.1% of the beneficiaries agreed that construction project experiences unnecessarily high costs in operations, 22.2% of the implementers and 28.6% of the beneficiaries disagreed while 11.10% and 14.3% were undecided. Also, 66.6% of the implementers and 68.6% beneficiaries agreed that most construction projects normally face financial crises, 11.2% of the implementers and 20% of the beneficiaries disagreed while 22.2% of the implementers and 11.4% of the beneficiaries were undecided. Further, 61.1% of the implementers and 68.6% of the beneficiaries agreed that construction projects experience construction delays, 16.7% of the implementers and 17.1% of the beneficiaries disagreed while 22.2% implementers and 14.3% of the beneficiaries were unsure.

On average, on a scale of 1 to 5, the implementers agreed with the statements on economic risks with a mean of 3.61 and responses were spread from the mean at 1.21 standard deviation while the beneficiaries agreed to statements on economic risk with a mean of 3.7 and at 1.35 standard deviation.

Table 4.12: Implementers' agreement with statements of economic risk

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
Construction project is affected by economic policies	5.60%	11.10%	33.30%	27.80%	22.20%	3.5	1.15
Construction project experiences unnecessarily high costs in operations	11.10%	11.10%	11.10%	50.00%	16.70%	3.5	1.249
Most construction projects normally face financial crisis	5.60%	5.60%	22.20%	33.30%	33.30%	3.83	1.15
Construction projects experiences construction delays	11.10%	5.60%	22.20%	33.30%	27.80%	3.61	1.29
Average	8.35%	8.35%	22.20%	36.10%	25.00%	3.61	1.21

Table 4.13: Beneficiaries agreement with statements of economic risk

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
Construction project is affected by economic policies	14.30%	14.30%	5.70%	28.60%	37.10%	3.6	1.479
Construction project experiences unnecessarily high costs in operations	14.30%	14.30%	14.30%	25.70%	31.40%	3.46	1.442
Most construction projects normally face financial crisis	2.90%	17.10%	11.40%	20.00%	48.60%	3.94	1.259
Construction projects experiences construction delays	5.70%	11.40%	14.30%	34.30%	34.30%	3.8	1.208
Average	9.30%	14.28%	11.43%	27.15%	37.85%	3.70	1.35

4.4.3 Influence of Economic Risk on Timely Completion of CDF Construction Projects

Further, the study investigated the implication of economic risk on timely completion of these projects. Table 4.14 outlines the pertinent correlation analysis results.

Table 4.14: Correlations between Economic risk and timely completion of the CDF construction projects

		Timely completion of CDF construction projects	Economic risk
Timely completion of CDF construction projects	Pearson Correlation	1	-.546**
	Sig. (2-tailed)		.000
	N	116	116
Economic risk	Pearson Correlation	-.546**	1
	Sig. (2-tailed)	.000	
	N	116	116

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

The results from the correlation analysis revealed that there exists a negative correlation between economic risk and timely completion of CDF construction projects in Kwanza constituency ($r = -0.546$, $p = 0.000$). In this regard, $p < 0.01$ an indication that the relationship between the two variables was statistically significant at 0.01 level of significance. These indicated that the prevailing economic risks in the market have a negative influence on timely completion of the CDF construction projects in Kwanza constituency.

4.4.4 Community Participation

From the study findings, majority of the project beneficiaries 42 (45.7%) indicated that community participation affected timely completion of CDF construction projects to a very large extent, 22 (23.9%) to a large extent, 9 (9.8%) were neutral, 12 (13%) to a negligible extent while 7 (7.6) to no extent as indicated in Figure 4.2.

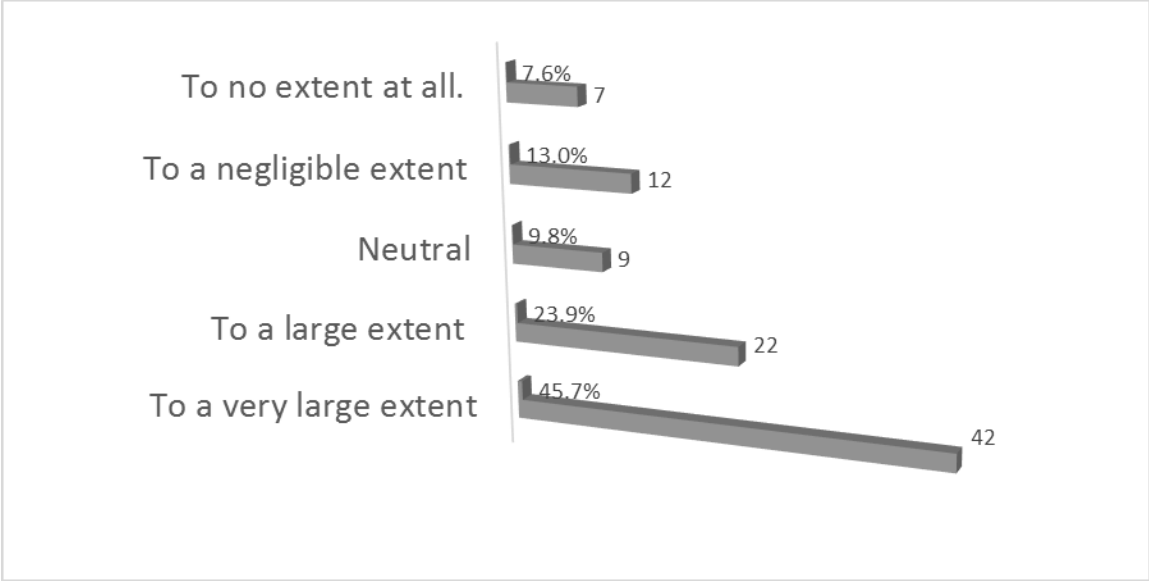


Figure 1: Beneficiaries’ extent of effect of community participation

Further, the study findings revealed that 72.2% of the implementers agreed that efforts to increase resources influence community participation and timely completion of CDF construction projects, 16.7% disagreed while 11.10% remained undecided. Also, 72.2% of the implementers agreed that exercising control over resources by the community has an influence on CDF construction projects, 16.7% disagreed with the statement while 11.1% remained undecided. 61.1% of the implementers agreed that contribution in the project design by the community influences completion of CDF construction projects, 22.3% disagreed while 16.7% remained undecided as indicated in Table 4.14.

