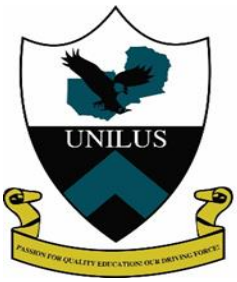


UNIVERSITY OF LUSAKA

SCHOOL OF POSTGRADUATE STUDIES

FACTORS ASSOCIATED DELAYED COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUND (CDF) IN CHADIZA, CHIPATA AND CHIPANGALI CONSTITUENCY.

A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, UNIVERSITY OF LUSAKA IN PARTIAL FULFILMENT FOR THE REQUIREMENT OF THE AWARD OF A MASTER OF SCIENCE PROJECT MANAGEMENT.

BY

KALALE HOWARD

MSCPM 1512263

DECLARATION

I "**Kalale Howard** student number **MSCPM 12152263** do declare that this work is original and has not been plagiarised in any way or submitted by someone else at any other University before. Works by other authors have been referenced accordingly."

SIGNATURE

This dissertation has been submitted to the University of Lusaka for examination with approval from my Supervisor."

SIGNATURE

Miss. Mukasami Mwanangombe

DATE: 20th January, 2025

COPYRIGHT NOTICE

ACKNOWLEDGEMENTS

I would love to express my sincere gratitude to all those who contributed positively towards the successful completion of this dissertation.

Firstly, am very grateful to my academic Supervisors Dr. Erastus M. Mwanaumo and Dr. Janice Kabwe for their unwavering support and guidance throughout this research endeavour. Their expertise and encouragement have been helpful in shaping the direction of this study.

I would also like to extend my thanks to the Town Clerk, Chipata City Council Mr, Robert Kamalondo, the Council Secretary, Chadiza Town Council Mr, Mwansa M. Mumba and the Council Secretary, Chipangali Town Council Mr, Francis Ndola, all the Council employees and members of the community from the three Councils who participated in this research. Their willingness to participate and share experiences and perspectives have enriched the findings and provided important insights into the factors associated with delayed completion of community construction projects funded using Constituency Development Fund (CDF).

I further extend my gratitude to the University of Lusaka for providing the needed resources and conducive learning environment for my academic exploration.

My sincere thanks go to my family, relatives and friends for their unwavering support and encouragement rendered to me during the time I was working on my research project which demanded much of time. Their support rejuvenated me until this end.

Lastly but not the least, I want to take cognisant of the support which I received brothers and sisters in the Christian Congregation and any other persons that contributed to this research work in any way. Working on this dissertation would not have been achieved without the collective efforts and inputs of the aforementioned individuals and Local Authorities. I am sincerely grateful for the collaborative effort culminated in shaping this research into its final product.

DEDICATION

I dedicate this dissertation to my late father Mr. Frazier Kalale, my mother Chaze Mwalusi Kalale, my siblings, my wife Chisha Ndebe and my son Killian Chisha Kalale for their support and words of encouragements that they gave me throughout the period I was carrying out my research. Their support really gave me strength, courage and motivation to carry on with the research despite the challenges encountered.

ABSTRACT

A number of physical community infrastructure construction projects implemented using Constituency Development Funds (CDF) in most Constituencies in Zambia, Chadiza, Chipata and Chipangali inclusive have experienced delays in completion despite most of the projects the expanded Constituency Development fund and timely disbursements.

Furthermore, despite the achievements that the Zambian Government has scored in the implementation of the National Decentralisation Policy as well as increasing the Constituency Development Fund (CDF) as was revealed from the reviews literature, it was discovered that much focus was on the utilization and decentralisation of Constituency Development Funds neglecting factors associated to delayed completion of community construction funded projects such as organisational, community/ project related, award of contracts and PESTEL factors which this dissertation explored.

When exploring on the factors associated delayed completion of community physical infrastructure projects, a mixed method approach was used namely; qualitative and quantitative methods. Further, the research designs used involved both qualitative and quantitative and to be specific, the types of mixed methods which was deployed was; concurrent triangulation and concurrent nested designs.

The research identified two (2) key factors associated with delayed implementation of community construction projects, namely (i) Organisational related factors and (ii) Contractor related factors.

The organisation related factors (staffing levels, education, and qualification) were analysed and the results showed that the locality of the projects awarded were significantly associated with delays in the completion of construction project funded using Community Development Fund. Also, Contractor related factors showed a significant association between completing the projects on time and types of contracts awarded to local communities. The full contracts awarded to Contractors with non-false accounts completed very few projects compared to the full contractors awarded to false accounts.

This research provided valuable insights into the factors associated with delayed completion of physical community construction projects funded using Constituency Development Fund and the study recommends that an investigation of the size of projects being implemented be done to assess the influence of project sizes and completion time in similar settings and also the study recommends research be conducted using a horizontal approach which focuses on the trends in price changes in lagged form and the completion time of the projects as completing the project on budget was a key success factor in project management.

ACRONYMS

CDF	Constituency Development Fund or Community Development Fund
CDFC	Constituency Development Fund Committee
EAZ	Economics Association of Zambia
LA	Local Authority
IJSRP	International Journal of Scientific and Research Publications
NDP	National Decentralization Policy
PLGO	Provincial Local Government Officer
WDC	Ward Development Committee

Table of Contents

LIST OF TABLES

LIST OF GRAPHS

LIST OF FIGURES

CHAPTER ONE

1.0 INTRODUCTION

This chapter would provide the background information of the dissertation, statement of the problem, and the general and specific objectives of the study, research questions, significance of the study, and scope of the study and thereafter define the key terms and concepts in the study.

1.1 BACKGROUND

A project is a temporary endeavour undertaken to create a unique product, service or result (PMI, 2008). One of the features of a project is that it is temporary; this fundamentally means that every project has a sure beginning and end. The end of a project is reached when all its objectives are achieved or when it is clear that the objectives can not be met which leads to its termination (PMI, 2008).

Every project that has been initiated gets to an end at some point whether its objectives have been accomplished or not. Project completion (completing the contract) can either follow successful completion of the natural sequence of project activities directed toward meeting the specified objectives, or a sudden decision to cease the project effort in mid-course (Robert and James, 2013). A project plan guides the project team on what to do in terms of the time frame and the activities to be performed; when the project plan is firmly followed by the project team, there is a very high likelihood that the project will be completed within the stipulated time but on the contrary, if it is not followed strictly a project is likely to delay thereby prolonging beyond its planned completion time.

According to the Constituency Development Fund guidelines (2022) the government of Zambia have prioritized decentralization as a major driver for attaining development and reducing poverty and supporting job creation through citizen engagement and participation at local level.

To actualize decentralization in line with the Constitution, the Zambian Government decided to take significant resources from the National level, to the Local Government level. In this regard, Constituency Development Fund (CDF) has been identified as a major tool to take resources closer to the people at grass root levels.

Despite the strides that governments have made globally Zambia inclusive in fostering the socio-economic development at local level, it has been observed that most of physical community construction projects implemented using Constituency Development Fund delays to be completed.

The major indicators of performance in construction or community construction projects were identified as time, cost and quality (Mckim et al., 2000; Atinson 1999). These indicators are driven by factors that can be used to ascertain the strength and weaknesses in project performance (Marteralla, 2007). These factors may be pitfalls or success factors.

According to Sanders and Eagles (2017), delay is an event that causes extended time to complete all or part of a project; it is the postponement of time from the original estimated completion time which might be caused by the contractor, owner or consultant as well as external factors, Koushki and Kartam (2004).

On the other hand, Pickavance (2005) defines delay as something happening at a later time than planned, expected and specified in a given contract or beyond the date agreed upon by both parties for delivery of a project. In general, delaying projects is a common phenomenon in every community construction project but its degree differs significantly from project to project.

Construction delay is considered one of the greatest problems in the construction industry and these delays commonly have an aggressive bearing on project success in terms of time, cost and quality. Some projects are only a few days behind schedule; some are delayed by over a year (Ahmed et al, 2003). Time and cost overruns occur in most construction projects although the magnitude of the delays and cost overruns varies considerably from project to project, Enshassi (2009).

The project complexity determines as to whether the delay is slight or main; simpler projects are easy to manage and therefore their delays may be less as opposed to projects of a complex measure. Depending on the size and complexity of a project, managing the scope of activities can range from being very easy on small and simple projects, to being very difficult on large and complex projects that may span several

years (Wilson, 2015). Assurance of project schedule has been considered as an important indicator of project success and factors associated with project schedule have been recognized to be critical to project success (Ling, Low, Wang and Lim 2016). Well-managed construction requires definite plans which guide in communicating to the project team what work is to be performed, which resources are required to undertake those works, and in what time frames they are required to be completed; It shows how the project will be effectively and efficiently achieved and therefore in the absence of an appropriate plan, the project is destined for failure.

A successful project is delivered within the limitations of time, cost and quality therefore the successful completion of a project in a timely manner is measured as one of the critical factors in assessing its success which is reliant on its completion time from the initiation to the delivery of the intended results. Hasseb, Bibi, and Rabbani (2011) illustrated that a project's success is based on meeting objectives within time and budget limits. Although timely completion of the project is one of the determinants of its success, it is important to manage each project based on its uniqueness (Divakar and Subramanian, 2009).

Further, the planning phase of the project is the most cardinal phase which outlines the processes of how the entire project will be executed; the resources needed and makes all possible assumptions of the risk and their mitigations (Kerzner, 2017). The projects may change direction during the course of implementation and this may cause delay, budget constraints and conflicts of interest among stakeholders.

The changes results in what is known as scope creep and need to be handled with utmost agency and care if the projects are to meet the final outcome objectives (Sanghera, 2019). It is worth noting that in project management and project implementation process, regardless of whatever point that the project has reached, the project can go back to a planning phase to plan the next step or action.

According to the 2022 Zambian Census of Population and Housing Report, Chadiza district has only one Constituency, twenty wards with the total population of 111, 069, Chipata district is made up of two Constituencies, eleven wards with a total population

of 327, 059 and Chipangali district has one Constituency, six wards with a total population of 169, 35.

Review of the ordinary Council minute books revealed that community construction projects which were implemented using Constituency Development Funds from 2020 to 2022 in Chadiza, Chipata and Chipangali districts were twenty-six (26), sixty-eight (68) and forty-eight (48) respectively of which only ten (10), three (3) and twenty-six (26) were completed within the contract period for Chadiza, Chipata and Chipangali districts respectively.

According to the Journal of Economic Behavioural Studies, Volume 6 (2014), it was revealed that, “among the factors associated to delayed completion of construction projects funded using the Constituency Development Funds were related to delay in approving major changes in the scope of work, poor communication and coordination, inadequate experience, mistakes and discrepancies in design documentation, delays in the procuring processes, unclear and inadequate details in drawings, insufficient data collection and survey before design, lack of advanced engineering design software, shortage of labour, low productivity level of workers and personal conflicts”.

Further, phased and delayed disbursement of funds hinders project completion. Any additional public financial management challenge relates to the timing of CDF disbursements. As funds are often disbursed in successive phases, this leads to accumulation of incomplete projects, which is exacerbated by delayed or partial release of funds (EAZ 2011; JCTR 2019; Chrine, Tembo, and Zyambo 2020).

