# ASSESSING FACTORS AFFECTING THE COMPLETION OF PROJECTS AT NATIONAL HOUSING CORPORATION IN DAR ES SALAAM REGION

**BY**

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**MASTER OF SCIENCE IN PROJECT PLANNING MANAGEMENT - (MSC-PPM)**

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**RESEARCH DISSERTATION**

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**DECEMBER, 2022**

## DECLARATION

I, **Maembe Akida Tajiri,** declare that this research dissertation is my own authentic original work and has not been presented for an academic award in any other university awards.

Signature……..

Date……..

## CERTIFICATION

I, Professor Edison Lubua the under-designed, certify that I have read and hereby recommend for acceptance by Institute of Accountancy Arusha the research report entitled the 'Factors affecting the completion of Projects at National Housing Corporation In Dar Es Salaam Region' in fulfillment of the required degree of masters of Science in Project Planning and Management offered by the Institute of Accountancy Arusha.

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Department of: ……

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Learning is a journey that cannot be accomplished on your own. It is facilitated by the people around us who support us, encourage us and motivate us by giving us an extra push so as to get a step towards achieving our goals. First of all, I would like to thank Allah (S.W) for the gift of life and full energy that has enabled me to be able to complete this work. Hence I hope this research dissertation was the start of the study that will contribute the known facts about the topic. Without my parents, this would also not have been possible, they believed in me, trusted and also, high faith is what kept me going when everything seemed tough. Their contribution has to be appreciated in this research dissertation. My sincere gratitude should go to Professor Edison Lubua for his supreme supervision towards the completion of this research dissertation. His guidance, advice, instructions, insights and positive critique has been integral towards accomplishing this research dissertation. His judgment and directions are what has enabled this research dissertation to be completed. I would like to thank my one and only beneficial friend Mr. Arim Akida for huge support and true love in academic and life support. I also wish to thank my colleagues Mr .Kheir and Mr. Adeid for their support in academic assistance which has enabled me to get access to all the relevant materials for research dissertation. More thanks should go to my beloved strongest partner MrAbdurahman Raphael Baharia for financial and academic support. My classmates from MSc-PPM have also been magnificent. Their love, friendship and support have made class feel like home and for that I will forever be grateful. Last but not least, I would like to thank the Institute of Accountancy Arusha for an opportunity to study at the institute. I will be a good ambassador for the institute wherever I go.

## ABSTRACT

The study was about ASSESSING THE FACTORS AFFECTING THE COMPLETION OF PROJECTS IN DAR ES SALAAM, TANZANIA. Three specific objectives of this study was; to investigate the impacts of technical capacity on the completion of projects, to examine the effects of leadership style influences project completion and to determine the effects of projects communication on the completion of projects in Tanzania country. A descriptive case study was adopted for the purpose of this study. The researcher employed simple random sampling procedure and purposive sampling procedure to select a sample that represents the entire population. The target population was 120 employees originated from the four (4) departments and a sample of 55 respondents was selected. The research instrument used for data collection was Questionnaires, documentary review while SPSS version 20 was used to analyze data using descriptive statistics. Also, the researcher applied two theories Constraints theory was developed by Gradratts (1984) to help companies or organizations identify the obstacles that block the path to goals and to provide a set of tools to help achieve them. The aim of management is to find better means to reduce the obstacles in projects and Contingency theories are a class of behavioral theory that contends there is no one best way of organizing, to leading an organizational (Kyalo&Muturi, 2015). Instead, the best course of action is contingent (dependent) upon the internal and external situation to support the study. The study findings indicated that technical capacity of contractors, leadership style and project communication are greatly affect the completion of projects. The researcher concluded that, the completion of projects run by NHC in Dar es Salaam region is highly affected by the technical capacity of both project managers and the contractors, Leadership styles affect the completion of projects run by NHC in Dar es Salaam region. Poor communication between the project players negatively affects the completion of projects run by NHC in Dar es Salaam region. As the project managers use irregular communication channels it becomes difficult for all the project players to get that information and thus affect their performance of project activities. Lack of communication about project information makes hard for the project managers and other stakeholders to assess the success or failure of the projects and hence not being able to spot out the existence of challenges until the problems become out of control. Poor communication within the project players may be attributed by either lack of proper communication policies limited skills of the project managers on the aspect of communication. Based on the study conclusions, the researcher recommended, the project managers should consider the technical capacity of contractors when offering contracts for implement NHC projects. This can be done by strictly adhering to the PPA regulations and not only selecting the contracts with low bids. The project managers should also be trained on technical skills required for project management so as to equip them with project monitoring skills which are necessary for ensuring success of the established projects. The project managers should be trained on managerial skills and leadership styles.

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## LIST OF ABBREVIATIONS

| | |
|---|---|
| A | -AGREE |
| D | - DISAGREE |
| F | - FREQUENCY |
| MSC-PPM | - MASTERS OF SCIENCE IN PROJECT PLANNING AND MANAGEMENT |
| N | - NO OPTION |
| NHC | - NATIONAL HOUSING CORPORATIONS |
| PPA | - PUBLIC PROCUREMENT ACT |
| SA | -STRONGLY AGREE |
| SD | - STRONGLY DISAGREE |
| SPSS | – STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES |

# CHAPTER ONE

## GENERAL INTRODUCTION

### 1.1 Introduction

This introductory chapter maps out the background of the study, research problem, research objectives and research questions, significance of the study, organization of the study, limitation of the study and the scope of the study.

### 1.2 Background of the study

In recent years, there has been a strong influx of projects in both the public and private sectors, making it a perennial issue in the world. Projects have changed in the last decade as globalization is a dynamic and interactive process that nowadays influences everywhere (Kimeli, 2008). A project can be defined as a time-limited endeavor undertaken by people working cooperatively to create a unique product or service within a specified time and budget to achieve identifiable results (Project Management Institute, 2010). Projects are an important driver of economic growth.

There are different types of projects, e.g., construction projects (road construction, buildings). A specific budget or cost, time, and quality are considered key measures of a project's success or completion. A successful project is completed within the specified time frame and the allocated budget meets the standards and quality required by the client and ensures the safety of the construction workers. a project is generally considered to be successfully implemented if it is executed within schedule (on the allotted dates) and budget (with minimal additional costs), achieves all the objectives originally set and is accepted and used by the clients for whom it is intended (Mbaluku&Bwisa ,2013).

Hasseb, Bibi, and Rabbani (2011) explained that the success of a project is based on achieving the objectives on time and within budget. A project without a fixed budget or cost is useless to

investors and funders. No investor would invest in a project that seems to take forever and whose cost or budget is undetermined (Kimeli, 2008). Every investor wants to be clear about the project cost (Munyoki, 2014). Many project managers always focus on completing projects on time and not on budget or cost and other parameters. They spend most of their time managing and controlling the schedule and forget to monitor and control the budget (Project Management for Development, 2015). Cost is the most critical parameter (Backer, Jaselkis, & El-gafy 2014).

In developed countries, the issue of completing a project within budget or cost is considered a common concern. The study conducted in the U.S. shows that in the current economic climate, project owners are cutting back or canceling their capital projects due to lack of funding, uncertain costs, and concerns about potential delays that could affect project feasibility (Chism and Armstrong, 2010). However, information is key to any project, and if there is none, it becomes difficult for project managers to complete the project. Due to a lack of information, it is very difficult to estimate project budgets accurately before executing the projects (Kwon & Kang, 2019). Therefore, the availability of information makes it easier for project managers to know what the cost of a project was. Omran, Abdurrahman, and Pakir (2012) noted that despite a large number of reported cases, cost overruns are increasingly occurring in construction projects ranging from simple to more complex projects.

In sub-Saharan countries, the presence of foreign direct investment has led to numerous projects in both the public and private sectors. For example, as recently as 2015, African countries renewed their efforts to accelerate their priority projects under the Infrastructure Development Program, which began in 2012, allocating $68 billion by 2020 and another $300 billion for projects planned through 2040 (Dawson, 2015). Despite these statistics, the problem of budget or costs in African countries is becoming more evident every year. A project may be

delayed or completed unsuccessfully if the flow of money for a project is not stable (Mukami, 2021).

It was reported by Mwinzi&Moronge (2018) project risk management, stakeholder involvement, project resources and project leadership are the major factors that mostly affect completion of housing projects. Murithi et al (2017) argues that project planning, resource allocation, project leadership and project monitoring continuously affect timely completion of building projects.