On average, the respondents agreed to statements on community participation with a mean of 3.78 and their responses were spread from the mean at 1.36 standard deviation.

Table 4.15: Implementers' agreement with statement on community participation

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
Efforts to increase resources influence community participation and timely completion of CDF construction projects	11.10%	5.60%	11.10%	22.20%	50.00%	3.94	1.392
Exercising control over resources by the community has an influence on CDF construction projects	16.70%	0.00%	11.10%	33.30%	38.90%	3.78	1.437
Contribution in the project design by the community influences completion of CDF construction projects	5.60%	16.70%	16.70%	33.30%	27.80%	3.61	1.243
Average	11.13%	7.43%	12.97%	29.60%	38.90%	3.78	1.36

4.4.5 Influence of Community Participation on Timely Completion of CDF Construction Projects

About the study objectives, the study sought to assess how community participation influences timely completion of the CDF construction projects. The correlation results were presented in Table 4.20.

Table 4.16: Correlations between Community participation and timely completion of the CDF construction projects

		Timely completion of CDF construction projects	Community participation
Timely completion of CDF construction projects	Pearson Correlation	1	.722**
	Sig. (2-tailed)		.000
	N	116	116
Community participation	Pearson Correlation	.722**	1
	Sig. (2-tailed)	.000	
	N	116	116

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

The results from the correlation analysis revealed that there exists a relatively high positive correlation between community participation and timely completion of CDF construction projects in Kwanza constituency ($r=0.722$, $p=0.000$). The $p<0.01$ implying that the relationship between the two was statistically significant at 0.01 level of significance. This is an implication that involvement of the surrounding community in CDF construction projects in Kwanza constituency has a big influence on their completion.

4.4.6 Availability of Funds

First, the respondents were asked to state whether the availability of funds had an influence on timely completion of CDF construction projects. In this regard, 12 (66.7%) of the implementers and 59 (64.1%) of the beneficiaries agreed that availability of funds had an influence, 4 (22.2%) of the implementers and 21 (22.8%) of the beneficiaries disagreed while 2 (11.1%) of the implementers and 12 (13%) of the beneficiaries were not sure as presented in Figure 4.4.

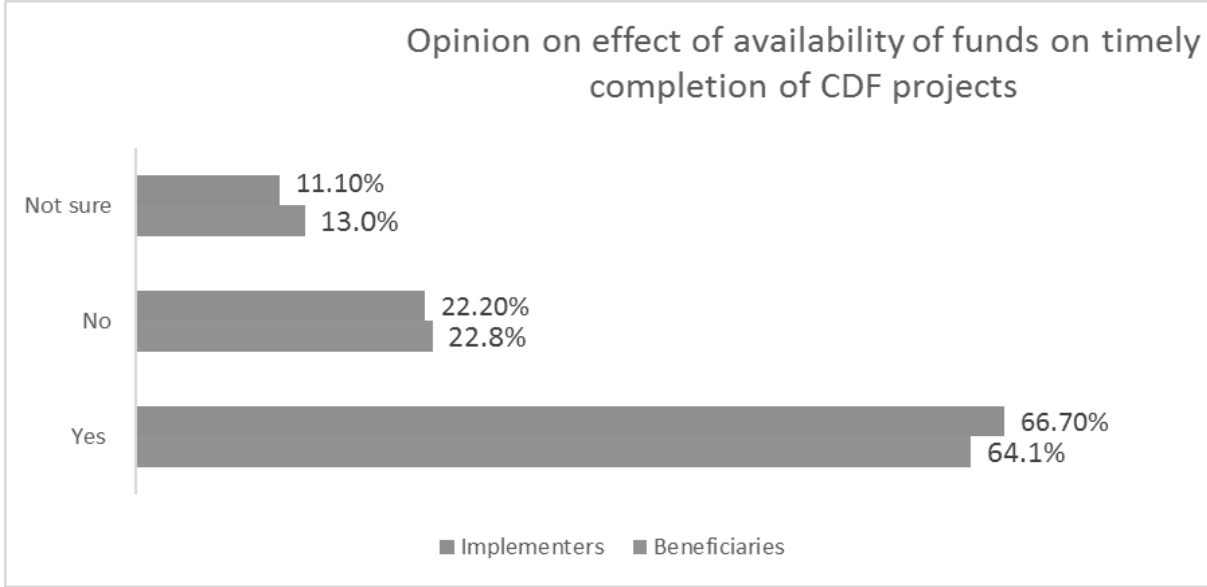


Figure 2: Opinion on effect of availability of funds on timely completion of CDF projects

Further, from the study findings in Table 4.15 and 4.16, majority of the implementers (88.8%) and majority of the beneficiaries (51.4%) agreed that budget allocation for CDF projects influences availability of funds, 5.6% of the implementers and 40% of the beneficiaries disagreed while 5.6% of the implementers and 8.6% of the beneficiaries remained undecided. Also, 77.8% of the implementers and 74.2% of the beneficiaries agreed that release of CDF construction projects funds adequately influences the availability of funds, 16.7% of the implementers and 20% of the beneficiaries disagreed while 5.6% of the implementers and 5.7% of the beneficiaries remained undecided. Further, 55.5% of the implementers and 65.7% of the beneficiaries agreed that commitment from the project financier influences the availability of funds, 11.2% of the implementers and 28.5% of the beneficiaries disagreed while 33.3% of the implementers and 5.7% of the beneficiaries remained undecided.

On average, the implementers agreed to statements on the availability of funds with a mean of 3.98 and their responses were spread from the mean at 1.09 standard deviation. Further, the beneficiaries slightly agreed to the statements on the availability of funds with an average of 3.56 and their responses were spread from the mean at 1.46 standard deviation.