Reports suggest successful implementation of project funded by CDF in various places such as the successful construction of School and Health Care Centres, as well as construction of market shelter, Chiefs Palaces, procurement of desks and buying of heavy duty earth moving machines among others (Kitwe City Council, 2(Kitwe City Council, 2023; Kaumba, 2023). Project may delay in implementation in some areas of the Country given the nature of projects.

Like many Constituencies in Zambia, constituencies in Eastern Province in the three selected districts (Chadiza, Chipata and Chipangali) are not exempted from delayed

completion of community construction projects funded using the Constituency Development Funds resulting in denying the rural communities of the much needed service provision like good road network, schools, health facilities, markets just to mention but a few.

1.2 STATEMENT OF PROBLEM

The Country has been in need of physical infrastructure development at the community level such as Schools, Health Centres, road crossings and other public amenities for various purposes but that has not been actualised for some years. Some of the hindering factors of development at community level have been due to the delayed completion of physical community construction projects which comes about because of the organisational factors, community/projects factors, awarding of contracts and Political, Economic, Social, Technological, Environmental and Legal (PESTEL) factors.

However, with change of government, several Constituencies have witnessed tremendous physical infrastructure development through implementation of CDF projects around the Country and have successfully handed over the projects to the end users, though in some other areas have not so much to show after years of increase in the CDF funding amount and policy changes (Kaumba, 2023). Eastern Province was one part of the Country with Constituencies that reported poor performance in physical infrastructure project implementation and delayed completion of construction projects funded by CDF.

The aforementioned was discovered during review of the Ordinary Council minute books for Chipata, Chaipangali and Chadiza Local Authorities that community construction projects which were implemented using CDF from 2020 to 2022 had not met the project expectations.

From 2020 to 2022, Chadiza district implemented 26 projects and completed 10 signifying 38.5% successful completion rate and 61.5% gap of completion rate. In the same period, Chipata implemented 68 projects and completed 3 projects signifying 0.044% successful completion rate and a 95.6% gap in the completion rate and Chipangali implemented 48 projects and completed 26 signifying 54.2% successful

completion rate and 45.8% gap in the completion rate. These statistics were disturbing and showed an average of 27.5% successful completion rate in the three Constituencies in the period 2020 to 2022.

In view of the above, conducting this study was necessary to assess or ascertain the factors associated with the delayed completion of community construction projects funded using community development fund (CDF) in Chadiza, Chipata and Chipangali constituency

1.3 RESEARCH OBJECTIVES

1.3.1 GENERAL OBJECTIVE

To assess the factors associated delayed completion of community construction projects funded using Constituency Development Fund (CDF) in Chadiza, Chipata and Chipangali Constituency.

1.3.2 SPECIFIC OBJECTIVES

1. To find out the organizational factors (academic/professional qualification, staffing level and experience) associated with delay in completion of community construction projects funded using Constituency Development Fund (CDF).
2. To assess whether community engagement and participation (community/project area) contributes to delayed completion of community construction projects funded using Constituency Development Fund (CDF).
3. To assess the Contractor related factors (experience, full contract and false accounting) associated with delay in completion of community construction projects funded using Constituency Development Fund (CDF).
4. To evaluate the Political, Economic, Social, Technological, Environmental and Legal factors associated with delay in completion of community construction projects funded using Constituency Development Fund (CDF).

1.4 RESEARCH QUESTIONS

1. What are the organizational factors associated with delay in completion of community construction projects funded using Constituency Development under (CDF)?

2. What are the community/project area related factors associated with delay in completion of community construction projects funded using Constituency Development Fund (CDF)?
3. What are the Contractor related factors associated with delay in completion of community construction projects funded using community development fund (CDF)?
4. How are the Political, Economic, Social, Technological, Environmental and Legal (PESTEL) factors associated with delay in completion of community construction projects funded using Constituency Development Fund (CDF)?

1.5 SIGNIFICANCE OF THE STUDY

This study was expected to add to the existing body of knowledge regarding delayed completion of community construction projects and government funded projects. The study would also guide Policy Makers in Institutions such as government line Ministries, Local Authorities, Private Sector and other organizations in formulating policies that would address the problem of delayed completion of community construction projects in the Country and CDF project awarding process and monitoring approaches. The study would further provide scholarly and academic information on factors associated with delayed completion of community construction projects to act as starting point for future research.

1.6 SCOPE OF THE STUDY

Despite the positive strides which Zambia have scored in the actualization of the National Decentralization Policy (NDP) through the use of the Constituency Development Funds in order to take the services closer to the local people, the problem of delayed completion of community construction projects have continued. In view of the above, the general objective of this study was to assess the factors associated with delayed completion of community construction projects funded using the Constituency Development Funds in the three selected districts in Eastern Province namely; Chadiza, Chipata and Chipangali.

The participants in this study were drawn from members of the Ward Development Committees (WDCs), Constituency Development Fund Committees (CDFCs), some

selected staff members of the Local Authorities (LAs) or Councils and the Provincial Local Government Officer (PLGO). Further, from each district mentioned above, a total of Fifty (50) participants were selected to participate in the study which lasted for an estimated period of Six (6) months. Also, interviews and questionnaires were used in the collection of data for the study.

1.7 DEFINITION OF KEY TERMS AND CONCEPTS

Availability of funds refers to access to monetary resources to enable successful completion of a community construction project.

Community projects means any project(s) identified and undertaken at community level for the benefit of the community.

Community participation can loosely be defined as the active participation of individuals in solving and implementation of construction projects in their communities.

Constituency Development Fund/ Community Development fund refer to the fund designed to support constituency-level, grass-root development projects. Its aim is to achieve equitable distribution of development resources across regions and control imbalances in regional development brought about by partisan politics.

Community construction projects refers to an organised effort aimed at improving the social, economic, and environmental conditions within a specific community or group of communities and in the case of this study, these community construction projects are public physical infrastructure like buildings (hospitals/schools/water points) financed and constructed by CDF to give services to locals in Chadiza, Chipata and Chipangali districts.

Delayed completion refer to situations where project events occur at a later time than expected due to causes related to the client, consultant, and the contractor just to mention but a few. Delayed completion may also mean failure to complete community projects within the agreed period in the contract.

Local Authority means a Council and its Secretariat consisting of persons appointed by the Local Government Service Commission.

Member means an appointed person to sit on a Committee.

Ward Development Committee means a Ward Development Committee established under the Local Government Act No. of 2019.

Physical infrastructure refers to the physical availability and quality of public facilities, including the number of facilities, facility amenities and resources, the distribution of facilities, and the appropriate mix of facility types to meet population health needs. In the case of this study, the infrastructure in question was the hard infrastructure.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter will discuss the various studies and publications that have been made relating to implementation of community construction projects funded by Constituency Development Fund also in other areas referred to Constituency Development Fund or Community Funds and grants. The study utilized search engines such as google scholar, and research gate.

2.1 GLOBAL PERSPECTIVE OF FACTORS ASSOCIATED TO DELAYED COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUND.

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.

Globally, several Researchers have studied delays in construction projects; Ogunlana (2009) researched on the success factors in large scale construction projects in Thailand and concluded that project planning and control, project personnel and involvement of clients contributed to the project success. Al-Najjar (2008) in his study concluded that some of the significant factors causing time overrun in construction projects in Gaza Strip included lack of materials in the market, cash shortage during construction, Israeli attacks and border closures. Ayman (2010) outlined that the causes of delays on 130 public projects in Jordan were related to designers, user changes, weather, site conditions, late deliveries, economic conditions and increase in quantity. In another study, Alaghbari Wa'el (2017) concluded that the factors causing delay of building construction projects in Malaysia included financial problems, late supervision, lack of materials on the market and poor site management. Another research conducted

in Malaysia by Hussin and Omran (2012) specified that financial problems of developers, contractors, the local and national governments and stakeholders led to neglect of 70 percent of Malaysian transport construction projects. Al-Kharashi and Skitmore (2012) identified difficulties in project financing, poor site management, poor qualification of the contractor's team and delay in approving changes in scope as the factors contributing to delay in Saudi Arabian Public construction projects. Mahamid (2011) identified commencement delays, poor resource management, insufficient inspectors, and communication breakdown between construction parties as some of the contributors of time delay in road construction projects. Al-Tabtabai (2012) established that slow financial and payment procedures and decision-making process, limited authority among supervision staff, risk allocation mainly on the contractor and lack of design drawings coordination were the causes of delays in construction projects in Kuwait. Sambasivan and Soon (2007) established that poor planning and site management, inadequate supervisory skills on the part of the contractor, delayed payments, material shortages, labour supply shortages, equipment availability and failure, poor communication and rework were the most important causes of delays in the Malaysian construction industry. Globally, what the researchers identified to be causes of delay in project completion include delays related to designers, user changes, weather and site conditions, late deliveries, poor planning and financial conditions, lack of supervision, poor resource management among others.

According to (Moura et al., 2007) specified that in Portugal construction industry, over 40 percent of the construction projects experience delay. Le-Hoai et al. (2008) in their work also discovered from 87 construction experts that were interviewed in Thailand that delay in construction projects was a regular challenge faced by the Thailand construction industry.

Unlike the work by (Moura et al., 2007), approximately 66.7 percent of projects in private sector and 79.5 percent in the public sector experienced delay in a study carried out in Malaysia by (Endut, Akintoye & Kelly, 2005). Sambasivan & Soon (2007) in their investigation also indicated that 17.3 percent of the public projects in the Malaysian construction sector encountered delay. In similar studies in the Middle East, Mahamid

(2011) established in his study that 76 percent of the Palestine construction projects that were investigated encountered some delays, 80 percent of projects studied by Emam, Farrell & Abdelaal (2015) in Qatar also suffered delay, while in Oman, 40% of the respondents in a study by (Alnuaimi & Mohsin, 2013) indicated that the construction projects carried out by them were upset by delay.

2.2 FACTORS ASSOCIATED DELAYED COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUND IN AFRICA

In Africa, the need for development is a daily call from the community members and the leadership promises to deliver development in various sectors. The economic status which translates to the source of funding to finance or support developmental projects is a critical factor in the pursuit for development in Africa. Odhiambo, (2016) claimed that in Kilifi Constituency, one of the community projects that were funded by community fund were largely affected by accessibility to the funds, sustainability of the fund for the project and the adequacy of the funds for the projects. It was further indicated that the socio-economic environment and the stakeholder engagement influenced the project positively (Odhiambo, 2016). The findings meant that the absence of stakeholder participation and a certain socio-economic environment state would be negatively correlated to the project success.

Political will and politics continues to be a drive in the implementation of the developmental projects. Various municipal positions and departments are managed by politically elected office bearers who are inclined to the political party and its agenda. This make them to interfere with the project implementation by politicizing the projects in many aspects such as delaying to pay the awarded Contractor(s), conflicting the process of contract awarding which causes the projects to delay (Muhammed, Yakubu, Aboh, Abubakar, & Muhammed, 2022).

Corruption, accountability and misappropriation of funds affects the delivery of development to the communities. One of the factors include the awarding a contract to individuals who do not have the capacity to deliver the project on time, scope and

budget. Corruption compromises the project management, and also leading to less transparency and accountability (Gathoni & Ngugi, 2016).