The findings concluded that clearly deadlines, deliverables in the projects initial plan, set roles and responsibilities, stakeholder needs assessment and analysis and smart project objectives assist in the initial project planning has an effect on the performance of the project (Egide& Roland, 2021). As per previous studies, many of them based on time rather budget or cost and quality. So, on this study will looking on technical capacity of contractors, politics and project communication on how affect the completion of project regards budgeting or costing. This study therefore assessed factors affecting the completion of projects, provide a clear understanding of the completion of projects and also proposed means by which management could regard completion.

**1.3 Statement of the problem**

There has been massive growth of projects in worldwide with road, and housing recorded in recent times. Consequently, the project must be completed on time, within the prescribed budget or cost and with good quality; without those factors, the project fails. Biniyam (2019) argues that the success of a construction project depends on the achievement of the main objectives of time, quality, and cost. Also, Mohamed (2017) acknowledges that a project is commonly acknowledged as successful when it is completed on time, within budget, and in accordance with its quality specifications

Previous researches have been done on both and private sector projects and researchers addressed views on completion of project. Time management for timely completion of a project can be expensive, fraught with pressures and subject to much uncertainty (Kihoro,2015).

Also, inaccurate estimation of contract duration attracts the possibility of delay as the time planned for the overall construction is not sufficient enough to commence and complete as stipulated (Yahya et al, 2019). Time is significant for both owner (the requirement of performance) and contractor (the requirement of profit) (Masood et al, 2011).

However, most of the time researchers have studied the on-time, completion of projects in detail without considering other measures of project success or completion such as budget or cost. This study will focus on a broader approach to identify the factors that affecting the completion of a project within a given budget or cost. This study was focused on the factors that affecting the completion of projects from the point of view of a certain budget or cost, and also, showed the way for project completion.

### 1.4 Research objective

#### 1.4.1 General Objective

The main objective of the study is to assessing factors affecting the completion of project at the National Housing Corporation.

#### 1.4.2 Specific objectives

i. To investigate the impacts of the technical capacity on the completion of projects
ii. To examine the effects of leadership style influences project completion.
iii. To determine the effects of project communication on the completion of projects.

### 1.5 Research Questions

#### 1.5.1 general question

What are the factors affecting the completion of project at the National Housing Corporation.?

### 1.5.2 Specific Questions

i. What is the impact of the technical capacity on the completion of projects?

ii. To what extent does leadership style affect the completion of projects?

iii. How does project communication affect the completion of projects?

## 1.6 Scope of the study

This study was conducted at the National Housing Corporation (NHC) in the Dar es Salaam region. The study focused on the factors that affect the completion of projects. The findings and recommendations will be used by similar institutions in Tanzania.

Since it was not possible to visit all NHC offices in Tanzania due to the fact that NHC has many branches spread out in every region of the country and due to time constraints, geographic location, and limited resources available, the researcher conducted the research at the National Housing Corporation (NHC) in the Dar es Salaam Region, which is also NHC's headquarters, to assess factors that affect the completion of projects. The findings and recommendations will be used by similar institutions in Tanzania.

## 1.7 Limitation of the study

In this study, some factors were thought to limit the study such as respondents 'busy schedules, respondents' fear of being spied on, and lack of cooperation because of feeling that the study will not benefit them. However, the researcher ensured that all these constraints were managed appropriately and were collected appropriately as required.

## 1.8 Significance of the Study

The study was significant in the area of completion of the project due to the following reasons;

i. The results of this study, provided a critical information to institutions and various related agencies for understanding factors affecting the completion of projects within given budget and finding possible solutions to those limiting factors.

ii. The study provided a starting point for other researchers who are interested to study in the same field; this is from the abstract and the findings, and the statement of the problem.

### 1.8 Organization of the study

This research contains five chapters. The first chapter consists of the background of the study, statement of the research problem, research objectives, research questions, significance of the study, the scope of the study, and organization of the study. The second chapter contains a literature review with key concepts, theoretical framework, empirical review, research gaps, and conceptual framework. The third chapter describes the research methodology through the research design, scope of the study, population of the study, sample size, sampling technique, data collection methods, data analysis methods, and pilot testing. The fourth chapter presents data analysis, presentation and discussion of findings and finally, the fifth chapter presents summary, conclusions and recommendations and suggestion for further studies.

### 1.9 limitation of the Study

Time and financial resources were the main limitation in doing this research because the study was financed by the researcher herself. Further, the time allocated was very short for a researcher to conduct research. Moreover, the researcher developed several measures to overcome the limitations that emerged during the study; the researcher prepared a prior budget and research plan in order to appropriately manage the distribution of time, funds, and other resources. The prior arrangement of the appointment with respondents conveniently helped the data collection process during the study.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter described the literature review on the topic under study. The chapter includes a theoretical literature review, an empirical literature review, knowledge gaps, a research model, and a conceptual framework. The purpose of the literature review was to help the researcher become familiar with the problem so that he or she can find solutions to the problem under study.

## 2.2 Construction projects complection

Project completion as the execution of projects in accordance with the planned project scope, specifications, work program, completion dates, and planned budget (Musyimi, 2015). Not only has that, but it also (Makori 2015) defined that projects are completed within the planned time, within the allocated budget, scope, and quality. Therefore, completion of tasks in a given time, adequate budget, and quality standards are recognized as factors for project success. The important activities in construction project completion; collecting project records, distributing information to formalize acceptance of the product closure. However, the completion of projects is a pressure to private and public sector because many projects has been abruptly stopped due to various reasons such as budget, poor project management and other. Also, in order to achieves the project to be completed with the specific purpose must be focused within the following checklist

i. By compare the aims and reality
ii. Confirm project completion with stakeholders
iii. Prove if the project is within the scale
iv. Clear pending contracts and invoices.
v. Write a post project report and archive all documentation

Due to that there are ways to minimize the pressure of completing a project that are;

i. Information sharing
ii. Simplify the review process
iii. Keep the project team engaged and vigilant

The construction projects completion is very important due to various reasons such as confirmation of objectives being met, capturing the knowledge, tying up loose ends, rewarding the team and sense of closure. Despite the developed countries are highly succeeded in project completion in terms of budget or cost, and quality, compare to developing countries especially Africa. Eja (2020) notes that government and organizations in developing countries, have witnessed project failures in their project implementation.

**Current status of NHC projects**

The status of projects completion in NHC is not quite good enough due to various motives happened in last five years, where by project like morocco square failed to complete on prescribed time and a definite budget because of political issues, budget. There are other ongoing projects which supervised with NHC such as Safari city, Kawe estate.

In this study, the main aim is to assessing factors affecting the project completion such as technical capacity, leadership style and project communication is among factors affecting NHC projects right now.

**2.2.1 Factors Affecting the Completion of Projects at National Housing Corporation**

**Technical capacity of contractors**

Aje&Famakin (2012) defined technical capacity as the one of the major criteria for evaluating construction contractors during prequalification and tender evaluation.Prequalification is the process used to investigate and assess the capabilities of the contractors to carry out a job if it is awarded to them (Musyimi ,2015). Prequalification is always providing a client with list of

names of the contractors who are invited to tender. The purpose of prequalification is to assessing the technical and managerial competence. Musyimi (2015) has recognized that the technical capacity of the contractor is one of the most important factors that are critical to the completion of the project. Technical capacity mainly refers to the level of training, the experience of technical staff, facilities and equipment, and the contractor's accreditation class according to the Ministry of Public Works' evaluation criteria. Projects vary in terms of complexity and cost, hence the need for an appropriate contractor registration class and skill level of technical staff. This can facilitate the timely completion of a project.

**Leadership style**

Leadership style is a leader's method of providing direction, implementing plans and motivating people. There is different style such as autocratic, democratic laissez faire, transformational. The leadership style which is best called democratic because it allows low level employees to exercise the authority.

Leadership style is a determinant for project completion within time, budget or cost and quality. Due to the fact that it helps to remove obstacles so that projects can begin and completed. In project management needs to employ effective leadership skill and traits to ensure overall success of the project in benefiting particularly organization.

Therefore, it is clear that leaders play a primary and key role in project management because their approach determines the overall success or failure of any particular project (Kyalo&Muturi, (2015).

**Project communication**

According to Shakeri&Khalizadeh (2013) defined communication as the process whereby concepts are exchanged among individuals through a system of generic signs and words. Dainly, Moore & Murray (2006) have recognized that the term communication is a multi-faceted and complex concept that can mean different things in different contexts and situations. In the

case of residential property management, communication is undoubtedly necessary for the project to be completed within the time stipulated in the project contract. Based on that there are three communication flows

Plan Communications Management, the process of developing an appropriate approach and plan for project communication based on stakeholders' information's wants and requirements and available organizational assets. Manage Communications concern the process of creating, collecting, distributing, and storing, retrieving and ultimate disposition of project in accordance with the communications management plan. And lastly Control Communications is the process of monitoring and controlling communications throughout the entire project life cycle to ensure the information needs of the project stakeholders are met.