Table 4.17: Implementers' agreement with statements on availability of funds

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
Budget allocation for CDF projects influences the availability of funds	5.60%	0.00%	5.60%	44.40%	44.40%	4.22	1.003
Release of CDF construction projects money adequately influences the availability of funds	0.00%	16.70%	5.60%	50.00%	27.80%	3.89	1.023
Commitment from the project financier influences availability of funds	5.60%	5.60%	33.30%	11.10%	44.40%	3.83	1.249
Average	3.73%	7.43%	14.83%	35.17%	38.87%	3.98	1.09

Table 4.18: Beneficiaries' agreement with statements on availability of funds

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
Budget allocation for CDF projects influences the availability of funds	11.40%	28.60%	8.60%	11.40%	40.00%	3.4	1.538
Release of CDF construction projects money adequately influences the availability of funds	11.40%	8.60%	5.70%	37.10%	37.10%	3.8	1.346
Commitment from the project financier influences availability of funds	17.10%	11.40%	5.70%	34.30%	31.40%	3.51	1.483
Average	13.30%	16.20%	6.67%	27.60%	36.17%	3.57	1.46

4.4.7 Influence of Availability of Funds on Timely Completion of CDF Construction Projects

In tandem with the study objectives, the study sought to establish the influence of availability of funds on timely completion of the CDF construction projects. The correlation results were presented in Table 4.21.

Table 4.19: Correlations between Availability of funds and timely completion of the CDF construction projects

		Timely completion of CDF construction projects	Availability of funds
Timely completion of CDF construction projects	Pearson Correlation	1	.730**
	Sig. (2-tailed)		0.001
	N	116	116
Availability of funds	Pearson Correlation	.730**	1
	Sig. (2-tailed)	0.001	
	N	116	116

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

The correlation results in Table 4.21 revealed that there exist a high positive correlation between availability of funds and timely completion of CDF construction projects in Kwanza constituency ($r=0.730$, $p=0.001$). The $p<0.01$ an indication that these results were statistically significant at 0.01 level of significance. These findings bring to the fore the fact that availability of funds highly influences the timeliness of completion of any given project in a real life situation.

4.4.8 Technical Competence

When the respondents were asked to state whether they felt technical competence had an effect on timely completion of the CDF construction projects, 15 (83.3%) of the implementers and 62 (67.4%) of beneficiaries agreed that technical competence had an effect, 3 (16.7%) of the implementers and 23 (25%) were of a contrary opinion while only 7 (7.6%) of the project beneficiaries were not sure as indicated in Figure 4.4.

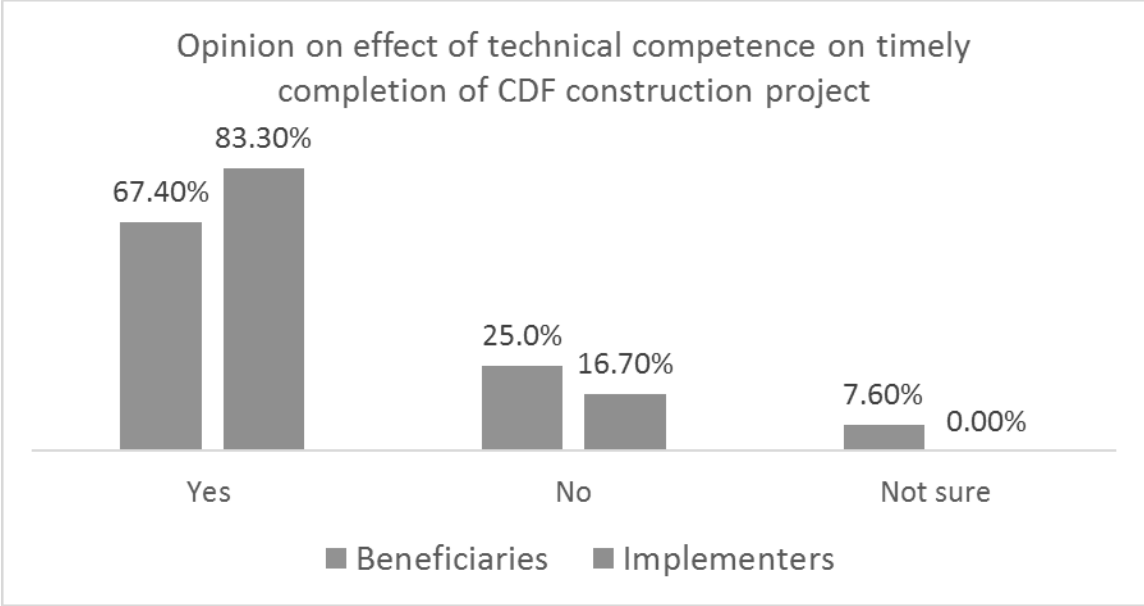


Figure 3: Opinion on influence of technical competence on timely completion of CDF construction project

Further, the study findings in Table 4.17 and 4.18, majority of the project implementers (77.7%) and 80 percent of the project beneficiaries agreed that project planning affected timely completion of CDF construction projects. On a similar note, the majority of the respondents (100%) and 80% of the beneficiaries agreed that financial management had an influence on timely completion of CDF construction projects. Also, 100% of the implementers and 77.10% of the beneficiaries agreed that controlling and coordination of resources affected timely completion of the CDF construction projects. Similarly, 61.1% of the implementers and 68.6% of the respondents agreed that performance/progress reporting influenced timely completion of CDF construction projects. A hundred percent of the implementers and 71.4% of the beneficiaries agreed that monitoring and evaluation did influence timely completion of the CDF construction projects.

On a scale of 1-5, both the project implementers and project beneficiaries highly agreed to statements of technical competence with a mean of 4.05 and 4.04 with the responses spread from the mean at 0.24 and 1.15 standard deviation, respectively.