It is noted in several areas in Africa that the communities where the rich and elite live receives a fair share of development even beyond what is allocated to them because they have a voice and are well connected or have influence (Murithi, Makokha, Otieno, & I, 2017). On the other side, the communities with people who seem to be in the middle and lower economic classes receive less attention owing to their lack of influence in the society (Masinde, 2019). This leads to delays in completing works for communities with lower class.

Perception of the project by the community is another factor that affects the delivery of projects by the government through community funds (Dick-Sagoe, Lee, & Boateng, 2023). A study on influence of community participation on successful implementation of Constituency Development Fund projects revealed that the projects in the area failed to be implemented successfully because of lack of community participation and were not engaged in all the stages of the projects implementation cycle (Nyaguthi & Oyugi, 2013; Dick-Sagoe, Lee, & Boateng, 2023).

Members of the community could have been in need of a facility in its community that they felt had great benefit but if the government implements the other projects, which the community perceives otherwise, the project may face challenges and obstacles hence the delay (Ellis, 2016). This mostly happens when the project is run and implemented without stakeholder engagements.

Price volatilities or unstable markets also affects the delivery of the projects on time. One of the factors in Africa is the unstable markets where the Contractor at the time of bidding declares prices which drastically changes over a short period of time leading to budget deficit hence project delay or failure (Odhiambo, 2016).

In Ghana, Frimong 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 Contractors and that the appointment of a registered project manager for each contract should be 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.

Moenga, (2005) was in agreement that timely completion of construction projects in Kenya was increasingly becoming an issue of concern among stakeholders in the construction industry. The most important factor influencing timely completion of construction projects in Kenya was; 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-utilisation of professional construction management. Also, preparation and approvals of shop drawings also contribute to the delays to a significant extent.

El-Razek, Bassioni and Mobarak (2018) concluded that payment delays, coordination problems and poor communication were causes of delay in construction projects in Egypt. There have been several projects initiated in the region and most of them have not been completed within the scheduled time; studies were conducted on the main causes of those delays and concluded that limited/inadequate financial resources, poor financial and contract management, political influence and the operating environment led to delays is completion of the projects.

2.4 FACTORS ASSOCIATED DELAYED COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT UND IN ZAMBIA

The projects funded through CDF have witnessed two extremes with one extreme being successful and timely implementation of projects while the other is delayed and failed project implementation. It was argued that the derailment in the funding of the projects,

failure of the Contractor to finance the project and the long process taken to approve the project where among the factors that negatively influenced the project implementation in Lusaka (Aigbavboa, Thwala, & Mukuka, 2014).

The community projects face a lot of challenges due to their diversity of application and stakeholders that are involved. The major setback or challenge in public projects is the funding or financing challenge. Most public projects are funded by the government which is usually overburdened and runs budget deficits. This coupled with the bureaucracies in government presents as a challenge to fully fiancé the projects or delay in funding projects (Casey, Rodriguez, Sacchetto, & Wani, 2021).

Kaliba, Muya and Mumba (2019) established that the major causes of delay in construction projects in Zambia were delayed payments, financial deficiencies on the part of the client, economic problems, change in design, and unavailability of equipment, poor supervision and staffing problems.

According to the Report of the Auditor General on Audit of Local Authorities (2021:9 and 45), item (i) “Unimplemented Approved Projects”, Chadiza Town Council was cited that six (6) approved projects receiving funding from 2020 CDF with a total allocation of K1, 520, 00.00 had not been implemented as at 30th September, 2022 despite being approved by the Ministry of Local Government and Rural Development on 13th May, 2021 and funding received on 30th September, 2021.

Also in the case of Chipata City Council, the same report on page 49 stated that, the review of the approved list of projects and progress report of CDF revealed that two (2) projects with a total allocation of K254, 650.00 had not been implemented as at 30th September, 2022 despite being approved in 2020 by the Ministry of Local Government and Rural Development.

Further, twenty-nine (29) projects from 2021 funding with a total allocation of K3, 040,000.00 had not been implemented despite being approved on 5th April, 2022 by the Ministry.

According to the report of the Public Accounts Committee (2013:3) on the report of the Auditor-General on the management of Constituency Development Fund, the Committee was concerned with the continued poor management of construction projects under the CDF. The Committee also noticed that delays in the completion of projects are widespread and directly attributable to weak supervision and monitoring mechanisms in place. Therefore, the Controlling Officers were urged to work closely with stakeholders at the district level to curb delayed completion of projects.

2.5 THEORETICAL FRAMEWORK

For the purpose of this study, two (2) theories were used namely; the Theory of Constraints (TOC) and Scientific Management theory.

The Theory of Constraint was used in this study considering that delayed completion of community construction projects could be caused by a number of factors and rather than focusing on individual factors or process. However, TOC takes a holistic view of the organisation as a system of interconnected parts. It also emphasizes the importance of bottlenecks or constraints to enhance the entire system's effectiveness and improved performance.

Scientific Management Theory was settled on in this study with the understanding that for community projects to be executed timely, human resource with skilled knowledge and expertise were required to avoid wastage of resources and deny communities the needed physical infrastructure development in their respective Constituencies.

Due to the aforementioned, the principle on which the Scientific Management Theory is based on made it suitable to be used in this study in that its aims is to analyse the workflow of workers to improve labour productivity, which leads to improved economic efficiency and in turn reduced wastage and time.

2.5.1 THEORY OF CONSTRAINTS (TOC)

The theory of Constraints is based on the idea that every system has at least one bottleneck which can be defined as any kind of situation that impedes the system to reach high performance level in terms of its purposes (Goldratt, 1990). Theory of

Constraints originated from the idea that the achievement of project objectives is restricted by at least one or more constraints. Constraints are factors that could restrict product or project options, setting limits to what can be achieved, how it can be achieved, in what timeframe or at what cost (Knapp, 2006). The key challenge of project management is to attain all of the project goals and objectives while honouring the preconceived project constraints (Lamb, Robert and Boyden, 2016). In project management, the typical project limitations are time, scope and budget. This theory is linked to project resource allocation since the management of projects requires resources to achieve project objectives and these resources are always scare and therefore, it is the Project Manager's responsibility in ensuring proper use of the assigned resources to ensure achievement of project objectives including timely completion of projects. The basic goal of project management is to deliver an acceptable product, typically referred as project scope on schedule and within budget (Knapp, 2006). With the understanding of the Theory of Constraints (TOC) which is directly linked to resource allocation, the project manager is well equipped to handle challenges as pertains project constraints; he has an overview on what to expect in projects and how to manage the risks which may lead to delays in completion of tasks thereby making the project fall behind schedule.

In the case of this study, the bottleneck which was identified in relation to the Theory of Constraints was delayed completion of community construction projects (time factor) which requires to be exploited to ensure that community construction projects are completed timely.

2.5.2 SCIENTIFIC MANAGEMENT THEORY

According to Fredrick Taylor (1911), he defined Scientific Management as the "Art of what is to be done and the best way of doing it". Scientific management came up as a result of applying scientific knowledge and scientific methods to the various aspects of management and the problems that may arise.

Taylor through his principles of scientific management initiated a system in which there would be an effective and fruitful coordination and cooperation between the management and the workers. The systems which were identified are as follows:

Analyse the work scientifically, rather than using thumb rule. It means that an attempt is made to find out what is to be done by a particular worker, how he/she is to do it, what equipment will be necessary to do it. This information is provided to the worker, so as to reduce wastage of time, material etc. and improve the quality work.

Scientific selection, placement and training of workers: This principle states that select the workers best suited to perform the specific task, and then train them within the industry in order to attain the objectives of the enterprise, workers should also be trained from time to time to keep them informed of latest development in the techniques of production.

Division of Labour: division of work in smaller tasks and separation of thinking element of job from doing element of the job, this is the principle of specialization. It is essential for efficiency in all spheres of activities as well as in supervision work

Standardization of methods, procedures, tools and equipment: Standardization helps in reducing time, labour and cost of production. The success of scientific management largely depends upon standardization of system, depends upon standardization of system, tools, equipment and techniques of production.

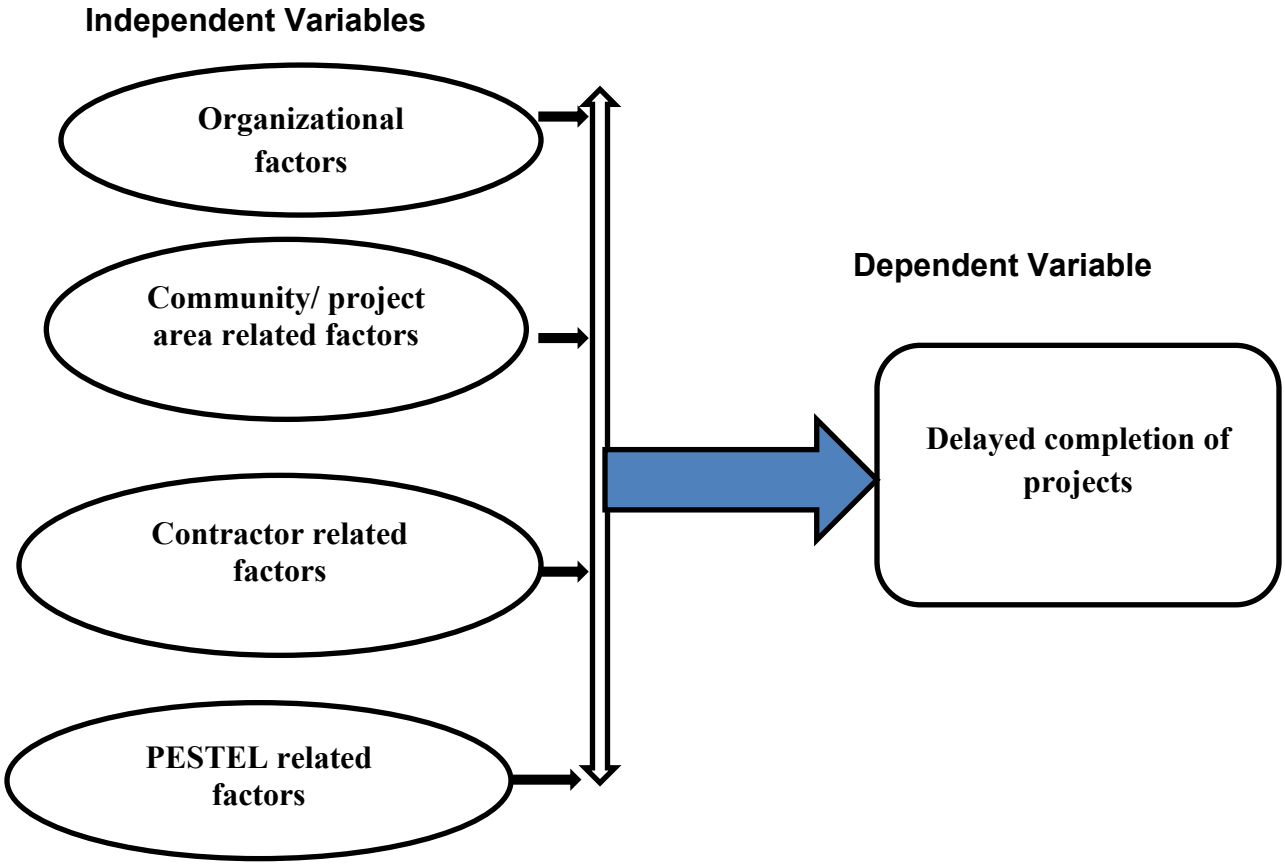
The scientific principles outline above if applied in the implementation of community projects funded using Constituency Development Fund can really help in avoiding late completion of project and produce works of good standard.