Consistently, Musyimi (2015) has recognized that any project requires communication between varieties of stakeholders. Communication can facilitate the process of the project by sharing information in the required time. Agreeably El-saboni et al, (2009) argue that communication plays a role throughout the life cycle of a project and has a great contribution to its success. Drunker (1985) emphasizes the importance of communication for managers, pointing out that the abilitly to communicate is essential for a project. Consistently, Musyimi (2015) found that engineers and technical staff spend 50% -70% of their time on verbal communication. Communication is the most important link between project stakeholders. Good project communication includes informing the next task manager in the project delivery chain when to expect performance (OPMPI, 2007). A breakdown in communication can result in a public housing project not being completed at the desired time because there is no link within the project cycle. Musyimi (2015) has also recognized that inadequate communication can lead to demonization of the workforce and problems during construction

## 2.3 Theories of study

### 2.3.1 Theory of Constraints

This theory was developed by Gradratts (1984) to help companies or organizations identify the obstacles that block the path to goals and to provide a set of tools to help achieve them. The aim of management is to find better means to reduce the obstacles in projects. In this way, the companies or organizations can understand their goals. This theory describes the causes of system constraints and provides information on the best ways to deal with these constraints (Galdratt, 2006). An organization without a system is meaningless because it cannot operate efficiently.

A system can be described as a collection of independent and interconnected processes that work together to transform inputs into outputs to achieve specific goals (Akali, 2018). Constraints, however, act as a limit to the efficient functioning of the system. The theory of constraints is applicable in this study as the technical capacity of contractors, policy interventions and project communication are limiting factors (constraints) encountered in the implementation of a public housing project. Therefore, it is better to control such challenges in housing projects by finding appropriate means to remove constraints in implementation. Weakness of this theory, corporate strategies are not taken into consideration.

### 2.3.2 Contingency theory

In a general sense, Contingency theories are a class of behavioral theory that contends there is no one best way of organizing, to leading an organizational (Kyalo&Muturi, 2015). Instead, the best course of action is contingent (dependent) upon the internal and external situation. Consequently, leaders are flexible in select and adapting to the strategies to suit with change in situation in a prescribed time. The assumptions of contingency theory a leader's effectiveness is contingent on whether or not their leadership style suits a particular situation.

In the contingency theory, a leader's preference plays a significant role in ability to be successful in variety of situations. This is supported by Kyalo&Muturi, (2015) the success of the leader is a function of various factors in the form of subordinate, task and or group of variables. This theory explains different Styles of leadership appropriate to the needs created by change in situation within an organization. In context of the study, this theory is important because it show kind of leadership styles depend on different organizational situation. The weakness of this theory is reactive in nature not proactive.

## 2.4 Empirical Literature Review

### 2.4.1 The impacts of the technical capacity on the completion of projects

**Local perspectives**

Simon, J. (2017)did a study on the factors causing delays in road construction projects in Tanzania; a case of TANROADS.The specific objectives were; to identify causes of delay in completing construction projects, important causes of delay in construction projects**.** It adopted quantitative research design. The sample size was 45 which were chosen through purposive sampling technique. https://core.ac.uk/download/pdf/79425368.pdf. The results revealed that technical capacity were not considered in selecting contractors for construction project.

**Regional perspectives**

Makebo (2019) conducted research on the significant factors that affect the construction project performance in Ethiopia. The sample of the study was 40 respondents, http://ijariie.com/AdminUploadPdf/Significant_Factors_that_Affect_the_Construction_Project_Performance__A_Review_ijariie11004.pdf. Also data was collected through a questionnaire. The study revealed that categorized under contractor related highly affect the construction project performance. The researcher was so quite in providing a well understanding on contractors towards the construction project performance.

**Global perspectives**

Thorat et' al (2017) did a study on the identifying the causes and effects of delay in residential projects. The objective of this study was to identify the factors causing delays in residential units in India and effects of delays on these residential projects. The sample size was 67, total 67 professionals were visited in this questionnaire survey. https://www.irjet.net/archives/V4/i4/IRJET-V4I4722.pdf. The findings of the study revealed that contractor related factors which cause more delay in the projects. Also, Clients always appoint the contractor with the low bid not technical capacity.

**2.4.2 The effects of leadership style influences project completion**

**Local perspectives**

Nakhumicha, W (2017) conducted research on the factors influencing completion of development projects in secondary schools: a case of CDF projects in Imenti. The sample size of the study was 60 respondents. https://www.iajournals.org/articles/iajispm_v2_i1_390_400.pdf. The researcher adopted a descriptive survey method. The findings of study showed that there is no clear leadership in place on these development projects that is why hinders the completion of project on prescribed time and budget.

**Regional perspectives**

Moronge and Mwinzi (2018) did a study on the determinants of completion of housing projects in informal settlements in Nairobi City County. The objectives for this study were to examine how project risk management affect completion of housing projects, to establish how projects resources influence completion of housing projects and to establish how project leadership influence completion of housing projects. The sample size was 100 which were selected through simple random sampling.https://strategicjournals.com/index.php/journal/article/view/737. The findings revealed that project leadership is the first important factor which affects completion of

housing projects in informal settlements Kenya. Also, increasing levels of project leadership would increase the levels of completion of housing projects in informal settlements Kenya.

**Global perspectives**

Alqahtani (2015) carried out a study on the success factor for construction projects in West Australia: a conceptual framework. The sample size of the study was 60 respondents, which were selected through simple random sampling.https://link.springer.com/article/10.1007/s42107-022-00470-8. The data was collected through a questionnaire. The researcher identified the major factors affect timely performance of construction industry that are poor communication, low speed of decision, leadership.

### 2.4.3 The effects of project communication on the completion of projects.

**Local perspectives**

Chileshe&Kavishe (2017) conducted a study on the joint venture housing projects in Dar es Salaam City. The purpose of this study was to identify the challenges facing NHC Joint venture projects, to assess the effectiveness of the projects. Questionnaire survey and semi structured interviews were used to collect data. The sample size of the study was 25 respondents.https://www.researchgate.net/publication/319206387_Joint_venture_housing_projects_in_Dar_es_Salaam_City_An_analysis_of_challenges_and_effectiveness.

The results revealed that NHC joint venture encountered a number of challenges includes poor communication.

**Regional perspectives**

Muhammed M. M &Hasanath K (2021) did a study on the analysis of factors affecting successful completion of infrastructure projects. The sample size of the study was 30 respondents, which were selected through simple random sampling. https://www.irjet.net/archives/V8/i7/IRJET-V8I708.pdf. The data was collected through a questionnaire and analyzed by using descriptive statistics. The research findings showed that poor communication between client, contractors,

and supplier and also unqualified contractors selected due to poor technical competency evaluation.

**Global perspectives**

Masood et'al (2015) conducted a study on the delay factors of construction projects in Metropolitan city of a developing country. The primary objective is to determine the factors causing delay in construction and their impact on project completion and allocation of responsibility for delay causes. It adopted non-probability sampling. Response rate was significant since survey was successfully conducted on around 26 construction projects. https://www.scribd.com/document/511394580/20150917103201931. The results revealed that coordination problem with other stakeholders due to project communication.

Therefore, studies didn't provide a broad knowledge about leadership style, technical capacity and project in development projects.

**2.5 Knowledge gap**

There have been many studies on the factors that influence the completion of projects such as construction works. However, most of the time researchers have studied the on-time completion of projects in detail without considering other measures of project success or completion such as budget or cost.