Table 4.20: Implementers' agreement with statements of technical competence

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
Project planning	0.00%	16.70%	5.60%	44.40%	33.30%	4.22	0.186
Financial management	0.00%	0.00%	0.00%	33.30%	66.70%	3.89	0.298
Controlling and coordinating	0.00%	0.00%	0.00%	50.00%	50.00%	3.83	0.274
Performance/progress reporting	0.00%	11.10%	27.80%	22.20%	38.90%	4.30	0.150
Monitoring and evaluation	0.00%	0.00%	0.00%	33.30%	66.70%	4.00	0.298
Average	0.00%	5.56%	6.68%	36.64%	51.12%	4.05	0.24

Table 4.21: Beneficiaries' agreement with statements of technical competence

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
Project planning	8.60%	5.70%	5.70%	20.00%	60.00%	4.17	1.294
Financial management	5.70%	2.90%	11.40%	37.10%	42.90%	4.09	1.095
Controlling and coordinating	0.00%	17.10%	5.70%	37.10%	40.00%	4	1.085
Performance/progress reporting	5.70%	17.10%	8.60%	28.60%	40.00%	3.8	1.302
Monitoring and evaluation	0.00%	20.00%	8.60%	25.70%	45.70%	3.97	1.175
Project financing	0.00%	8.60%	11.40%	31.40%	48.60%	4.2	0.964
Average	3%	12%	9%	30%	46%	4.04	1.15

4.4.9 Influence of Technical Competence on Timely Completion of CDF Construction Project

Regarding the study objectives, the study sought to investigate the influence of technical competence on timely completion of the CDF construction projects. The correlation results were then presented in Table 4.22. The findings indicate that technical competence has a direct impact on the timely completion of the CDF construction projects.

Table 4.22: Correlations between Technical competence and timely completion of the CDF construction projects

		Timely completion of CDF construction projects	Technical competence
Timely completion of CDF construction projects	Pearson Correlation	1	.728**
	Sig. (2-tailed)		0.001
	N	116	116
Technical competence	Pearson Correlation	.728**	1
	Sig. (2-tailed)	0.001	
	N	116	116

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

The correlation results presented in Table 4.22 established that there is a strong positive correlation between timely completion of the CDF construction projects in Kwanza constituency and Technical competence ($r=0.728$, $p=0.001$). In this case, $p<0.01$ and indication that the results were statistically significant at 0.01 level of significance.

4.5 Regression Analysis

The researcher further ran a multiple regression to predict the dependent variable (timely completion of the CDF construction projects) using independent variables (economic risks, community participation, availability of funds and technical competence).

Table 4.23: Model Summary

Model	R	R Squared	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.884 ^a	.782	.764	.71799	.782	43.030	4	48	.000

a. Predictors: (Constant), Economic risks, Community participation, Availability of funds and Technical competence

The model used in this study was able to explain 78.2% of the variances in timely completion of the CDF construction projects. This is evidence that predictors used in this study were able to explain a very large percentage of the variance in timely completion of the CDF construction projects. In this case, the unexplained variance is quite small and that more research should be done to establish the factors influencing the remaining 21.8% of timely completion of the CDF construction projects in secondary schools in Kwanza constituency. Further, the ANOVA results in Table 4.24 revealed that the model was statistically significant in predicting the influence of economic risk, community participation, availability of funds and technical competence on timely completion of the CDF construction projects in secondary schools in Kwanza constituency at 0.05 since $p < 0.05$.

Table 4.24: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	88.728	4	22.182	43.030	.000 ^b
	Residual	24.744	48	.516		
	Total	113.472	52			

a. Dependent Variable: Timely completion of CDF construction projects

b. Predictors: (Constant), Technical competence, Economic risk, Availability of funds, Community participation

Table 4.25: Coefficients^a

Model	Unstandardized		Standardized	t	Sig.	
	Coefficients		Coefficients			
	B	Std. Error	Beta			
	(Constant)	-4.080	1.567		-7.192	.000
	Economic risk	-.343	.163	-.302	-.689	.030
1	Community participation	.531	.056	.236	2.192	.011
	Availability of funds	.638	.238	.137	2.004	.000
	Technical competence	.566	.229	.474	3.061	.000

a. Dependent Variable: Timely completion of CDF construction project

Substituting the beta coefficients to the regression equation, timely completion of CDF construction becomes:

$$Y = -4.080 + (-0.343) X_1 + 0.531X_2 + 0.638X_3 + 0.566X_4$$

In this regard, if all independent variables were at constant zero, then the timely completion of CDF construction projects will be -4.080. This implies that the timely completion of the CDF construction projects was to be ineffective if there was no economic risks, no community participation, no available funds and no technical competence. In this case, a unit increase in economic risks in the market will likely to result in a -0.343 increase in timely completion of the CDF construction projects. A unit increase in community participation will result in a 0.531 increase in timely completion of the CDF construction projects. A unit increase in availability of funds will likely result in a 0.638 increase in timely completion of the CDF construction projects. A unit increase in technical competence will likely result in a 0.566 increase in timely completion of the CDF construction projects.

4.7 Hypothesis Testing

H₀1: Economic risks do not significantly influence timely completion of CDF funded Construction Projects in Secondary Schools in Kwanza Constituency was rejected at t= -0.689 and p-value 0.030 which is less than 0.05 level of significance.

H₀2: Community participation does not significantly influence timely completion of CDF funded Construction Projects in Secondary Schools in Kwanza Constituency was rejected at $t=2.192$ and p-value 0.011 which is less than 0.05 level of significance.

H₀3: Availability of funds does not significantly influence timely completion of CDF funded Construction Projects in Secondary Schools in Kwanza Constituency was rejected at $t=2.004$ and p-value 0.000 which is less than 0.05 level of significance.

H₀4: Technical competence does not significantly influence timely completion of CDF funded Construction Projects in Secondary Schools in Kwanza Constituency was rejected at $t=3.061$ and p-value 0.000 which is less than 0.05 level of significance.

4.8 Qualitative Analysis

From the qualitative data collected through questionnaires and interview methods and analyzed, it was established that most of the project beneficiaries; teachers and students indicated that they did participate in decision-making processes for most of the CDF construction projects in secondary schools. It was also pointed out that most projects in secondary schools in Kwanza constituency had been implemented but not successfully as per customers' requirements. The respondents also indicated that the issues of finance to the project as a major barrier to their implementation this, in turn, led to stoppage project rate to be high and thus their completion time, and quality becomes an issue to the customers.

The project implementer interviewed also pointed out that availability of funds and technical competence were the major factors influencing timely completion of the CDF construction projects in Kwanza constituency. They said the training was very useful in utilizing its skills in guiding the key stakeholders on project implementation. They also stated that they were dissatisfied with the commitment of the financiers and pleaded that CDF funding should be increased for fruitful and timely completion of these projects.

CHAPTER FIVE:

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS FOR FURTHER RESEARCH

5.1 Introduction

This chapter presents the summary of the study findings, discussions, conclusions, and recommendations. The chapter further presents suggestions for further research.