2.6 CONCEPTUAL FRAMEWORK

Kothari (2014) describes conceptual framework as the arrangement of interrelated ideas, definitions and suggestions that show a precise perspective of wonders by determining relations among factors. A conceptual framework is a diagrammatical illustration of hypothesized relationship between independent and dependent variables of the study. It is an argument about why the topic one wished to study matters and why the means proposed to study it were appropriate and rigorous (Sharon and Mathew, 2012). The conceptual framework consists of independent variables and dependent variable.

The conceptual framework shown in the figure shown below stipulates the factors which could be attributed to the delayed completion of community construction based projects implemented using the Constituency Development Fund. The dependent variable was delayed completion of projects and independent variables were; organisational factors (staffing levels, education, and qualification), community/ project area, Contractors (experience and contracts signed/awarded) and Political, Economic, Social, Technological, Environmental and Legal (PESTEL) factors.

FIGURE 1: CONCEPTUAL FRAMEWORK



Adopted from: Author 2019

2.6.1 INTERACTION BETWEEN THE INDEPENDENT AND DEPENDENT VARIABLES

Organizational factors

If an organization has inadequate staff, less skilled and qualified results in delayed completion of community construction projects.

Community/Project Area-Related Factors

Community construction projects where community participation and engagement was inadequate are susceptible to more delays than where the community were fully engaged.

Contractor-Related Factors

If the Contractor lacks experience or resources, the project will face delays due to inefficiencies in execution.

PESTEL-Related Factors

If political or economic instability arises, the project completion time may be significantly delayed due to budget constraints, legal issues, or environmental disruptions.

2.7 KNOWLEDGE/ RESEARCH GAP

From the reviews literature, it has been discovered that studies have focused more on utilization of Constituency Development Funds and community participation and other aspects of the Constituency Development Fund implementation processes such as awareness and adherence to the CDF project guidelines. There is little information and relevant empirical research regarding the factors associated to delayed completion of community construction projects funded using Constituency Development Funds and the extent to which strict adherence to the CDF guidelines has contributed to delayed completion of community construction projects.

The projects funded by CDF in the study area have a different contextual aspect where the CDF allocation is largely compared to the previous years in Zambia. The CDF is

disbursed on time and made available to the Contractor for efficient project management. There are no studies which discussed project delays funded by CDF in Zambia in the study area especially in the current political regimen.

Therefore, the study intends to find out factors associated delayed completion of community construction projects funded using community development fund (CDF) in Chadiza, Chipata and Chipangali Constituency.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter discusses how the study was conducted and the methods employed to collect and analyse data in order to achieve the research objectives. The first part would explain the research approach which was used in the study, while the second section would highlight the research design and the third section would discuss the study population and the sample size and sampling techniques which was used. Data collection and structured interviews methods was used in this research would be discussed in part four and last parts would discuss how data was collected from informants and analysed, research validity, ethical considerations and limitations of the study shall be highlighted as well.

3.1 RESEARCH APPROACH

Research approach is a plan and procedure that consists of the steps of brad assumptions to detailed method of data collection analysis and interpretation (Creswell, 2014). Therefore, according to Kothani, (2004) promulgated that, there are primarily two (2) types of research approaches; which are qualitative and quantitative approaches. Further, a mixed research methodology was deployed on this study and decision to settle on this methodology was due to the fact that the constructs of the study required a combination of quantitative and qualitative methods. (Creswell at al. 2003).

This study utilised the mixed method approach to attain the objective of the study because both quantitative and qualitative contributed to a particular research problem or research question(s) with a specified research context, a position supported by several other theorists. Also the data which was used in this study was collected using concurrent triangulation.

It should be further noted that, the two major philosophical positions under which the mixed methods research might be grounded are; pragmatism and realism. And in this study, a pragmatism principle was used because generalisation of the research findings were based on the information collected from both quantitative and qualitative sources.

3.2 RESEARCH DESIGN

A mixed method approach according to Creswell is referred to a research design in which the Researcher collects, analyse and mixes (integrates or connects) both qualitative and quantitative data in a single study or a multiphase programme of inquiry, (Creswell, 2009). Therefore, because of the aforesaid, the research designs which was used in this study involved both qualitative and quantitative and to be specific, the types of mixed methods which were used were; concurrent triangulation and concurrent nested designs.

The two sentences below clearly defines concurrent triangulation and concurrent nested designs:

Concurrent triangulation design involves a single study consisting quantitative and qualitative data collection which was conducted at the same time. The purpose of this type of investigation was to validate the findings generated by each method (Creswell at al. 2003).

Concurrent nested design is an approach which is also used when applying mixed methods research that requires data to be collected at the same time or parallel within the same study and one method (quantitative or qualitative) dominates with the other embedded or nested within (Creswell at al. 2003).

3.3 STUDY POPULATION

In this study, population refers to the specific group of people or individuals that Researchers intended to investigate or gather information from in a specific scientific study or research project. Therefore, the study population was defined by certain characteristic or criteria that was pertinent to the research objectives. The study population was Four Hundred Eighty-six Thousand Nine Hundred Seventy-eight (486,978) which was a consolidated figure from the three (3) districts in Eastern Province namely; Chadiza, Chipata and Chipangali and its populations were 111,069, 206,552 and 169,357 respectively (Zambian Census Population Projections, 2022).

The participants who took part in the study were drawn from members of the Ward Development Committees (WDCs), Constituency Development Fund Committees

(CDFCs), some were also selected members of staff from the Local Authorities (LAs) or Councils and the Provincial Local Government Office (PLGO). The other participants were drawn from the Contractors who were awarded contracts physical infrastructure in the respective wards during the period stipulated in the research study. The selection of the study population was purposive, targeting individuals and Contractors deemed to be reliable sources of information for the research and the selection criteria was arrived at based on the recommendation of Kambo and Tromp (2009).

3.4 SAMPLE SIZE

The study's sample size consisted of One Hundred Fifty (150) of which Fifty (50) were drawn from Chadiza, Chipata and Chipangali districts respectively. The sample was relatively large to make generalisation and was cost effective and easy to analyse.

The formula used to determine the sample size was as follows:

$2n = E2z2 \times p \times (1-p)$

Where:

n = the desired sample size

Z= Z-value (Confidence level)

P= estimated proportion of the population

E= margin of error

In this study, a confidence level of Ninety-five (95%) percent and a margin of error of Five (5%) percent were selected. The estimated proportion of the population was based on prior or expert judgement.

3.5 SAMPLING TECHNIQUES

According to Kothani, (2004) sampling refers to a process of selecting a representative subset of the population called a sample. Sampling therefore, makes research more accurate and economical. It is the sampling method which actually determines the

generalization of the research findings. In simple words, the process of choosing a sample of the study population is what is referred to sampling (Borg, 1998).

In this research both probability and non-probability sampling techniques namely; stratified sampling and convenience sampling was employed in selecting the participants.

Further, convenience sampling was also applied when choosing the Local Authorities or Councils in Eastern Province as well as the contractors awarded the projects. Stratified sampling was applied when selecting participants from Ward Development Committees and the Constituency Development Committees because of their varying membership.

Paula and Justo (2011) state that, this method is advantageous as it helps to elicit the views of persons who have specific expertise thereby helping the researcher not to be alone trying to defend his decisions but will have some knowledge experts to back him or her up.

A sample size of 150 respondents was used in this study of which 50 respondents were drawn Chadiza, Chipata and Chipangali districts respectively. Also, the sample was large enough to allow the Researcher to make generalization from it.

3.6 DATA COLLECTION/ INSTRUMENTS

The study used both the primary and secondary data collection methods. The main tools of data collection for the study were interview guides and semi-structured questionnaires. Primary data was obtained from the field through administering questionnaires to 150 participants who were drawn from Chadiza, Chipangali and Chipata districts of Eastern Province. A semi-structured questionnaire was administered to selected people because it allowed the Researcher to ask questions to different respondents and get their own views on the subject matter (Numan, 1999).The questionnaire consisted of both closed and open ended questions. This was so because closed ended questions are easy to analyse. On the other hand, open ended questions are useful in capturing a variety of views. The choice of using both interview and self-administered questionnaire was due to the varying levels of education of respondents.

Secondary data was gathered from a number of sources which included inter alia journal articles, dissertations, reports, Council minute books, GRZ documents and internet materials related to the subject matter at hand.

3.7 DATA ANALYSIS

According to Kambo (2006:117), considering that both qualitative and quantitative data analysis was employed in this research, data analysis involved “examining what was collected in a survey or experiment and making deductions and inference form it. It also involved uncovering underlying structures, extracting important variables, detecting any anomalies and testing any underlying assumptions. It involved scrutinizing the acquired information and making references.

In this study, qualitative data was analysed thematically after gathering, organising, coding and interpreting data from key informants manually to uncover patterns, themes and insights. Thereafter, Microsoft word was used to impute data, check all responses and highlight those that fit into each theme, and then count the frequencies.

Quantitative data was collected from participants using semi-structured questionnaire which was later analysed and interpreted using of descriptive statistics, predictive statistics, exploratory statistics and inferential statistics with the aid of SPSS software. This form of analysis helped the Researcher to analyse the collected data and identify information relevant to the research questions and objectives.

3.8 RESEARCH VALIDITY AND RELIABILITY

Validity is concerned with the meaningfulness of research components and processes (Drost, 2011). Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure. Validity refers to the extent by which a test measures what it is actually wish to measure (Kothani, 2004, Weiner 2007). Reliability is concerned with accuracy and precision of the measurement procedure and it becomes reliable if it provides consistent results (Kothani, 2004). To ensure reliability, interview questions were piloted prior to actual data collection.

3.9 ETHICAL CONSIDERATIONS

When carrying out any research, it is cardinal to take into account ethical considerations. Any unethical practices during research may affect the smooth conduct and achievement of the set research objective(s), and cause harm to the researcher and study participants. Ethical conduct on the part of the researcher is therefore important. Among the ethical considerations key to this research are; informed consent, privacy and confidentiality, conflict of interest, deception and respect for participants.

3.10 STUDY LIMITATIONS

Conducting research involves dealing with a number of challenges that may come along such as limited time, distance considering that data collection was carried out in three district which are vast and challenges in finding research participants.

CHAPTER FOUR

PRESENTATON OF FINDINGS

4.0 INTRODUCTION

This chapter presents the findings from the data analysis that was done using the data that was collected. This chapter presents the findings in tables, graphs and narrations.