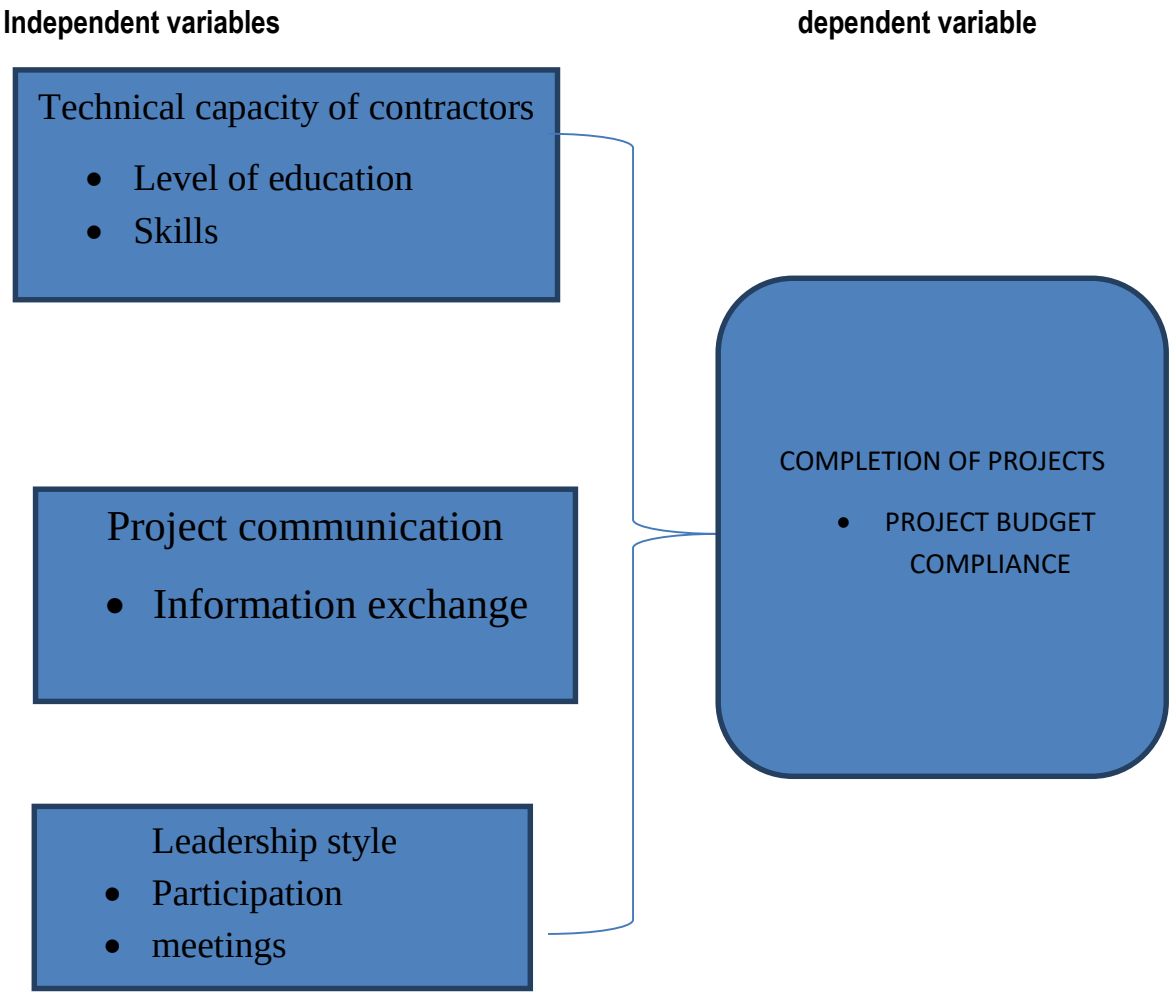
This study will focus on a broader approach to identify the factors that influence the completion of a project within a given budget or cost. This study will focus on the factors that influence the completion of projects from the point of view of a certain budget or cost, and it will show the way for project completion.

**2.6 Conceptual Framework**

According to (C. R. Kothari, 2009), a conceptual framework is a diagrammatic representation that shows the relationship between the dependent variable and the independent variables. In

this study, the dependent variable is the completion of the project, while the independent variables are the technical capacity of contractors, politics, and project communication.

**Figure 1 Conceptual Framework**




**Source: Researcher (2022)**

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

Research methodology is a systematic approach through which research is undertaken (Kothari, 2004). The research methodology consists of research design, data collection methods, sampling and sample size, sampling procedure, study area, reliability and validity, data management, and analysis.

This chapter covers the following sections: - Study area, Research design, and Research approach, Population, Sample size, Sampling techniques, Data generation methods, Pilot study, Data Analysis, Reliability, Validity and Ethical considerations.

## 3.2 Study Area

The study was conducted at National Housing Corporations (NHC) located in Dar Es Salaam City. Dar es Salaam City is one of the 4 cities on Tanzania's Mainland. Dar es Salaam City lies at 6°48'58" S, 39°16'49" E. Dar Es Salaam City occupies a total of 1,590 square kilometers. It is one of the fastest-growing cities in the world. National Housing Corporations (NHC) in Dar es salaam City was preferred for this study because it is one of the organizations where there are frequent projects.

## 3.3 Research Design

Research design is the mechanism to ensure that appropriate data was being collected to answer the research questions. Research design is defined as the scheme, outline, or plan that was used to generate answers to research problems. Design is needed because it facilitates the smooth sailing of the various research operations thereby making research to be efficient resulting in maximum information with minimum expenditure of effort, time, and money Kothari (2004). For the purpose of this study, the researcher adopted a case study design which

supported by the quantitative approach. The case study gives the story behind the result by capturing what happened to bring it about and can be a good opportunity to highlight a project success (Thapa, 2006), this is because the researcher has defined clearly what he wants to measure and found adequate methods for measuring it along with a clear cut definition of population he wants to study.

### 3.3.1 Research approach

Kothari, (2004) notes that a research approach is the arrangement of conditions for the collection and analysis of data in a manner that aims to combine the relevance of the research purpose with economy in procedure. This study is based on quantitative research because numerical data such as primary and secondary data were collected. Therefore, the researcher uses numerical data to draw the conclusion by using statistical proof. This study also used a quantitative approach because the study variables, such as leadership styles, project communication, and construction project completion, were tested.

### 3.3.2. Targeted Population

(Kothari, 2004) defined as a totality of the object or elements under investigation, also referred to as the entire group of people, events, or interests that the researcher wishes to investigate. The target population enables the study to construct and define the sampling frame by looking at all elements in target population to draw the sample with the assumption that the population will be accessible by researcher (Njuguna, 2018). Under this study targeted research population was originated from the four (4) departments. Population of the study was 120 employees.

**Table 1 Population Distribution**

| Category | Targeted Population |
|---|---|
| Administration | 33 |
| Directorate of Finance | 10 |
| Directorate of project planning and management | 67 |
| Directorate of Quality Management | 10 |
| **Total** | **120** |

**Source:** Research (2022)

### 3.3.3. Sample size

According to Kothari (2004, pg.56), a defined sample size is the number of items to be selected from the universe to constitute a sample. The size of the sample should neither be excessively large nor too small. It should be optimal; an optimal sample is the one that fulfills the requirements of efficiency, representativeness, reliability, and flexibility. The researcher selects a sample of 55 respondents where 15 from administration, 5 employees from the financedepartment, 30 from the project planning and management department and5 from the Quality Management department. Agreeably Kothari (2009) asserts that the sample size must be 5% or 10% of the population. Therefore, the researcher opted to use the formula given by Kothari (2009) to obtain the sample from the NHC.

NF = $\frac{N}{1+N(e)^2}$

Where: NF = the desired sample size where the population is less than 1000

N= the estimated of population size (120)

e= estimated sample error

Therefore;

NF = $\frac{120}{1+120(0.1)^2}$

54.545454= 55 respondents

Therefore, the sample size of the study was 55 respondents

**Table 2 Sample Size Distribution**

| **Category** | **Targeted Population** | **Sample Size** | **Percentage** |
|---|---|---|---|
| Administration | 33 | 15 | 27.3 |
| Directorate of Finance | 10 | 05 | 9.1 |
| Directorate of project planning and management | 67 | 30 | 54.5 |
| Directorate of Quality Management | 10 | 05 | 9.1 |
| **Total** | **120** | **55** | **100** |

**Source:** Research (2022)

**Formula for sample size distribution**

Targeted population ÷ Total population × Sample size

### 3.3.4 Sampling Techniques

In this study, the researcher used simple random sampling and purposive sampling because they fitted for getting respondents. Sampling technique is a way researcher used to allocate correspondents out of large population. Kothari (2004) referred to sampling technique as a technique that the researcher would implement to select items for the sample. There are two major goals that sampling can achieve that are, to establish representatives of what are being studied and conversely to reduce bias and to be able to make inferences from findings based on sample to a larger population. Sampling is important in reducing bias in the findings (Veal, 2007 and Flick, 2008).

#### 3.3.4.1 Simple random sampling

In this study, the researcher used this technique to draw a sample size of employees of the administration, finance, Quality Management, and project planning and management within the National Housing Corporation (NHC). The sample was randomly selected from the target population, giving each member of the population an equal chance of being selected.

#### 3.3.4.2 Purposive sampling

Purposive sampling is a deliberate selection of particular units of the universe for constituting a sample that represents the universe (Kothari, 2004). Purposive sampling technique was used to select head of sections, managers and other officers from NHC to participate in the study. The researcher chose this sampling technique because it saves time and assists in obtaining the desired information from the target respondents.

### 3.4 Data Collection methods

This segment presents the different methods /techniques and approaches which the researcher used in the process of collection of data from respondents in the study area. According to Kothari (2004), data collection techniques are as follows interview, observation, questionnaires, schedules, and some other methods such as use of mechanical devices, consumer panels, and projective techniques. In this study, information was collected from sources by using data collection techniques which are questionnaire, documentary review, and interview.