5.2 Summary of the Study Findings

The aim of this study was to investigate the factors influencing timely completion of the CDF construction projects in secondary schools in Kwanza constituency. The researcher intended to provide possible solutions to enhance timely completion of the CDF construction projects in secondary schools in Kwanza constituency. The study was guided by four objectives and five research questions from which the independent variables were specified. The variables included economic risks, community participation, availability of funds and technical competence.

Regarding the general information of the respondents, the study established that majority of the implementers (66.7%) were male with only 33.3% being female while the majority of the beneficiaries (55.4%) were female with 44.6% being male. Further, the study established that majority of the project implementers (58.3%) had worked in Kwanza constituency for three years and above while the majority of the beneficiaries (55.4%) had lived in Kwanza constituency for more than three years. The study also established that most of the study implementers were professionally trained; 37.5% had diplomas, 29.2% had degrees, 25% had certificates while 8.3% had mastered.

5.2.1 Timely Completion of the Project.

Majority of project implementers (61.1%) and project beneficiaries (62.9%) agreed that there was a baseline report for CDF construction projects. In a similar context, the majority of the project implementers (72.2%) and project beneficiaries (57.2%) agreed that schedule of work determines timely completion of the CDF construction funds. 55.5% of the implementers agreed that all CDF construction projects had been completed on time and to the required standards while 71.4 of the beneficiaries disagreed.

5.2.2 Economic Risk

Descriptive statistics regarding economic risks established that majority of the implementers (72.2%) and beneficiaries (56.5%) were of the opinion that economic risk had a negative effect on timely completion of the CDF construction projects. Further, a majority of the project implementers (50%) and a majority of the beneficiaries (65.7%) agreed that construction projects are negatively affected by the economic policies. Similarly, 66.7% of the implementers and 57.1% of the beneficiaries agreed that construction project experiences unnecessarily high costs in operations. Also, 66.6% of the implementers and 68.6% beneficiaries agreed that most construction projects face financial crisis while 61.1% of the implementers and 68.6% of the beneficiaries agreed that construction projects experience construction delays.

5.2.3 Community Participation.

Descriptive statistics relating to community participation established that majority of the project beneficiaries (69.6%) felt that community participation was positively affected timely completion of CDF construction projects to a large extent. Further, 72.2% of the implementers agreed that efforts to increase resources positively influenced community participation and timely completion of CDF construction projects. Also, 72.2% of the implementers agreed that exercising control over resources by the community had a positive influence on completion of CDF construction projects while 61.1% of the implementers agreed that contribution in the project design by the community positively influenced completion of CDF construction projects.

5.2.4 Availability of Funds.

Descriptive statistics relating to the availability of funds revealed that majority of the implementers (66.7%) and beneficiaries (64.1%) were of the opinion that availability of funds had a positive influence on timely completion of construction projects in secondary schools in Kwanza constituency. Further, the study established that majority of the implementers (88.8%), and a majority of the beneficiaries (51.4%) agreed that budget allocation for CDF positively influenced the availability of funds. Also, a majority of the implementers (77.8%) and a majority of the beneficiaries (74.2%) agreed that release of CDF construction projects money positively influenced the availability of funds. In a similar context, a majority of the implementers (55.5%) and majority beneficiaries (65.7%) agreed that commitment from the project financier positively influenced the availability of funds.

5.2.5 Technical Competence of Project Implementers.

Descriptive statistics relating to technical competence established that majority of the implementers (83.3%) and majority beneficiaries (67.4%) agreed that technical competence had a positive influence on timely completion of construction projects in secondary schools in Kwanza constituency. Further, the study revealed that majority of the project implementers (77.7%) and 80 percent of the project beneficiaries agreed that project planning positively impacted timely completion of CDF construction projects. Similarly, a majority of the respondents (100%) and 80% of the beneficiaries agreed that financial management had a positive influence on timely completion of CDF construction projects. On a similar note, 100% of the implementers and 77.10% of the beneficiaries agreed that controlling and coordinating positively impacted on timely completion of the CDF construction projects. Also, 61.1% of the implementers and 68.6% of the respondents agreed that performance/progress reporting positively influenced timely completion of CDF construction projects while 100% of the implementers and 71.4% of the beneficiaries agreed that monitoring and evaluation did influence timely completion of the CDF construction projects.

5.2.6 Effect of Independent Variables on Completion of CDF Projects.

Correlation results regarding the effect of the independent variables on timely completion of CDF construction projects in secondary schools in Kwanza constituency established that there existed a negative correlation between economic risk and timely completion of CDF construction projects in Kwanza constituency ($r = -0.546$, $p = 0.000$). Further, there existed a relatively high positive correlation between community participation and timely completion of CDF construction projects in Kwanza constituency ($r = 0.722$, $p = 0.000$). Also, there exist a strong positive correlation between availability of funds and timely completion of CDF construction projects in Kwanza constituency ($r = 0.730$, $p = 0.001$) and that there is a strong positive correlation between timely completion of the CDF construction projects in Kwanza constituency and technical competence ($r = 0.728$, $p = 0.001$).

Regression analysis results established that if all independent variables were at constant zero, timely completion of CDF construction projects will be -4.080. In this regard, a unit increase in economic risks in the market will likely result in a -0.343 increase in timely completion of the CDF construction projects. A unit increase in community participation will result in a 0.531 increase in timely completion of the CDF construction projects. A unit increase in availability of

funds will likely result in a 0.638 increase in timely completion of the CDF construction projects. A unit increase in technical competence will result in a 0.566 increase in timely completion of the CDF construction projects.

5.3 Discussion of the Findings

This section sought to discuss the influence of economic risks, community participation, availability of funds and technical competence of CDF project managers on completion of construction projects funded by CDF in secondary schools in Kwanza Constituency

5.3.1 Economic Risk

In this regard, a majority of the respondents; implementers and beneficiaries concurred that economic risks had a negative influence on the timely completion of the CDF construction projects in Kwanza constituency where a majority of the implementers (72.2%) and beneficiaries (56.5%) supported the statement. Further, the findings made in this study revealed that most CDF construction projects in the area were affected by financial crises, high costs of operations as well as the national economic policies. This was supported by the inferential statistics established that economic risks negatively influenced timely completion of the CDF construction projects in Kwanza constituency with a p-value of 0.000 at 0.01 level of significance. These study findings were in line with the study findings made by Kiprono et al. (2015) who argued that sometimes projects are affected by non-manageable factors that have an adverse effect on their completion. Further, the study findings were in agreement with an argument put across by Mwangi et al. (2015) that external factors such as economic risks and politics negatively impact the completion of CDF projects in Kenya.