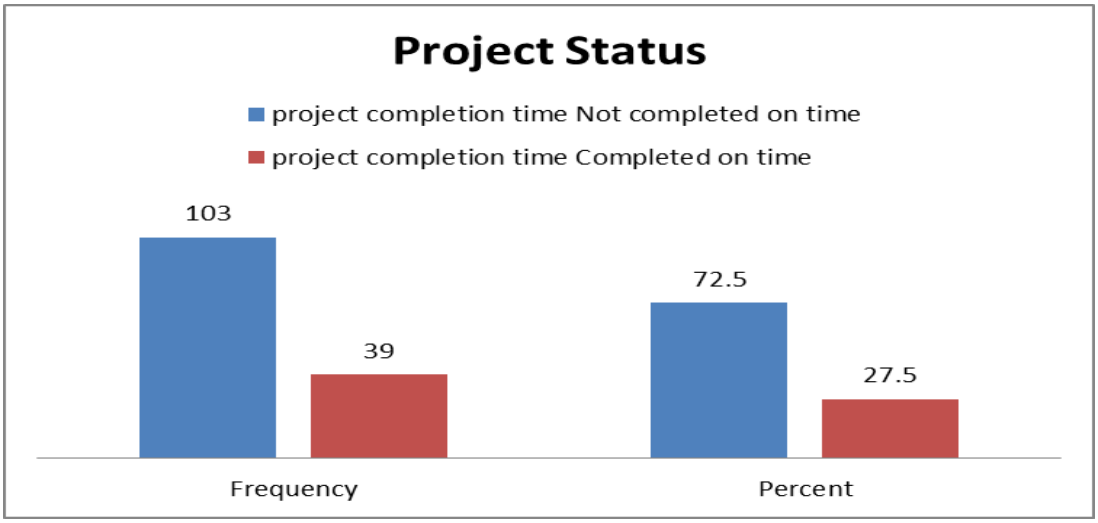
4.1 DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANT

Table 1: Gender distribution of participants

		Frequency	Percent
Sex	Male	83	58.5
	Female	59	41.5

For this study, there were more males accounting for 58.5% (83) than the females that accounted for 41.5%. The participants responded for various projects in the three Constituencies.

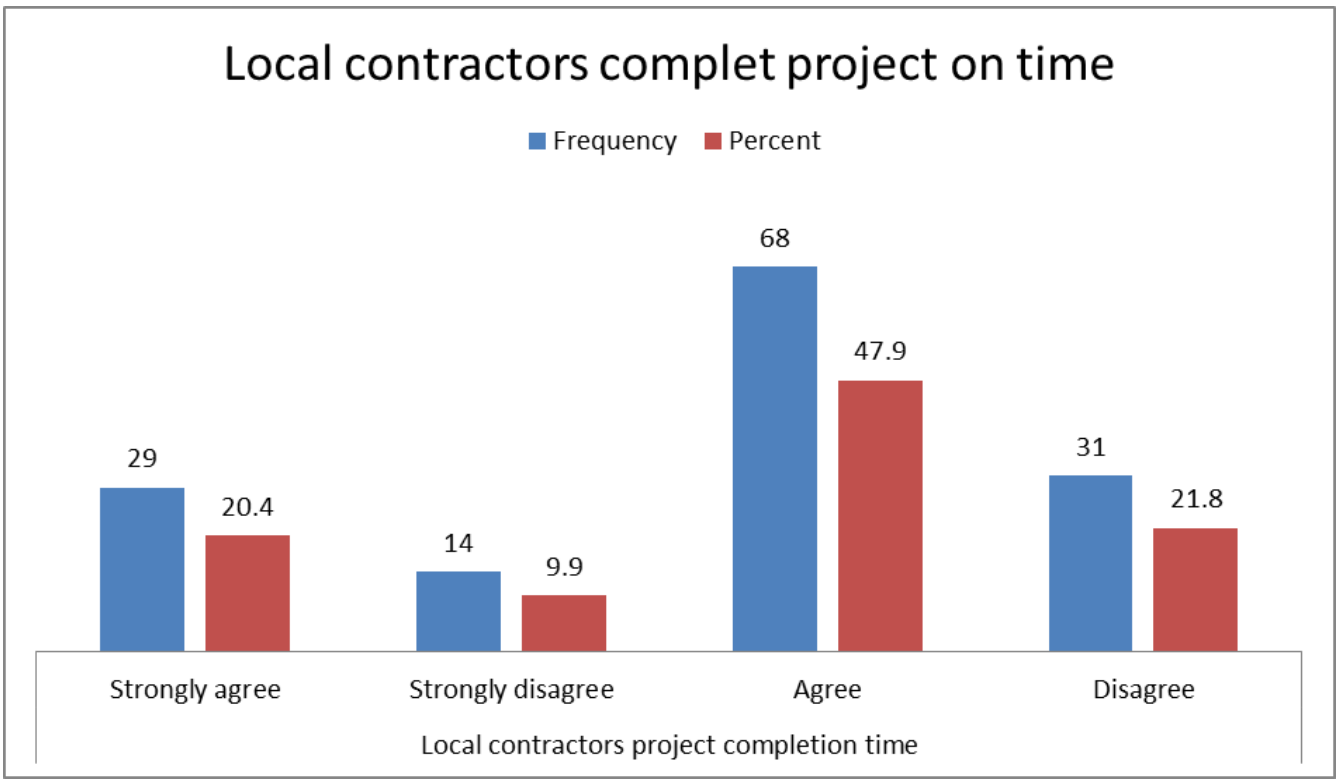
4.2 Perception of Local contractors completing projects on time



Graph 1: Perception of Local contractors completing projects on time

For the projects that were approved to be initiated were a total of 142 projects distributed across the three constituencies. The projects that were completed on time were far less (27.5%) than the projects that were not completed on time (72.5%). This showed how gross the challenges of not completing projects on time were.

4.3 Perception that local contractors complete projects on time



Graph 2: Perception that local contractors complete projects on time

The participants had different perceptions regarding the local contractor's ability to complete projects on time. A majority (47.9%) of respondents agreed that local contractors completed projects on time considering that they may want to win another tender while only 9.9% strongly disagreed that the local contactors complete projects on time.

Objective 1: Government organizational factors associated with delay in completion of community construction projects funded using community development fund (CDF)

Table 2: Organizational Factors

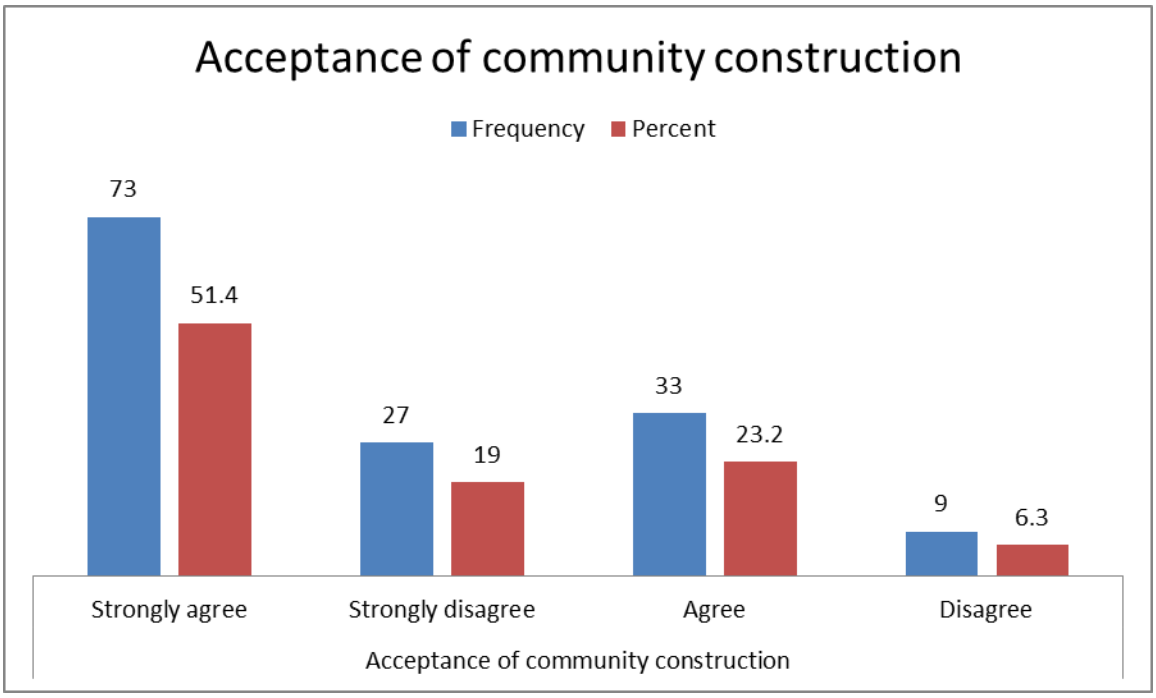
		project completion time		
		Not completed on	Completed on	P-

		time	time	value
Name of Local Authority	**Chadiza**	**40**	**10**	**0.000**
	Chipata	**43**	**4**	
	Chipangali	**20**	**25**	
Staffing levels	Yes	42	13	0.416
	No	61	26	
Qualified planning officers	Yes	101	38	0.818
	No	2	1	
Monitoring and evaluation Unit	Yes	53	17	0.403
	No	50	22	

The government organisation related factors were analysed and the results are presented in table 2 above. The results showed that the locality of the projects awarded were significantly associated with delays in the completion of construction project funded using community development fund (CDF) (*P=<.01).* In Chipangali constituency, it was noted that more projects were completed on time than those that delayed completion. Chipata had the lowest timely completion of project with only 4/43 being completed on time. It is however not clear the types of projects that were completed or projects that were approved to be undertaken. The study did not go in detail to analyse the type of projects such as major or minor projects approved by the community.

Objective 2: To assess the community/project area related factors associated with delay in completion of community construction projects funded using community development fund (CDF).

Acceptance of community construction projects



Graph 3: Acceptance of community construction projects

Table 3: Community/project area related factors

Variables		project completion time		
		Not completed on time	Completed on time	Exact P-value
Functional WDCs	Yes	101	39	
	No	2	0	0.525
Involvement of community members	Yes	94	37	
	No	9	2	0.727
Members involved	Ward Development Committees	35	17	
	Ward Development Committees, CDFCs and Councillors	28	8	
	WDCs, Councillors, Community members and beneficiaries	19	8	
	DCFCs, WDCs, DCs and Council Chairperson	6	2	
	N/A	3	0	
	Ward Development Executive Committee	1	0	
	WDCs, DC, MP and other officers from line Ministries	7	3	
	Constituency Development Committee members	4	1	0.886

Acceptance of community construction	Strongly agree	52	21	
	Strongly disagree	20	7	
	Agree	26	7	
	Disagree	5	4	0.563

Geographical sites (disputes with local people on location and boundaries affect project implementation and execution of projects in communities which may affect project completion time. However, the results of the study indicated that there was no community related factor which was significantly associated with delayed completion of projects funded by CDF in the communities. This does not mean the community related factors do not have any influence on the project delays rather that there influence is not significant enough.

Objective 3: To assess the contractor related factors associated with delay in completion of community construction projects funded using community development fund (CDF).