#### 3.4.1 Questionnaire

A questionnaire consists of a number of questions related to the study at issue, printed or typed in a definite order on a form or set of forms and sent to the persons or respondents concerned with a request to answer the questions and return the questionnaire (Kothari, 2004). Information was collected from sources by using a data technique, which is a questionnaire, because it is free from bias, cost-effective, and less time-consuming as compared with other methods of data collection and also easier to employ large numbers of respondents

#### 3.4.2 Documentary Review

In this study, this data collection method was used to derive the required data from a variety of documents such as published and unpublished audit and performance evaluation reports, official magazines, official gazettes, professional journals, and other relevant reports and meetings done at NHC.

### 3.5. Pilot study

In this study, the researcher will conduct pilot test to check the validity of the responses from respondents. Mugenda and Mugenda (2003) suggest that pilot testing allows errors to be identified. The pilot test was done on 12 respondents; on the other hand, these respondents

won't be in study sample. Therefore, a result of the pilot test tends to change words selection and instructions regarding questionnaire.

### 3.6 Data Analysis

Kombo and Tromp (2011) define data analysis as the process of packaging collected information, organizing it, and structuring its main components so that the findings can be easily and effectively communicated. Based on (Mugenda and Mugenda, 2003) suggests the use of descriptive statistics as the method of data analysis. Data collected was analyzed through descriptive statistics to generate percentages, means, standard deviation, and frequencies and then be presented in a table, graph, and charts with the aid of SPSS version 22.

### 3.7 Validity and Reliability

#### 3.7 .1 Validity

"Validity" is the instrument capable of measuring what is accurate, effective, and efficient (Omari, 2011). The researcher will test the validity through a pilot test that was carried out by checking the respondent's responses against the objectives of the study. A pilot test was used by the investigator to identify issues, such as confusion about the questionnaire components. This pilot test allowed the researcher to rectify any weaknesses in data collection methods prior to actual data collection. Therefore, the researcher selected 12 individuals from the study population to test the validity.

#### 3.7.2 Reliability

Kothari (2004) defined reliability as the quality of consistency or explicability of the study of measurement. In this study, the reliability of completion information collected from the National Housing Corporation (NHC) is calculated using Cronbach's alpha coefficient. When the

reliability coefficient (Cronbach's Alpha) is 0.7 and higher, it is said to be acceptable (Gwahula&Mrema, 2017). Hence, it implies that the results are reliable and stable.

### 3.8 Ethical considerations

Ethics refers to the standards of behavior that guide a researcher's conduct in relation to the rights of those who become the subject of research or are affected by it (Saunders et al, 2012). In this study, the researcher reasonably observed and complied with the ethical standards to avoid breaches arising from the disclosure of all information, including personal details and sensitive information that should be kept confidential. In accordance with ethical standards, the research maintained the confidentiality of data and information provided by respondents. Therefore, the data and information will only be used for academic purposes.

# CHAPTER FOUR

## DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS

### 4.1 Introduction

This chapter presents, discusses and interprets the study findings on the factors affecting the completion of project run by NHC in Dar es Salaam region. The chapter starts with the return rate of instruments, followed by demographic information of respondents and then the presentation, discussion and interpretation of the findings. The research findings focused on the objectives of the study that were:-

1. To investigate the impacts of the technical capacity on the completion of projects.
2. To examine the effects of leadership style influences project completion.
3. To determine the effects of [project communication on the completion of projects.

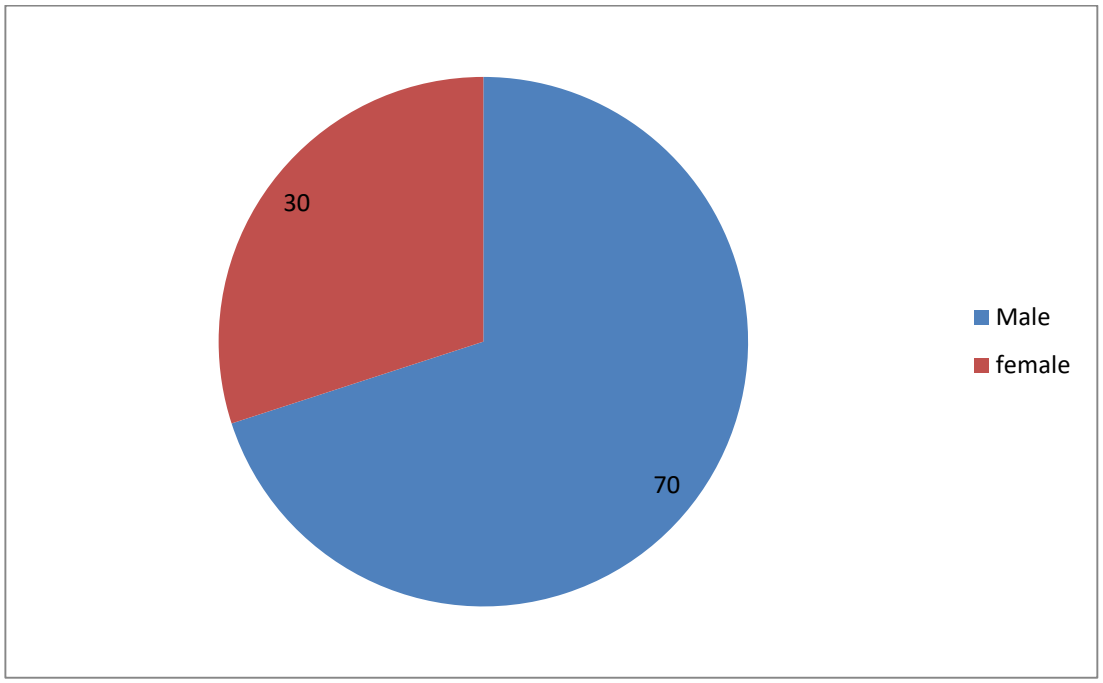
### 4.2 Instruments Return Rate

The researcher distributed questionnaires to 55 participants and was able to collect data from all the sampled respondents. Therefore, the return rate of instruments was one hundred percent (100%). This high rate of return instruments indicates that the sampling method used to get the respondents were proper and also the instruments were well understood by the participants as each one of them saw the importance of filling the questionnaire. Since the return rate of instruments was very high, the collected data therefore were adequate for analysis and interpretation.

### 4.3 Demographic Information of Respondents

Demographic information sought in this study included; gender, age, education qualification, experience and professionalism of the participants. The gender of respondents has been presented in table 4.1

**Table 3 Participants' gender**

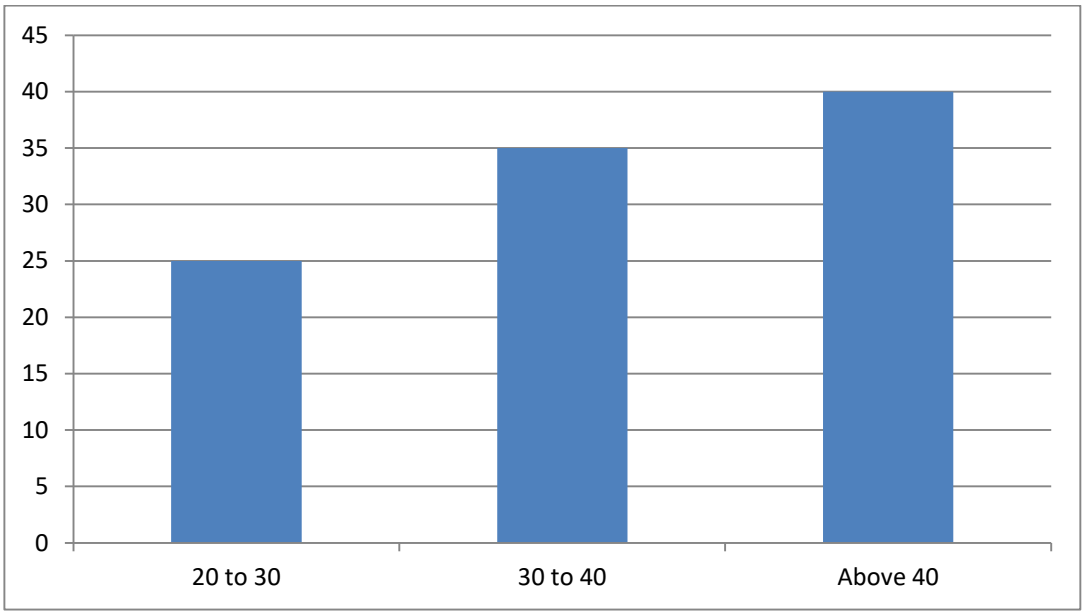



**Source** (Field data, 2022)

Concerning gender of the respondents, figure 4.1 shows that 39 (70%) and 16 (30%) of the participants were males and females respectively. This shows that there were more male and female respondents. The presence of more males in the sample is an indication that a large number of the project managers, engineers and contractors are males. This may be due to the fact that project management and implementation courses require knowledge on mathematics and other science subjects which attract more males and females.