5.3.2 Community Participation.

In this regard, the descriptive statistics revealed that majority of the respondents (69.6%) agreed that community participation had a positive influence on timely completion of CDF construction projects in Kwanza constituency to a large extent. In this regard, the project beneficiaries who were the teachers and students articulated that they did participate in the decision-making process in most of the CDF construction projects in secondary schools and that they also made inputs into the successful completion of these projects. This was further supported by the results of inferential statistics in this study that established that there is a relatively strong positive correlation between community participation and timely completion of CDF construction

projects in Kwanza constituency ($r=0.722$, $p=0.000$). These findings are in line with the findings of Mugo (2013) who established that inadequate follow up on CDF construction projects positively contributed to the success of CDF projects in secondary schools. Similarly, Mwereria (2015) established that adequate stakeholder involvement in CDF construction projects has a positive effect on their success. Further, these study findings concurred with an argument by Kairu and Ngugi (2014) that there is need to increase citizens' participation in identification and prioritization of projects in order to actually address the real issues affecting the people and create ownership of the projects among the people and this can be achieved through evaluation and project control since it will enable the parties responsible to suggest solutions to the problems identified in project implementation and operations.

5.3.3 Availability of Funds.

The descriptive statistics revealed that majority of the respondents; implementers (66.7%) and beneficiaries (64.1%) were in agreement that availability of funds adequately affected timely completion of CDF construction projects in secondary schools in Kwanza constituency. Further, the findings revealed that availability of funds was negatively affected by the budget allocation done by the parliament, release of the CDF funds done by the controller of finances as well as the commitment of the Central Bank of Kenya. These findings were further supported by results of inferential statistics that established that there is a strong positive relationship between availability of funds and timely completion of CDF construction projects in Kwanza constituency ($r=0.730$, $p=0.001$). These findings concurred with the finding of Kamau & Mohamed (2015) who established a very strong positive correlation between fund allocation and successful completion of the CDF construction projects. In this case, Kamau & Mohamed (2015) argued that fund allocation did not only control the pace of the CDF projects but also the technical competence applied.

5.3.4 Technical Competence of the CDF Project Managers.

From the descriptive statistics, majority of the respondents; implementers (83.3%) and beneficiaries (67.4%) agreed that technical competence had a positive effect on timely completion of construction projects in secondary schools in Kwanza constituency. Further, the study findings revealed that issues of project planning, financial management, controlling and coordinating, performance and reporting, monitoring and evaluation all had a positive effect on

timely completion of CDF construction projects in Kwanza constituency. This was further supported by results of inferential statistics that revealed that there is a strong positive correlation between timely completion of the CDF construction projects in Kwanza constituency and Technical competence ($r=0.728$, $p=0.001$). These study findings agreed with the study findings by Ondari and Gekara, (2013), who pointed out that management support, skills and competence, are significant factors in successful project completion. Further, Mwereria (2015) established that project management skills are vital to timely completion of project CDF construction projects in secondary schools. Further, the study findings concurred with the findings by Mwangi et al. (2015) who established that technical competence is a major factor positively influencing successful completion of CDF projects.

Lastly, the qualitative analysis revealed that most projects in secondary schools in Kwanza constituency had been implemented but not successfully as per customers' requirements. Issues of financing and competence are the major barriers to timely completion of CDF construction projects in Kwanza constituency. Training was in this case said to be very useful in utilizing skills to guide the key stakeholders on project implementation process. However, majority of the project implementers were dissatisfied with the commitment of the CDF project financiers and indicated that CDF funding should be increased to ensure successful and timely completion of the CDF construction projects.

5.4 Conclusion

The study concluded that all the four factors investigated in this study had an influence on timely completion of the CDF construction projects in Kwanza constituency. These factors were economic risks, community participation, availability of funds and technical competence. In fact, all the factors reviewed in this study had an influence on timely completion of CDF construction projects in Kwanza constituency. The most significant factors were availability of funds ($p=0.000$, $t=2.004$) and technical competence ($p=0.000$, $t=3.061$) that positively influenced timely completion of the CDF construction projects. The Economic risk, however, had a negative impact.

5.5 Recommendations

Based on the findings the study recommended the following:

1. The Government of Kenya to ensure that the largest proportion and adequate funds of the CDF funds are allocated to development projects such as schools, roads, and health facilities before commencement so that these projects do not stall at some level due to lack of finance.
2. The government can intervene through proper mechanism in payment of school fees to enable availability of funds throughout project life cycle; additional finances for the operations of the schools could be done through agricultural projects, and other engagements like essay competition which could win funds for the schools.
3. The parents and all stakeholders to be involved in identifying development projects that ought to be funded in secondary schools using the CDF kitty at the constituency level. More so there is need to involve key stakeholders throughout the life cycle of the project who would give more option and proper assessment as the project progresses to completion.
4. The secondary school principals should be trained on project management skills and financial accounting and auditing to boost their technical competence. Such training should be done more often so as to cope with the ever-changing project environment and changing challenges.
5. To ensure that the CDF construction projects at constituency levels are completed within the recommended timeframe, CDF Committees should eliminate any vested political interests in CDF projects.

5.6 Suggestions for Further Research

The factors investigated in this study were able to account for 78.2% of timely completion of the CDF construction projects in secondary schools. In this regard, a similar study on factors affecting timely completion of the CDF construction projects in secondary schools in Kenya should be undertaken and should involve a larger sample size so as to help investigate the other

factors affecting the remaining 21.8% of timely completion of the CDF construction projects in secondary schools.

Further, a longitudinal study should be undertaken on factors influencing timely completion of the CDF construction projects in secondary schools in Kenya to validate and add weight to the findings made in this particular study.