Table 4: The contractor related factors

Variables		project completion time		
		Not completed on time	Completed on time	Exact P-value
Change initial construction designs	Yes	98	35	
	No	5	4	0.259
Types of Contracts awarded to local	**Full Contract**	**81**	**27**	
	Labors based	**13**	**2**	
	Full Contract and False	**6**	**7**	

communities	**Account**			
	Not sure	**3**	**3**	**0.048**
Contractor experience	Yes	95	38	
	No	8	1	0.256
Contractual terms	Yes	100	36	
	No	3	3	0.206

Under the contractor related factors, the results showed that there was a significant association between completing the projects on time and types of contracts awarded to local communities (*P=0.048)*. The full contracts awarded to contractors with non-false accounts completed very few projects compared to the full contractors awarded to false accounts. This may mean that false accounts had many individuals benefiting in some way hence received adequate funding on time and the type of jobs done were not under strict scrutiny. The other variable under contractor related factors were not significantly associated to the delayed completion on community construction projects funded using community development fund (CDF).

Objective 4: To evaluate the political, economic, social, technological, environmental and legal (PESTEL) factors associated with delay in completion of community construction projects funded using community development fund (CDF).

Table 5: Political, economic, social, technological, environmental and legal factors

		project completion time		
		Not-completed on time	Completed on time	P-value

Political will	Yes	90	35	
	No	13	4	0.698
Changes in Prices of materials	Yes	97	39	
	No	6	0	0.305
Legal issues	Yes	94	33	
	No	9	6	0.25

The data in the table above shows the analysis of the data collected the no PESTEL factor which showed significant association with delays in the completion of community projects. The three (3) variables that were displayed as n tables were the variables with complete responses from participants; however, they produced insignificant results.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 INTRODUCTION

The preceding chapter presented the findings of the analysis from the data that was collected from the respondents that participated in the study. This chapter presents the discussion of the findings of the study in detail and brings context to the findings of the study and relate the findings to the objectives of the study.

5.1 PERCEPTION OF LOCAL CONTRACTORS COMPLETING PROJECTS ON TIME

The study reached out to 142 projects in total that were planned, approved and scheduled to be implemented. The study managed to successfully interview 142 participants that completed the study out of the 150 potential participants that were reached giving 95% response rate. The respondents were had more males accounting for 58.5% (83) than the females that accounted for 41.5%. The participants responded for various projects in the three constituencies. The respondents were a mix of individuals that included members of the public, workers from local authorities and individuals from the contractors that could be reached.

During the interview, some information could not be revealed such as financial; issues and political issues and any other issues that could be deemed as a bleach of confidentiality and contractual terms. A total of a total of 142 projects were approved to be initiated in the three constituencies. The projects that were completed on time were far less (27.5%) than the projects that were not completed on time (72.5%). This showed how gross the challenges of not completing projects on time were. The participants had different perceptions regarding the local contractor's ability to complete projects on time.

It was found that a majority (47.9%) of respondents confirmed that Local Contractors completed projects on time considering that they would want to win other tenders in future while only 9.9% strongly disagreed that the Local Contactors completed projects

on time. However, these were assumptions that Contractors would offer answers to in a more detailed study focusing on the context of Local Contractor performance.

5.2 GOVERNMENT ORGANIZATIONAL FACTORS ASSOCIATED WITH DELAY IN COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUND (CDF)

According to Sweis & Bisharat, (2023) indicated that when the governments award bids or contracts to individual contractors, the contractors should have declared full obedience to government regulations such as safety, labour laws, child protection policy and other pieces of regulations. Contactor factors affect the delivery of a government project on time and if the contractor is found wanting on certain areas such as safety issues, the government makes the contractor answerable to the law and may demand the contractor to meet the minimum safety requirements (Sweis, Sweis, Bisharat, & Bisharat, 2023).

Some studies showed that in Africa, the communities where the rich and elite resides receives a fair share of development even beyond what is allocated to them because they have a voice and are well connected or have influence (Murithi, Makokha, Otieno, & I, 2007). On the other side, the communities with people who seem to be in the middle and lower economic classes receive less attention owing to their lack of influence in the society (Masinde, 2019). This results to delays in completing works for communities with lower class. In line with these results, the current study discovered that the locality of the projects awarded were significantly associated with delays in the completion of construction project funded using community development fund (CDF).

Contrary to the conclusions by Murithi, et al., (2017) and Masinde, (2019), the current study revealed that more projects that were approved by the government in the urban areas delayed in being completed compared to the rural areas like the rural constituencies such as Chipangali and Chadiza. Chipata Constituency had the lowest timely completion of project with only four (4) out of Forty-three (43) being completed on time. It was however not clear the types of projects that were completed or projects that

were approved to be undertaken in terms of size of project and budgets of the project approved by the community.

5.3 COMMUNITY/PROJECT AREA RELATED FACTORS ASSOCIATED WITH DELAY IN COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUND (CDF)

Perception of the project by the community was another factor that affects the delivery of projects by the government through funded using Constituency Development Funds. A study on influence of community participation on successful implementation of Constituency Development Fund projects revealed that the projects in the area failed to be implemented successfully because the community did not participate and were not engaged in all the stages of the project (Nyaguthi & Oyugi, 2013; Dick-Sagoe, Lee, & Boateng, 2023). This study found that there was no community related factor which was significantly associated with delayed completion of projects funded by CDF in the communities. This does not mean the community related factors do not have any influence on the project delays rather that there influence is not significant enough.

5.4 THE CONTRACTOR RELATED FACTORS ASSOCIATED WITH DELAY IN COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUND (CDF)

This study found a significant association between completing the projects on time and types of contracts awarded to local communities. The full contracts awarded to contractors with non-false accounts completed very few projects compared to the full contractors awarded to false accounts. This may mean that false accounts had many individuals benefiting in some way hence received adequate funding on time and the type of jobs done were not under strict scrutiny. The other variable under contractor related factors were not significantly associated to the delayed completion on community construction projects funded using community development fund (CDF). The study however, found no significant association between the process of awarding contracts and delayed completion of projects funded by CDF.

According to Sweis, et al., (2023) and Gathoni & Ngugi, (2016) indicated that the process of awarding contracts influences the project completion and success because some contracts are awarded to contractors on the ground of empowering them and not the capacity that the contractor has in executing the project on time, scope and budget.

5.6 THE POLITICAL, ECONOMIC, SOCIAL, TECHNOLOGICAL, ENVIRONMENTAL AND LEGAL (PESTEL) FACTORS ASSOCIATED WITH DELAY IN COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUND (CDF)

The analysis of the data collected showed no PESTEL factor was significantly associated with delays in the completion of community projects. The three variables that were displayed in tables were the variables which had completed responses from participants; however, they produced insignificant results. However, this does not mean that the PESTEL factors do not influence delay of the project completing time, rather, that the influence is not significant enough.

It was found that price volatilities or unstable markets also affect the delivery of the projects on time. One of the factors in Africa is the unstable markets where the contractor at the time of bidding declares prices which drastically changes over a short period of time leading to budget deficit hence project delay or failure (Odhiambo, 2016). This maybe the case in some areas of the world but this study finding revealed that there was no significant association between the delay in project completion and price changes of the commodities or materials to use. However, there is need for a horizontal study that focuses on the trends in prices changes in lagged form and the completion time of the projects as completing the project on budget is key success factor in project management.

As found by Odhiambo, (2016), price changes are a factor in various projects funded with CDF. However, the changes in price do not significantly influence the delay in completion time of the projects. In fear of price changes, contractors may actually want to complete project quicker to beat inflation speculations thereby working as a facilitator to timely completion of projects. The price changes are mostly common for projects that

take too long to be implemented because in economic assumptions, price changes take steps and jerks indicating that they take time before they change.

In other studies, it was indicated that the derailment in the funding of the projects, coupled with the failure of the contractor to finance the project and the long process taken to approve the project where among the factors that negatively influenced the project implementation in Lusaka (Aigbavboa, et al., 2014). In addition, most public projects are funded by the government which is usually overburdened and runs budget deficits and the bureaucracies in government presents as a challenge to fully finance the projects or delay in funding the projects (Casey, et al., 2021). This study however found the project funded by CDF have less challenges in funding and financing approved projects because the call for contractors to is usually done when CDF is disbursed to the community and after the community has agreed on the project to undertake. The CDF guidelines allow for a partial payment to the awarded contractor before commencing the works.

5.7 INTERVIEW GUIDE

5.7.1 BACKGROUND INFORMATION

NAME OF THE WARD

Oral interview in this study was conducted in Fifteen (15) wards of the study area. That was five (5) from Chadiza, Chipata and Chipangali respectively. From Chadiza district the wards were; Chadiza Central, Kapachi, Chamanda, Chanjowe and Chilenga. From Chapita district the wards were; Kanjala, Masupe, Kapata, Dilika and Msanga. From Chipangali district the wards were; Chipangali, Sisinje, Lunkhuswe, Nthope and Madziatuba.

OCCUPATION

From the Seventy-five (75) individuals who participated in the interview made up of Forty-five males and (45) and Thirty (30) females' majority were Farmers translating to 66.67%. Further, out of 75 interview respondents, 10 were Teachers, 10 were Health

Personnel, 4 were Community Development Officers and 1 Provincial Local Government Officer drawn from Chadiza, Chipata and Chipangali districts.

WHAT IS YOUR POSITION IN THE WARD DEVELOPMENT COMMITTEE?

At the time of interview, it was discovered that most of the Ward Development Committees were just reconstituted two (2) years ago and the people who were interviewed are Ward Development Committee Chairpersons, Vice Chairpersons, Secretaries and Ward Councillors from all the three (3) study areas.

5.7.2 THEMATIC ANALYSIS IF QUALITATIVE DATA

The table below show the thematic analysis of data which was collected from respondents on organizational and community/project related factors associated with delayed completion of community projects.

Questions	**Organizational factors**	**Yes**	**No**	**Total**
1. Is manpower at the Council adequate		15	60	**75**
2. Is manpower qualified		55	20	**75**
	Community/ project related factors			
3. Is your Ward Development Committee involved in the following? (a) Identification of community construction projects		75	0	**75**
(b) Monitoring of community construction projects		65	10	**75**

(c) Evaluation of community construction projects		60	15	**15**
4. State at least five (5) things that can cause delay in completion of community construction projects implemented using CDF funds.	1. Award contracts to experienced Contractors. 2. Scarcity of upfront materials. 3. Ban road network. 4. Political interference. 5. Price changes in construction materials.			
5. From the five (5) you have stated, what can be the possible solution?	1. Award contracts to experienced. 2. Implement contracts with the contract period. 3. Employ more staff. 4. Exclude political interference. 5. Capacity building of WDCs and officers.			
1. Is you Ward Development Committee adequately oriented to execute its mandate of identifying, monitoring and evaluation of community construction		70	5	**75**

projects				

5.7.3 ORGANIZATIONAL FACTORS

Is the manpower at the Council adequate to carry out CDF community construction projects?

The interview conducted in Chadiza, Chipata and Chipangali districts revealed that manpower in all the three Local Authorities were not adequate to execute CDF construction projects despite the staff being adequately qualified in departments directly linked to CDF projects such as Planning, Finance and Engineering and also Procurement section.

Therefore, it was recommended in all the three study areas that, there was need to recruit more staff in the said departments and section to beef up manpower to effectively and efficiently carry out CDF community construction projects.