The researcher also sought information about the age group of study respondents and the obtained information on this aspect has been presented in figure 4.2

**Figure 2 Participants' Age**

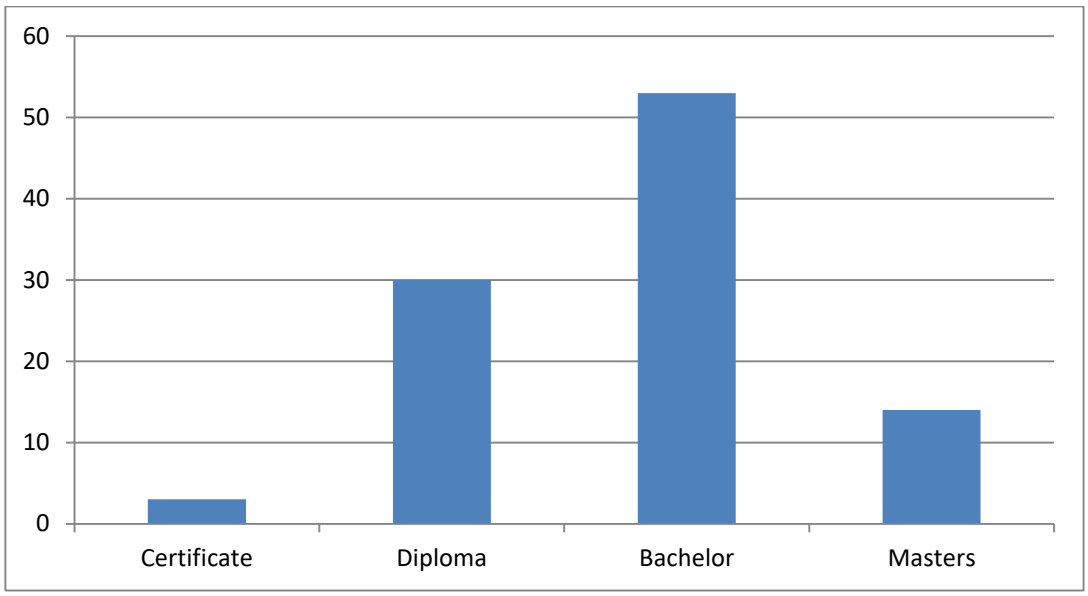



**Source** (field data, 2022)

On the issue of age, a larger number of the participants were at the age above 40 years (40%) followed by 35% with the age between 30 to 40 years and lastly 25% of the respondents were aged between 20 – 30 years. These data suggest that the participants were mature enough to participate in the study, and therefore they were in a better position of giving their views on the problem under investigation.

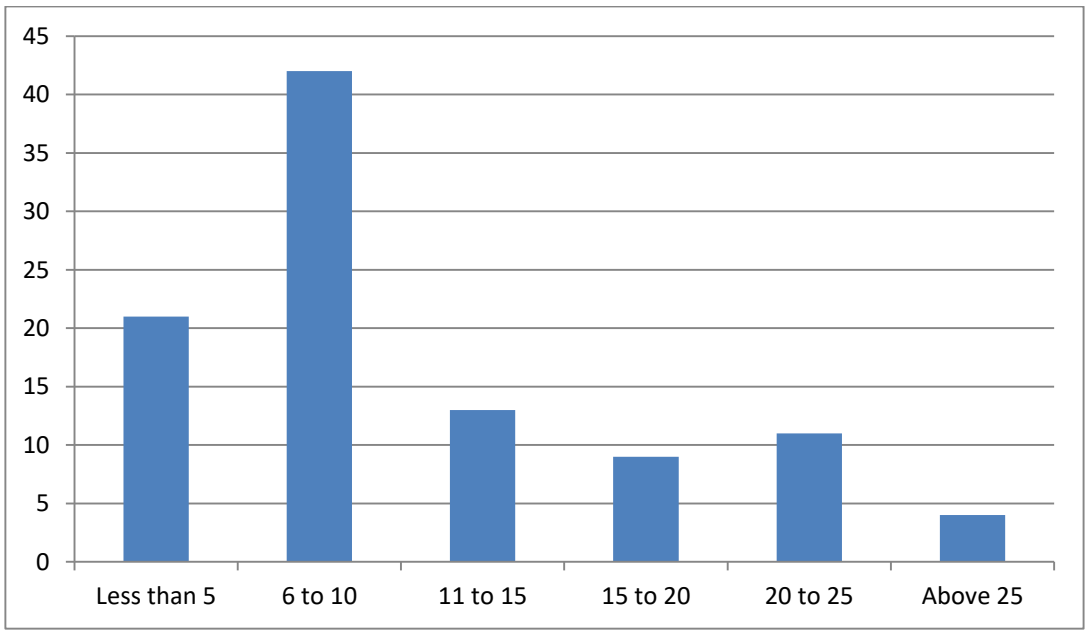
Information on participants' education qualification and experience was sought in this study. The obtained information on the two aspects has been summarized in figures 4.3 and 4.4 respectively.

**Figure 3 Respondents' education qualifications**




**Source** (field data, 2022).

**Table 4 Respondents' experience**




**Source** (field data, 2022).

About the education qualification and experience of the participants, majority of them were degree holders and experienced between 6 to 10 years.

This implies that most of the target participants had adequate education level to understand the questions in the instruments and also were having enough experience in their respective position. These aspects guaranteed the collection of accurate and adequate information about the study.

### 4.4 Impacts of the Technical Capacity on the Completion of Projects

The first objective of this study aimed at investigating the impacts of technical capacity on the completion of NHC projects in Dar es Salaam region. Data to address this objective were collected from all the study participants using a questionnaire. In the questionnaire, the participants were provided with a five-point rating scale with four items and requested to indicate their level of agreement or disagreement with each of the items (statements). Numbers were assigned for the responses whereby 1 was used for strongly disagree and 5 was used for strongly agree while 3 indicated a neutral position. These numbers were then used to compute the response mean scores for each statement. Table 4.2 summarizes their responses.

**Table 5 Response on the Impact of Technical Capacity on the Completion of Projects**

| Statements | SD | D | N | A | SA | Mean score |
|---|---|---|---|---|---|---|
| | F (%) | F (%) | F (%) | F (%) | F (%) | |
| Projects are supervised by qualified personnel | 6 (10.9) | 17 (30.9) | 19 (34.5) | 8 (14.5) | 5 (9.1) | 2.80 |
| Contractors maintain technical workers within the site | 7 (12.7) | 23 (41.8) | 12 (21.8) | 11 (20.0) | 2 (3.6) | 2.60 |
| Contracts are awarded to the correctly registered as per PPA requirement | 9 (16.4) | 27 (49.1) | 11 (20.0) | 7 (12.7) | 1 (1.8) | 2.35 |
| Projects are done to completion using skilled personnel | 15 (27.3) | 20 (36.4) | 8 (14.5) | 9 (16.4) | 3 (5.5) | 2.26 |

**Source** (Field data, 2022) *Key: SD = strongly disagree; D = disagree; N = no option; A = agree; SA = strongly agree; F = frequency; % = percentage*

Table 4.2 shows that 17 (30.9%) of the respondents disagreed with the statement “projects are supervised by qualified personnel” and 6 (10.9%) of them strongly disagreed on the same statement. The mean score for the response from all the 55 participants was 2.8. Since the mean score (2.80) was less than the neutral point (3.0), these response show that most of the study participants disagreed with the statement. These findings imply that there is a lack of skilled personnel needed to supervise the implementation of projects run by NHC in Dar es Salaam region. Lack of skilled personnel leads into improper supervision and hence negatively affects the implementation and completion of the projects. This is in agreement to Simon (2017) who reported that poor monitoring skills limits the consideration of technical capacity in the selection of contractors and thus leading into delays or failure to complete the projects. When the contractors are not supervised by skilled personnel, there are dangers of misusing the resources or performing the works below the agreed standards.