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APPENDICES
APPENDIX 1: TRANSMITTAL LETTER

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Cell Phone: 0715003388; Email:nakitareonline@yahoo.com

**SUBJECT: MASTER OF ARTS IN PROJECT PLANNING AND
MANAGEMENT RESEARCH PROJECT**

STUDY TOPIC: Factors influencing timely completion of CDF funded construction projects

Dear Sir/Madam,

I am a final year MA Student carrying out an academic research for the purpose of examination leading to the award of a degree of Master of Project Planning and Management.

The purpose of this letter is to request you to provide the required information as per the questionnaires and interview guides provided. Kindly be as honest and as thorough as possible. The information you provide will be considered as confidential and will only be used for the purpose of my examination only.

Thanking you in advance for your cooperation.

Yours faithfully,

Amos Biketi

APPENDIX 2: RESEARCH QUESTIONNAIRE FOR PROJECT IMPLEMENTERS

Introduction

This questionnaire is designed to collect data on the study titled ‘**Factors influencing timely completion of CDF funded construction projects in secondary schools in Kwanza Constituency**’. The data collected through this questionnaire is intended for academic purposes only and will not be divulged to any other person. Please complete all sections of this document. All questions are interrelated and are very important for the study. You have been identified as one of the respondents and you are requested kindly to fill in the information as appropriate.

SECTION A: BACKGROUND DATA

- a. Gender: Male Female
- b. How long have you worked in this CDF project?
- i. Less than one year
- ii. 1 -2 years
- iii. 2 – 3 years
- iv. 3years and above
- c. What is your highest educational qualification?
- i. Certificate
- ii. Diploma
- iii. Degree level
- iv. Master and above

The following statements relate to timely completion of CDF construction projects. Using the scale **5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree and 1-Strongly Disagree**, express the extent to which you agree or disagree with the following statements.

No.	Statement	5	4	3	2	1	Scores
i.	There is a baseline report for CDF						

	construction projects						
ii.	Schedule of work determines timely completion						
iii.	All CDF construction projects have been completed within time frame and at required standards						
iv.	Total						
v.	Mean						

SECTION B: ECONOMIC RISKS

In your own opinion, do you think Economic risks influences the completion of CDF construction projects in Kwanza Constituency?

Yes [] No [] Not sure []

The following statements relate to Economic Risks. Using the scale **5-Strongly Agree, 4-Agree, 3-Un-decided, 2-Disagree and 1-Strongly Disagree**, express the extent to which you agree or disagree with the statements.

No.	Statement	5	4	3	2	1	Score
i.	Construction project is affected by to economic policies						
ii.	Construction project experiences unnecessarily high costs in operations						
iii.	Most construction projects normally face financial crisis						
iv.	Construction projects experiences construction delays						
	Total						
	Mean						

SECTION C: COMMUNITY PARTICIPATION

Do you think community participation influences completion of CDF construction projects in Kwanza constituency?

Yes [] No [] Not sure []

In your opinion, to what extent does the community participation influence CDF construction projects? Using the scale 5-To a very large extent, 4-To a large extent, 3-Neutral, 2-To negligible extent and 1-Not at all

No.	Factors	5	4	3	2	1	Score
i.	Efforts to increase resources influence community participation and timely completion of CDF construction projects						
ii.	Exercising control over resources by the community has an influence on CDF construction projects						
iii.	Contribution in the project design by the community influences completion of CDF construction projects						
iv.	Total						
v.	Mean						

SECTION D: AVAILABILITY OF FUNDS

In your own opinion, do you think availability of funds influences timely completion of CDF projects in Kwanza constituency?

Yes [] No [] Not sure []

The following statements relate to availability of funds for CDF construction projects. Using the scale **5-Strongly Agree, 4-Agree, 3-Unsure, 2-Disagree and 1-Strongly Disagree**, express the extent to which you agree or disagree with the statements.

No.	Statement	5	4	3	2	1	Scores
i.	Budget allocation for CDF projects influences the availability of funds						
ii.	Release of CDF construction projects money adequately influences the availability of funds						
iii.	Commitment from the project financier influences availability of funds						
iv.	Total						
v.	Mean						

SECTION E: TECHNICAL COMPETENCE

In your opinion, does technical competence have an influence on timely completion of CDF construction projects?

Yes [] No [] No sure []

As a project implementer, using the scale **5-Strongly Agree, 4-Agree, 3-Unsure, 2-Disagree and 1-Strongly disagree**, please rate your agreement on how the following affects timely completion of the CDF construction projects.

No.	Skills	5	4	3	2	1	Scores
i.	Project planning						
ii.	Financial management						
iii.	Controlling and coordinating						

iv.	Performance/progress reporting						
v.	Monitoring and evaluation						
vi.	Total						
vii.	Mean						

APPENDIX 3: RESEARCH QUESTIONNAIRE FOR CDF BENEFICIARIES

This questionnaire is designed to collect data on the study titled; ‘**Factors Perceived to Influence timely completion of CDF funded construction projects in secondary schools in Kwanza Constituency**’. The data collected through this questionnaire is intended for academic purposes only and will not be divulged to any other person. Please complete all sections of this document. All questions are interrelated and are very important for the study. You have been identified as one of the respondents and you are requested kindly to fill in the information as appropriate.

SECTION A: BACKGROUND DATA

a) Gender: Male Female

b) How long have you worked/lived in Kwanza constituency?

- i. Less than one year
- ii. 1 -2 years
- iii. 2 – 3 years
- iv. 3years and above

The following statements relate to timely completion of CDF construction projects. Using the scale **5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree and 1-Strongly Disagree**, express the extent to which you agree or disagree with the following statements.

No.	Statement	5	4	3	2	1	Scores
i.	There is a baseline report for CDF construction projects						
ii.	Schedule of work determines timely completion						
iii.	All CDF construction projects have been completed within time frame and at required standards						
iv.	Total						
v.	Mean						

SECTION B: ECONOMIC RISKS

In your own opinion, do you think economic risks influences the completion of CDF construction projects in Kwanza Constituency?

Yes [] No [] Not sure []

The following statements relate to economic risks. Using the scale **5-Strongly Agree, 4-Agree, 3-Un-decided, 2-Disagree and 1-Strongly Disagree**, express the extent to which you agree or disagree with the statements.