5.7.4 COMMUNITY/PROJECT RELATED FACTORS

Is your Ward Development Committee involved in the following?

From all the three study areas, interview revealed that Ward Development Committees and other key stakeholders were actively involved in the identification, monitoring and evaluation of community construction projects.

However, in Chadiza and Chipangali districts, members of the Ward Development Committees recommended that, they required capacity building more especially in monitoring and evaluation of projects in order for them to effectively execute their mandate.

State at least five (5) things that can cause delay in completion of community construction projects implemented using CDF funds.

From the interviews conducted in Chadiza district, it was learnt that factors which contributed to delayed completion of community construction projects were awarding of contracts to non-experienced Contractors, scarcity of upfront materials for construction and bad road network to project sites as well as high prices for building materials.

In Chipata district, it was learnt that, the factors that contributed to delayed completion of community construction projects were; Political influence in the award of contracts, awarding contracts to local Contractors with inadequate experience in construction projects and price fluctuation of building materials.

In Chipangali district, the factors which were attributed to delayed completion of community construction projects were inadequate staffing at the Council, change in prices for building materials, political influence in the award of contracts and poor road network to project sites.

Further, of all the challenges highlighted above, it was recommended from all the three districts that, to complete community construction projects on time, there was needed to award contracts to Contractors with adequate experiences, exclude political interference in the award of contracts, employee more staff in Councils and ensure that the projects are implemented within the contract period to avoid the aspect of price changes of construction materials.

Additionally, all the three districts recommended that, there was need to capacity build Ward Development Committee in the identification, monitoring and evaluation of community construction projects and that would in turn result in minimizing delay in execution of projects.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

6.0 INTRODUCTION

Chapters four and five of the study presented the study's findings and the discussion thereof. This chapter presents the conclusion of the study which is a summary of all the chapters presented before it and also offers recommendations to the policy makers. The chapter further introduces the limitations of the study.

6.1 SUMMARY OF STUDY FINDINGS

The general objective of the study was to establish factors associated delayed completion of community construction projects in Chadiza, Chipata and Chipangali districts. Therefore the summary below follows the findings of the study in relation to each objective.

6.2 CONCLUSION

The study aimed at establishing the factors associated delayed completion of community infrastructure construction projects in Chadiza, Chaipta and Chipangali districts and the conclusion of the study was given based on the research questions that were raised earlier in the study. The conclusion provided views based on the findings and discussions about the questions being addressed.

6.2.1 WHAT ARE THE GOVERNMENT ORGANIZATIONAL FACTORS ASSOCIATED WITH DELAYS IN THE COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUNDS (CDF)?

The study revealed that, government organisational factors such as academic/ professional qualification, staffing level and job experience of employees in departments key in the implementation of community infrastructure projects using CDF were not associated with delayed completion of projects.

However, the study revealed that, community infrastructure projects implemented in areas hard to reach were susceptible to be completed in time than those implemented in easy to reach areas. The study also discovered that projects implemented in rural areas were more likely to be completed on time than other projects implemented in urban areas for example Chipata district. The study, however, did not go further to investigate the size of the project being implemented which could as well be a factor in timely completion of projects.

6.2.2 WHAT ARE THE COMMUNITY/PROJECT AREA-RELATED FACTORS ASSOCIATED WITH DELAYS IN THE COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUNDS (CDF)?

The communities where the projects were implemented had not shown significant influence on the projects funded by CDF. That was evident in the results which were produced by the study. This does not mean the engagement and participation of key stakeholders (community-related factors) in community infrastructure projects implementation process would not have any influence on the project delays rather their influence was not significant enough. The communities were involved in the approval of the projects and it was noticed that the urban district approved a large number of projects but very few were completed on time. It was however not clear the types of projects that were completed or projects that were approved to be undertaken in terms of size of project and budgets of the project approved by the community.

6.2.3 WHAT ARE THE CONTRACTOR-RELATED FACTORS ASSOCIATED WITH DELAY IN COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUND (CDF)?

This study found a significant association between completing the projects on time and the types of contracts awarded to local communities. The full contracts awarded to contractors with non-false accounts completed very few projects compared to the full contractors awarded to false accounts. This meant that false accounts had many individuals benefiting in some way and hence received adequate funding on time and

the type of jobs done were not under strict scrutiny. The study, however, found no significant association between the process of awarding contracts and delayed completion of projects funded by CDF.

6.2.4 HOW ARE THE POLITICAL, ECONOMIC, SOCIAL, TECHNOLOGICAL, ENVIRONMENTAL AND LEGAL (PESTEL) FACTORS ASSOCIATED WITH DELAY IN COMPLETION OF COMMUNITY CONSTRUCTION PROJECTS FUNDED USING COMMUNITY DEVELOPMENT FUND (CDF)?

Although the study finding did not show any significant association of PESTEL factors with delayed completion of CDF projects, the various aspects of the PESTEL environment direct the pace of the projects. In fear of price changes, Contractors would like to complete projects quicker to beat inflation speculations thereby working as a facilitator for timely completion of projects. Price changes were mostly common for projects that took too long to be implemented because, in economic assumptions, price changes take steps and jerks indicating that they take time before they change. The projects funded by CDF had fewer challenges in funding and financing approved projects because the call for contractors was usually done when CDF were disbursed to the community and after the community had agreed on the project to undertaken. The CDF guidelines allowed partial payment to the awarded Contractor before commencing the work. Furthermore, the monitoring and evaluation was helpful to engage the contractors on challenges that they were facing and addressed the challenges such as community engagements, and agreeing on scope changes in case of scope creep and contractors capacity.

Additionally, the study established that the adequate allocation of funds influenced completion of community construction projects implemented using Constituency Development Funds. That was evident from the majority respondents who agreed that adequate allocation of funds indeed affected the completion of projects.

6.3 RECOMMENDATIONS

For purposes of future prosperity in the completion of community construction projects in most Constituencies in Zambia, Chadiza, Chipata and Chipangali inclusive; it was important to make some recommendations from the study findings, the following recommendations were made derived from the study presented in chapter four and discussed in chapter five:

1. Government should consider employing not only qualified but adequate personnel in Planning, Engineering and Finance departments as well as Procurement section to work on the project.

   Furthermore, Community construction projects should be assigned enough personnel who are well versed with the required work to be done to ensure proper completion projects to serve the intended purposes. Also, there was need to make it mandatory condition of tender for appointment of a registered Project Manager for each contract.

2. The centralised authority should continue influencing the prudent management and monitoring the implementation of the projects at the community level despite the project being chosen and spearheaded by the community.

   Also, the government should develop a deliberate policy that any community that hampers the implementation and delivery of the project will have no further project allocation for the entire financial year to prevent communities from compromising project implementation.

3. The government should be involved in doing the due diligence of contractors and the companies before the community or Local Councils proceed to engage them in tenders to avoid abandoning work and not starting work at all.
4. The Country leadership, especially the relevant departments should ensure that adequate funds are allocated and released on a timely basis to enable timely completion of projects and once funds have been allocated to a community project, there should be regular release of those funds to enable project complete in time.

6.4 LIMITATIONS OF THE STUDY

- The study was only a cross-sectional study and did not consider horizontal observation of the influence of various variables on the completion of CDF projects.
- The study was also limited to three constituencies namely Chipangali, Chadiza and Chipata despite having a lot of constituencies in Eastern province.

6.5 FUTURE RESEARCH

After going through the entire process starting from data collection and ending with the analysis and recommendations, the research was only focused on hard physical infrastructure (community construction) projects leaving other forms of infrastructure. Furthermore, the study only covered three (3) Constituencies in Eastern Province out of the One Hundred Fifty-six Constituencies in Zambia. Therefore, there should be other studies on a similar field using different variables and if possible in different scopes for comparison purposes. Those studies should be carried out specifically on monitoring and evaluation of these community construction projects and other projects in other Constituencies in Zambia.

It is further recommended that research be conducted using a horizontal approach which focuses on the trends in price changes in lagged form and the completion time of the projects as completing the project on budget is a key success factor in project management.

7.0 RESEARCH TIMEFRAME OF RESEARCH ACTIVITIES

Activity	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Jan 2025	Feb 2025
Submission of a research proposal to the Supervisor							
Designing of the data collection tools							
Seek for ethical consideration							
Data collection							
Data analysis							
Write/ submission of dissertation							
Defending of dissertation							
Final submission of the dissertation							

8.0 BUDGET

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT(ZMW)
Stationery and printing	Ream of paper	3	150	450
	pens	2	15	30
	Secretarial work		850	850
	staples	1	50	50
Personnel (Research assistants)	Assistants	2	1000	2000
communication	talk time	3	100	300
Thesis Preparation cost	3 copies	3	500	1500
Contingency	10% of budget	1		643
Transport	Transport costs (Data Collection)		1500	1500
			Total	**K7,323**

8.1 JUSTIFICATION FOR THE BUDGET

The budget includes all the expenses that the Researcher had incurred during the period of the research and are elaborated as follows:

Stationery: stationery was be required for purposes of printing, photocopying, collection of data and storage of data collected i.e. pens, note books and memory stick.

Research personnel: This research will used two (2) Research Assistants or Data Collectors for data collection and editorial purposes at a cost of K1000 each.

Communication: for purposes of constant communication an amount of K300 was budgeted for talk time and bundle purchases to ease communication.

Thesis Preparation costs: an amount of K2400 was allocated for the printing and binding of the final copies of the thesis.

Contingency fee: a contingency fee has been added at 10% in case of any deficits to the budget.

Transport: an amount of K1500 has been allocated for all transport costs during the period of the project.

Source of Funding: The research was self-sponsored.

9.0 QUESTIONNAIRE

Questionnaire No._____

Dear respondents,

I am a student at the University of Lusaka pursuing a Master's Degree in Science of Project Management, as a partial fulfillment of the Master's Degree, and conducting a research on a topic "**factors associated with delayed completion of community construction projects funded using Constituency Development Fund (CDF) in Chadiza, Chipata and Chipangali Constituency**"

You have been randomly selected to participate in this study through your responses. Furthermore, you be assured that your responses provided in this questionnaire shall be strictly confidential and is purely for academic purpose.

Instructions

1. Do not write your name or contact number on this questionnaire.
2. For open ended questions, you may either cross **[×]** or tick **[√]** in the space provided.
3. For open ended questions, write your responses in the spaces provided

For any clarifications, you may contact **0978756747**

BACKGROUND INFORMATION **Official use**

1. Name of the Local Authority. _____
2. Sex

1. Male [ ]
2. Female [ ]

3. What is your occupation?

_____

4. What is your professional qualification?

1. Certificate [ ]
2. Diploma [ ]
3. Degree [ ]
4. Masters [ ]
5. Others (specify)_____

5. What is your hierarchy in your Institution?

1. Management [ ]
2. Non-management [ ]

6. How long have you been in the service?

_____

ORGANIZATIONAL FACTORS

7. Are the staffing levels adequate in Planning, Accounts/Finance and Works/Engineering departments and Procurement Unit?

1. Yes [ ]
2. No [ ]

8. If no to question 7, what should be done?

_____

_____

_____

9. Does your Local Authority have functional Ward Development Committees, Constituency Development Committee and Procurement Committee?