Data in the same table also show that 23 (41.8%) of the participants disagreed with the statement “contractors maintain technical workers in the site”. On the same statement, the percentage of participants who strongly agreed with was 12.7% and the ones for those who agreed and strongly agreed were 20.00% and 3.6% respectively. The mean score for this response as computed from all the participants was 2.60. This value means that most of the participants disagreed with the statement. The implication is that contractors do not have effective mechanisms to maintain the technical workers in the site and hence affecting the completion of NHC projections. Failure of the contractors to maintain the workers in the site makes these either to report late or to rarely attend at the working site. As the workers do not attend regularly or they report late, the work may not be done as per the plans and hence leading into completion delay of the projects.

Table 4.1 also shows that 27 (49.1%) of the participants disagreed with the statement “Contracts are awarded to the correctly registered as per PPA requirement” and 9 (16.4%) of them strongly

disagreed with the same statement. The mean score for the responses from all the 55 respondents was 2.35. This value is below the natural point (3.0) and therefore most of the respondents disagreed on the statement. This implies that there are concerns that the awarding of contractors done by NHC does not correctly follow the PPA requirements. The violation of public procurement act may lead into improper awarding of contactors whereby some of the constructors may be given construction tenders while they do not meet the requirements. By having contractors who do not meet the standards, the completion of projects may be negatively affected as these contractors may not have the expected skills to run the awarded projects. This argument is further supported by Thorat et' al (2017) who reported that completion delays of most of the projects results from the clients to consider contractors with low bid and not technical capacity. This shows that technical capacity of the contractors has a huge role to play in the implementation and successful completion of the projects.

Data in table 4.2 also show that 20 (36.4%) and 15 (27.3%) of the participants disagreed and strongly disagreed with the statement "Projects are done to completion using skilled personnel" respectively. The mean score calculated from the responses of all the 55 participants was 2.26. Being less that the neutral point (3.0) this value shows that most of the participants had negative views on the statement. The implication is that technical capacity is not given due consideration while planning, implementation and monitoring of projects run by NHC. This may either be due to the presence of few skilled personnel or improper strategies used by the management to get the required personnel. According to Musyimi (2015), one of the factors for successful completion of projects is the technical capacity of the constructors. However, looking at the mean scores across all the statements, it can be depicted that technical capacity of either the constructors or managers is not given due consideration in the projects run by NHC within Dar es Salaam region. This may be one of the factors which affect the completion of many projects initiated by the corporation.

### 4.5 Effects of Leadership Style on Project Completion

The second objective of this study aimed at examining the effects of readership style on project completion. To address this objective, the study participations were provided with closed ended questions in their questionnaire and were requested to indicate their degree of agreement or disagreement with the provided statements concerning the effect of leadership style on project completion. The frequencies, percentages and mean scores for their responses are presented in table 4.3.

**Table 6 Responses on the Effect of Leadership Style on Project Completion**

| Statements | SD | D | N | A | SA | Mean score |
|---|---|---|---|---|---|---|
| | F (%) | F (%) | F (%) | F (%) | F (%) | |
| Leadership skills is highly needed over the project life cycle | 3 (5.5) | 3 (5.5) | 5 (9.1) | 25 (45.5) | 19 (34.5) | 4.44 |
| Leadership style plays a vital role in ensuring decision making and project success | 3 (5.5) | 4 (7.3) | 9 (16.4) | 23 (41.8) | 16 (29.1) | 4.24 |
| Involvement leadership can lead to neglecting project | 6 (10.9) | 12 (21.8) | 17 (30.9) | 13 (23.6) | 7 (12.7) | 3.29 |
| Leadership styles involvement is the barrier to project completion or success | 5 (9.1) | 14 (25.5) | 20 (36.4) | 11 (20.0) | 5 (9.1) | 3.15 |

**Source** (Field data, 2022) *Key: SD = strongly disagree; D = disagree; N = no option; A = agree; SA = strongly agree; F = frequency; % = percentage*

Table 4.3 shows that 25 (45.5%) of the study participants agreed with the statement “leadership skills are highly needed over project life cycle and 19 (34.5%) of them strongly agreed on the

same statement. The response mean score as computed from all the 55 participants on this statement was 4.44. This value is higher than the neutral point (0.3) and therefore most of the participants had a positive opinion on the statement. This implies that leadership skills are considered to be important for successful completion of projects. When the managers are equipped with leadership skills, they can easily influence the performance of employees and contractors and thus achieve the project goals. On the contrast, if the leaders will not have such skills, it may be problematic for them to actively engage all the project implantation parties and hence leading into delayed completion. This argument is in line to what was documented by Kyalo and Muturi, (2015) that put forward that leaders need to be equipped with the required skills for them to effectively execute leadership roles.

Data in table 4.3 also shows that 23 (41.8%) of the participants agreed on the statement "Leadership style plays a vital role in ensuring decision making and project success" and 16 (29.1%) of them strongly agreed with the same statement. The response mean score as computed from all 55 respondents was 4.24 which is higher than the neutral point (3.0) and thus indicating that majority of the participants agreed with the statement. This implies that leadership style is considered to play a vital role in ensuring the decision making and project success. If the leaders will use good and relevant leadership styles, there will be a possibility of reaching into good decisions and hence enable the completion of projects. According to the contingency theory, there is no one best style of leadership but the suitability and applicability of each depends on the context (Kyalo&Muturi, 2015).

Table 4.3 also shows that the mean scores for the responses on the statements "Involvement leadership can lead to neglecting project" and "Leadership styles involvement is the barrier to project completion or success" were 3.29 and 3.15 respectively. These mean score values in the two statements (3.29 and 3.15) are slightly higher than the neutral point (3.0). Thus the participants had different views on the role of involvement leadership on project completion.

There are some who believed that involvement leadership leads into successful completion of projects while others considered the use of involvement leadership to be a hindrance factor for the completion of projects run by NHC. According to Mwinzi and Moronge (2018), leadership and stakeholder's involvement affects the completion of projects. By involving the stakeholders, they may feel to be part of the projects and thus work hard to achieve the goals. However, sometimes involvement of these stakeholders can lead to project delays as the agreed decisions may not be easily achieved.

Based on the contingency theory, there is no one leadership style that can be best in all the companies and circumstances but each one depends on the situation present. Thus this calls for project managers to be skilled on selecting the best leadership strategy based on the present situation. In a number of projects however, there are no clear leadership policies and this condition has lead into the delay in completing the projects (Nakhumicha, 2017). Similarly, Mwinzi and Moronge (2018) found out that leadership is essential for setting project goals and monitoring the implementation of the proposed activities and ultimately leads into successful completion of the planned objectives. Thus the project managers need to be skilled on different leadership styles and also should have knowledge on how to involve the stakeholders so as to bring about successful completion of the projects.

### 4.6 Effects of Project Communication on the Completion of Projects

The third objective aimed at determining the effects of project communication on the completion of projects run by NHC in Dar es Salaam region. The study participants responded to a rating scale in their questionnaire which had four statements concerning how project communication affects the completion of projects. The frequencies, percentages and mean scores for their response are presented in table 4.4.

**Table 7 Responses on the effect of project communication on project completion**

| Statements | SD | D | N | A | SA | Mean score |
|---|---|---|---|---|---|---|
| | F (%) | F (%) | F (%) | F (%) | F (%) | |
| Project information is always communicated from a centralized point | 12 (21.8) | 20 (36.4) | 10 (18.2) | 8 (14.5) | 5 (9.1) | 2.53 |
| Relevant information is usually communicated within prescribed time | 14 (25.5) | 17 (30.9) | 15 (27.3) | 6 (10.9) | 3 (5.5) | 2.4 |
| Technical instructions are always issued through project manager | 6 (10.9) | 18 (32.7) | 20 (36.4) | 9 (16.4) | 2 (3.6) | 2.69 |
| The communication channel used is always agreed and accepted by all players | 12 (21.8) | 22 (40.0) | 11 (20.0) | 6 (10.9) | 4 (7.3) | 2.42 |

**Source** (Field data, 2022) *Key: SD = strongly disagree; D = disagree; N = no option; A = agree; SA = strongly agree; F = frequency; % = percentage*

Table 4.4 shows that the mean score for participants' responses on the statement "Project information is always communicated from a centralized point" was 2.53. This value is less than the neutral point (3.0) which indicates that majority of the respondents disagreed with the statement. This implies that project information is not well communication from a centralized point.

Lack of centralized commutation makes it difficult for the project implementers to monitor the progress and thus leading into delayed project completion. These findings are in agreement to

Chileshe and Kavishe (2017) who also found out that NHC joint ventures are affected by poor communication among the parties and such situation negatively affects the completion of such projects. Similarly Muhammed and Hasanath (2021) reported that poor communication leads into delayed completion of projects. Lack of communication from the centralized points is therefore one of the factors that negatively affect the completion of projects run by NHC.