No.	Statement	5	4	3	2	1	Score
i.	Construction project is affected by to economic policies						
ii.	Construction project experiences unnecessarily high costs in operations						
iii.	Most construction projects normally face financial crisis						
iv.	Construction projects experiences construction delays						
	Total						
	Mean						

SECTION C: COMMUNITY PARTICIPATION

a. List five CDF projects you are aware of in Kwanza constituency

- i.
- ii.
- iii.
- iv.
- v.

b. Which of the five projects you listed above you were directly involved in making decisions on whether to implement the project or not, based on your community immediate needs?

Project number 1.....

Project number 2.....

Project number 3.....

Project number 4.....

Project number 5.....

g) In your own opinion, to what extend does community participation affect the timely completion of community initiated projects.

To a very large extend

To a large extent

Neutral

To a negligible extent

To no extent at all.

SECTION D: AVAILABILITY OF FUNDS

h) The following are some statement about your feeling on reasons why CDF construction projects are delayed due to availability of funds; indicate your level of agreeableness by ticking the most appropriate choice. Use scale of 1-5 where 5-Strongly Agree, 4-Agree, 3-Unsure, 2-Disagree and 1-Strongly Disagree, express the extent to which you agree or disagree with the statements.

	Question	1	2	3	4	5	Scores
	The funds available to fully finance CDF projects in Kwanza constituency is inadequate.						
	Accounting and finance errors, such as vendors being paid twice, budgeting, management, accounting and auditing problems cause projects to fail						
	The disbursement of finances by government is not very frequent						
	The sources of project finances are always inadequate						
	The methods of payment for the projects are always effective						
	Total						
	Mean						

SECTION E: TECHNICAL COMPETENCE

In your opinion, does technical competence have an influence on timely completion of CDF construction projects?

Yes [] No [] No sure []

As a project beneficiary, using a scale of 1-5 where 5-Strongly Agree, 4-Agree, 3-Unsure, 2-Disagree and 1-Strongly disagree, please rate your agreement on how the following affects timely completion of the CDF construction projects.

No.	Skills	5	4	3	2	1	Scores
i.	Project planning						
ii.	Financial management						
iii.	Controlling and coordinating						
iv.	Performance/progress reporting						
v.	Monitoring and evaluation						
vi.	Project financing						
vii.	Total						
viii.	Mean						

APPENDIX 4: INTERVIEW GUIDE FOR PROJECT IMPLEMENTERS

This questionnaire is designed to collect data on the study titled; ‘**Factors influencing timely completion of CDF funded construction projects in Kwanza Constituency**’. The data collected through this questionnaire is intended for academic purposes only and will not be divulged to any other person. Please complete all sections of this document. All questions are interrelated and are very important for the study. You have been identified as one of the respondents and you are requested kindly to fill in the information as appropriate.

SECTION A: BACKGROUND DATA

a. Gender: Male [] Female []

b. How long have worked on CDF construction projects?

i. Less than two year []

ii. 2 -5 years []

iii. 5 – 10 years []

iv. Over 10 above []

c. List CDF construction projects you have worked on in Kwanza constituency

- i.
- ii.
- iii.
- iv.
- v.

d. In your opinion what do you think influences timely completion of CDF construction projects in Kwanza Constituency? (*Read out the choices*)

Economic risks []

Community participation []

Availability of funds []

Technical competence []

e. What economic risks would you say affects timely completion of CDF construction funds in Kwanza constituency?

- 1.....
- 2.....
- 3.....
- 4.....

f. Do you in anyway involve community members in CDF project(s)?

Yes [] No []

g. If yes, which projects?

- Project number 1.....
- Project number 2.....
- Project number 3.....
- Project number 4.....
- Project number 5.....

h. List a maximum of five projects that you have successfully completed on time

- i.
- ii.
- iii.
- iv.
-

i. How does the community in Kwanza Constituency contribute to timely completion of CDF construction projects?

.....
.....
.....

j. Do you feel that project financiers (Government) is committed to funding the CDF construction projects in Kwanza Constituency? Yes [] No []

k. Do you feel you (project implementers) adequately utilize the CDF construction funds well Yes [] No []

l. What is your satisfaction to the level of funding by the financiers?

- i. Very satisfied ()
- ii. Satisfied ()
- iii. Dissatisfied ()
- iv. Very dissatisfied ()
- v. Not satisfied ()

m. Do you feel that the project implementers are qualified enough? Yes [] No []

n. In your opinion which one of the following do you think should be done to improve CDF projects outcome in kwanza constituency? (*Tick appropriately*)

Increase funding

Increasing community participation

Improve funding

Involve more qualified project implementers

APPENDIX 5: RESEARCH AUTHORIZATION LETTER FROM NACOSTI



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
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9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. NACOSTI/P/16/87137/12312

Date:

8th July, 2016

Amos Biketi Nakitare
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Factors influencing timely completion of Constituency Development Fund (CDF) funded construction projects in secondary schools; A case of Kwanza Constituency, Kenya.*" I am pleased to inform you that you have been authorized to undertake research in **Trans-Nzoia County** for the period ending **5th July, 2017.**

You are advised to report to the **County Commissioner and the County Director of Education, Trans-Nzoia County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

**BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner
Trans-Nzoia County.

The County Director of Education
Trans-Nzoia County.

APPENDIX 6 :RESEARCH PERMIT FROM NACOSTI

<p>THIS IS TO CERTIFY THAT: MR. AMOS BIKETI NAKITARE of UNIVERSITY OF NAIROBI, 0-510 NAIROBI, has been permitted to conduct research in Transzoia County on the topic: FACTORS INFLUENCING TIMELY COMPLETION OF CONSTITUENCY DEVELOPMENT FUND (CDF) FUNDED CONSTRUCTION PROJECTS IN SECONDARY SCHOOLS; A CASE OF KWANZA CONSTITUENCY, KENYA. for the period ending: 5th July, 2017 </p>	<p>Permit No : NACOSTI/P/16/87137/12312 Date Of Issue : 8th July, 2016 Fee Received :Ksh 1000</p>
<p>Applicant's Signature </p>	<div data-bbox="938 541 1224 852" data-label="Image"> </div> <p><i>[Handwritten Signature]</i> Director General National Commission for Science, Technology & Innovation</p>