1. Yes [ ]
2. No [ ]

10. Do you have qualified staff in Planning, Accounts/Finance and Works/Engineering departments and Procurement Unit?

1. Yes [ ]
2. No [ ]

11. Do you have a Monitoring and Evaluation Unit or section at your Local Authority?

1. Yes [ ]
2. No [ ]

COMMUNITY/PROJECT RELATED FACTORS

12. Are community members involved in the identification and monitoring of community construction projects

1. Yes [ ]
2. No [ ]

13. Which members of the community participate in the identification and monitoring of community construction projects?

_____

_____

_____

_____

14. Community acceptance of community construction projects results in timely completion of project.

1. Strongly agree [ ]

2. Strongly disagree [ ]
3. Agree [ ]
4. Disagree [ ]

15. Does change in the initial construction design cause delay in project?

1. Yes [ ]
2. No [ ]

CONTRACTUAL RELATED FACTORS

16. How are Contractors selected at your Local Authority?

1. Using e-government procurement [ ]
2. Traditional method [ ]
3. Both (e-GP and traditional) [ ]

17. Community construction projects implemented on full contract completes on time.

1. Strongly agree [ ]
2. Strongly disagree [ ]
3. Agree [ ]
4. Disagree [ ]

18. What type of contracts are awarded under community construction projects?

_____

_____

_____

19. Local Contractors completes projects on time than non-Local Contractors.

1. Strongly agree [ ]
2. Strongly disagree [ ]
3. Agree [ ]

4. Disagree [ ]

20. Does the experience of the Contractor(s) have an effect on timely completion of community projects?

1. Yes [ ]
2. No [ ]

21. Changes in the contractual terms and conditions has a bearing on projects.

1. Yes [ ]
2. No [ ]

PESTEL RELATED FACTORS

22. Does political will contributes to timely completion of community construction projects?

1. Yes [ ]
2. No [ ]

23. Changes in prices of construction materials and technology has an effect on timely completion of projects.

1. Yes [ ]
2. No [ ]

24. Construction community projects in good geographical sites completes on time than those located in hard to reach areas.

1. Strongly agree [ ]
2. Strongly disagree [ ]
3. Agree [ ]
4. Disagree [ ]

25. Can legal issues cause delay in implementing projects?

1. Yes [ ]

2. No [ ]

26. What should be done to ensure that projects are completed on time in your view?

_____

_____

_____

THANK YOU FOR YOUR COOPERATION

10.0 INTERVIEW GUIDE

Topic: "factors associated with delayed completion of community construction projects funded using Constituency Development Fund (CDF) in Chadiza, Chipata and Chipangali Constituency"

BACKGROUND INFORMATION

1. Name of the Ward

2. Sex

3. What is your occupation?

4. What is your professional qualification?

5. What is your position in the Ward Development Committee?

6. How long have you been in the Committee?

ORGANIZATIONAL FACTORS

7. Is the manpower at the Council adequate to carry out CDF community construction projects?

8. Is the manpower qualified at the Council to execute CDF community construction projects?

COMMUNITY/PROJECT RELATED FACTORS

9. Is your Ward Development Committee involved in the following?

(a) Identification of community construction projects

(b) Monitoring of community construction projects

(c) Evaluation of community construction projects

10. State at least five (5) things that can cause delay in completion of community construction projects implemented using CDF funds.

11. From the five (5) you have stated, what can be the possible solution?

12. Is you Ward Development Committee adequately oriented to execute its mandate of identifying, monitoring and evaluation of community construction projects?

THANK YOU FOR YOUR COOPERATION

11.0 REFERENCE

Ahmed, S., Azhar, S., Castillo, M., & Kappagantula, P. (2021). Delays in Construction Projects: Causes and Mitigation Strategies. *Journal of Construction Engineering and Management*, **147**(3), 102-118. https://doi.org/10.1061/(ASCE)CO.1943-7862.0001234

Aigbavboa, C. O., Thwala, W. D., & Mukuka, M. J. (2014). Construction project delays in Lusaka, Zambia: Causes and Effects. *Journal of economics and behavioural studies, 6*(11), 848-857.

Alaghbari, W., Kadir, M. R. A., Salim, A., & Ernawati, T. (2020). Factors Causing Delays in Construction Projects: A Review. *International Journal of Project Management*, **38**(5), 77-89. https://doi.org/10.1016/j.ijproman.2020.03.004

Auditor General of Zambia. (2021). *Report on the Management of Constituency Development Fund (CDF) Projects in Zambia.* Lusaka: Government of Zambia.

Casey, K., Rodriguez, A. F., Sacchetto, C., & Wani, S. (2021). *Zambia's constituency development fund: Policy considerations.* Policy paper. Retrieved from www.theigc.org

Chrine, T., Tembo, S., & Zyambo, M. (2020). Public Financial Management Challenges in CDF Disbursement in Zambia. *Economic Policy Review Journal*, **12**(2), 45-63.

Constituency Development Fund Guidelines. (2022). *Economics Association of Zambia (EAZ), 2011, 'Impact of the Constituency Development Fund in Zambia.* Lusaka: Government Printers, Zambia.

Creswell, J. W. (2009). *Research design: Quantitative, Qualitative and Mixed Methods Approach* (3 ed.). London: SAGE Publications Inc.

Creswell, J. W. (2021). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (6th ed.). Thousand Oaks, CA: SAGE Publications.

Dick-Sagoe, C., Lee, K. Y., & Boateng, P. O. (2023). Stakeholder's perceptions on causes and effects of public project failures in Ghana. *Humanities and social sciences communication, 10*(14). doi:doi.org/10.1057/s41599-022-01497-7

Ellis, G. (2016). *Project Management in Product Development; Leadership Skills in Product Development Techniques to Deliver Great Producs.* Radford: Library of Congress Cataloguing

Ellis, R. (2021). Community Participation and Infrastructure Development: Challenges and Solutions. *Development and Change Journal*, **52**(3), 112-134.

Gathoni, J., & Ngugi, K. (2016). Drivers of effective project performance in national goverment funded projects in Kiambu County, Kenya. *International academic journal of human resource and business administration, 2*(2), 22-40.

Goldratt, E. M. (2022). *The Theory of Constraints: A Practical Application in Project Management.* New York: North River Press.

Gathoni, A., & Ngugi, J. (2023). The Role of Corruption in Delayed Construction Projects in Kenya. *African Journal of Business and Economic Research*, **18**(4), 78-93.

Jatarona, N. A., Yusof, A. M., Ismail, S., & Saar, C. C. (2016). Public construction projects performance in Malaysia. *Journal of Southeast Asian research, 2016*, 1-7. doi:10.5171/2016.940838

Kaumba, M. (2023). *Chingola CDF project progress.* Lusaka: ZNBC.

Kerzner, H. (2017). *Project Management, A system approach to planning, scheduling and controlling, 20th edition.* Canada: John Wiley and sons, Inc.

Kerzner, H. (2021). *Project Management: A Systems Approach to Planning, Scheduling, and Controlling* (13th ed.). New York: Wiley.

Kitwe City Council. (2023). *CDF Projects: Constituency development fund (CDF) implementation and management.* Kitwe: Kitwe City Council. Retrieved from www.kcc.gov.zm/cdf-projects/

Kitwe City Council. (2023). *Annual Report on Constituency Development Fund Implementation.* Kitwe, Zambia: Kitwe City Council Press.

Ling, F. Y. Y., Low, S. P., Wang, S., & Lim, H. H. (2021). Key Determinants of Project Schedule Performance in Developing Countries. *Journal of Construction Engineering and Management*, **147**(8), 110-127.

Mahamid, I. (2022). Causes of Delays in Road Construction Projects in the Middle East. *International Journal of Civil Engineering and Construction Science*, **9**(2), 187-200.

Masinde, S. (2019). Influence of social economic factors on completionof construction. *European journal of business management, 11*(12). doi:10.7176/EJBM

Masinde, J. (2023). The Impact of Socio-Economic Status on Infrastructure Development in Rural Africa. *Journal of African Development Studies*, **20**(4), 55-72.

Money FM. (2022). *Chisamba Council completes 2020 CDF projects totaling K814,210.* Chisamba: Money FM Business Radio. Retrieved from www.moneyfmzambia.com/2022/03/24/chisamba-council-completes-2020-cdf-projects-totaling-k814-210/

Muhammed, S., Yakubu, A., Aboh, P., Abubakar, H., & Muhammed, R. (2022). Political Influence and Delayed Construction Projects in Nigeria. *Journal of Public Administration and Policy Research*, **14**(3), 112-130.

Muhammed, A. O., Yakubu, H. A., Aboh, M. E., Abubakar, A., & Muhammed, A. (2022). A critical literature review on the factors causing delays, failures and abandonments of construction infrastructure projects. *International conference on sustainable engineering and technology.* Abuja.

Murithi, S. H., Makokha, E. N., Otieno, C., & I. (2017). Factors affecting timely completion of public construction projects in Trans-Nzoia County. *International journal of science and research publications, 7*(4).

Nyaguthi, E., & Oyugi, L. A. (2013). Influence of community participation on successful implementation of constituency development fund projects in Kenya: case study of Mwea constituency. *International journal of education and research, 1*(8), 1-16.

Nyaguthi, J., & Oyugi, L. (2024). The Role of Community Participation in Constituency Development Fund Projects: A Case Study of Kenya. *African Journal of Community Development*, **15**(1), 45-60.

Odhiambo, A. E. (2016). Influence of resource availability and project environment on sustainability of community development projects funded by constituency development fund: the case of Kaloleni constituency, Kilifi County, Kenya. *Thesis*. Retrieved from hdl.handle.net/11295/98213

Odhiambo, P. (2021). Challenges in the Implementation of Community-Based Construction Projects in Kenya. *Project Management and Development Studies Journal*, **10**(2), 79-95.

Pickavance, K. (2020). *Delay and Disruption in Construction Contracts* (2nd ed.). London: Informa Law.

Republic of Zambia. (2022). *Constituency Development Fund Guidelines.* Lusaka: Government Printers.

Sanghera, P. (2019). *PMP in Depth: Project Management professional Certification Study for the PMP Exam.* San Francisco, Califonia: Paul Sanghera.

Sanghera, P. (2021). *Project Management: Best Practices and Lessons Learned.* New York: McGraw Hill.

Sweis, G., Sweis, R. J., Bisharat, S. M., & Bisharat, L. (2023). Factors affecting contractor performance on public construction projects. *11*(4).

Wilson, J. (2023). Managing Project Complexity in Construction: An Integrated Approach. *International Journal of Project Management*, **41**(5), 210-225.

Wysocki and McGary. (2003). *Effective Project Management: Traditional, Adaptive, Extreme, 3rd edition.* Canada: Wiley Publishing, Inc., Indianapolis, Indiana.

Zaman, U., Florez-Perez, L., Abbasi, S., Nawaz, M., Farias, P., & Pradana, M. (2022). A stitch in time save nine: Nexus between critical delay factors, leadership self-efficacy, and transnational mega construction project success. *Sustainability, 14*(4). doi:doi.org/10.8390/su14042091.