Table 4.4 also shows that the mean score for the response on the statement "Relevant information is usually communicated within prescribed time" was 2.4. This value is also less than the neutral point and thus indicating that majority of the respondents disagreed with the statement. The implication is that relevant information is not usually provided within prescribed time. Failure to provide relevant information within time is an indication of poor communication. Failure to provide relevant information on time may make it difficult for the management to find out whether the project is being implemented as intendant or not. The managers also may not be in a better position of determining the presence of challenges and thus the problems may not be solved before the condition becomes worse. This argument is supported by Masoodet'al (2015) who also reported that poor communication affects the coordination between different parties involved in the projects and hence affecting the completion of such projects.

Results in table 4.4 also show that mean score for the responses on the statement "Technical instructions are always issued through project manager" was 2.69. This value is also less than the neutral point and thus indicates that majority of respondents had negative views on the statement. The implication is that technical instructions are not always issued through project manager. As the managers do not always give technical instructions, there is a possibility for the projects to be implemented at low standards. Failure of the managers to give technical instruction can be attributed by lack of commutation skills among the project managers. According to Kyalo and Muturi (2015), communication skills among the project managers plays a pivotal role on the success of any project to be implemented and thus failure of the project

managers to give technical instructions may lead into delayed completion of the projects or the projects to be done at low standards.

Concerning the statement “The communication channel used is always agreed and accepted by all players” the mean score for participants, responses was 2.42. Again this value is less than the neutral point (3.0) and therefore indicates that the communication channel used is not always agreed and accepted by all the players. These findings suggest that in most cases project managers do use irrelevant communication channels to deliver messages about the project. The use of such channels may negatively affect the communication as there is a possibility that the given information may not reach all the intended players. According to El-saboni et al, (2009), the use of proper commination channels is required throughout the project life cycle for that project to be completed successfully. Thus, failure of the project managers to use the appropriate agreed and acceptable channels may negatively affect the implementation of project activities and hence delay the completion of such projects. The mean scores for the responses across all the four statements were below 3.0 indicating that the respondents had negative views on all the statements. The implication here is that poor communication between different project implementation parties is considered to be a hindering factor for successful completion of projects run by NHC.

# CHAPTER FIVE

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

This chapter presents summary of the study findings, conclusions and recommendations of the study. Summary of the findings gives the major findings obtained from the field according to the research objectives while conclusions are drawn from study findings and finally recommendations are made based on the conclusions. At the end of the chapter, the researcher has given suggestions for further studies.

## 5.2 Summary of the Findings

### 5.2.1 Impacts of the Technical Capacity on the Completion of Projects

It was found out that majority of the participants disagreed on all the four statements concerning the consideration of technical capacity in running the projects. The mean scores for all the four items were below 3.0. Most of the respondents indicated that projects are not supervised by qualified personally, contractors do not maintain technical workers within the site, contracts are not awarded to the correctly registered as per PPA and project were not done by skilled personnel. Lack of technical capacities of the contractor and supervisors was therefore found to negatively affect the completion of projects run by HNC in Dar es Salaam region. Awarding contracts without following the PPA requirements has resulted into the existence of contractors with limited skills and technical capacity who cannot effectively perform the project implementation activities and hence delaying their completion. This also suggest that there is a possibility for emergence of corruption in the process of awarding contracts whereby the contractors with low bids are selected without considering their technical capacity.

### 5.2.2 Effects of Leadership Style on Project Completion

Leadership styles were found to significantly affect the completion of projects. Most of the participants agreed that leadership skills are highly needed for successful completion of projects. Majority of them also agreed that leadership styles play an important role in ensuring decision making and project success. These findings were found to appeal to the contingency theory that calls for project managers to be context specific while choosing for the right leadership style. However, participants were found to have mixed views on the application of stakeholders' involvement leadership whereby some indicated that the use of such leadership style is important for project completion while other were of the opposite opinion. This means that different project players use different leadership styles whereby some make maximum involvement of the stakeholders while others do not involve all the players. In the places where the stakeholders are well involved, there is a high rate of project completion since each part will feel being valued and thus work hard to achieve the project objectives.

### 5.2.3 Effects of Project Communication on the Completion of Projects

The study found out that most of the respondent indicated a poor communication of project information from centralized points. This means that the flow of project information was found to be problematic as some of the managers were reported to be using communication channels which have not been agreed or accepted by all the players. The study also found out that most of the participants indicated that relevant information is not always communicated within the prescribed time. This was found to be caused by a lack of communication policy and poor communication skills among the project managers. The use of inappropriate communication channels was found to negatively affect the implementation of project activities as it could not be easy for the project managers to get feedback on either success or failures of the project. The study also found from the participants that technical information is not always issued by the

project managers. Thus project managers were reported not to be giving technical information on the running of projects. This may be due to the fact that these managers either do not have adequate skills on project management or they do not know how to effectively communication such information. This leads into delayed completion of the projects.

### 5.2.1 Impacts of the Technical Capacity on the Completion of Projects

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## 5.3 Conclusions

Based on the study findings, the following conclusions were drawn;

The completion of projects run by NHC in Dar es Salaam region is highly affected by the technical capacity of both project managers and the contractors. This is because in most cases

the technical capacity of the contractors is not given much consideration while selecting the contractors. Instead, the contractors with low bids are the ones given the contracts. This results into underperformance of the expected activities or using much time to accomplish the tasks due to limited resources and personnel.

The project managers also do not have adequate skills to supervise the implementation of project activities as a result they wait until the problems are beyond control. The presence of contracts with low technical capacity is also attributed by the managers not to follow the PPA requirements while selecting and offering tenders to the contractors.

Leadership styles affect the completion of projects run by NHC in Dar es Salaam region. The leaders who use participatory leadership style are likely to involve the stakeholders and other project players towards the accomplishment of the projects. The involvement of the stakeholders in project cycle makes these stakeholders to feel being part of the project and thus they become more motivation to ensure that the project is being completed within the prescribed time. However, not all the NHC project managers use participatory leadership style. There are some who do not involve the stakeholders in project design, implementation and evaluation and thus it becomes difficult for the uninvolved stakeholders to be active participants towards achieving the project objectives. This leads into delays as some of the project players may not see the importance of the established projects and thus take no much action to complete the projects.

Poor communication between the project players negatively affects the completion of projects run by NHC in Dar es Salaam region. As the project managers use irregular communication channels it becomes difficult for all the project players to get that information and thus affect their performance of project activities. Lack of communication about project information makes hard for the project managers and other stakeholders to assess the success or failure of the projects and hence not being able to spot out the existence of challenges until the problems

become out of control. Poor communication within the project players may be attributed by either lack of proper communication policies limited skills of the project managers on the aspect of communication.

### 5.4 Limitation of the study

In this study, some factors were thought to limit the study such as respondents 'busy schedules, respondents' fear of being spied on, and lack of cooperation because of feeling that the study will not benefit them. Also, Nature of the sample size the researcher will acknowledge that these findings cannot be generalized to other similar organizations. In, Cost the researcher will face challenges in terms of cost to be covered in the study. However, the researcher ensured that all these constraints were managed appropriately and were collected appropriately as required.

### 5.5 Recommendations

Based on the study conclusions, the researcher recommended the following;

The project managers should consider the technical capacity of contractors when offering contracts for implement NHC projects. This can be done by strictly adhering to the PPA regulations and not only selecting the contracts with low bids. The project managers should also be trained on technical skills required for project management so as to equip them with project monitoring skills which are necessary for ensuring success of the established projects.

The project managers should be trained on managerial skills and leadership styles. This can be done by either allowing the managers to attend professional development programmes as well as employing the mangers with such skills. Being skilled on leadership styles will enable the project managers to select the appropriate leadership style that can effectively influence the project players to participate in the implementation of project activities and thus bring about successful completion.

NHC should develop, implement and evaluate communication policies so as to ensure effective communication of project information to all players. The project also should seek professional development programmes to equip themselves with communication skills.

### 5.6 Suggestion for Further Studies

The researcher recommends other scholars to conduct research on the following topics;

1. The government or government agencies need to provide knowledgeable on challenge factors affecting the timely completion of public and private sector project so as to mitigate these emerging challenges of incompletion of housing project.
2. To evaluate the suitability of public procurement act towards selecting competent contractors.
3. To assess the influence of technological adoption on the completion of projects.
4. To assess the influence of technological adoption on the completion of projects.

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## APPENDICES

### APPENDIX 1: QUESTIONNAIRE

**Assessing factors affecting the Completion of Projects at National Housing Corporation in Dar es Salaam Region**

**Instructions:**

1. The questionnaire has six sections and you are requested to respond to all questions
2. All information was treated with maximum confidentiality

### SECTION 1: GENERAL BACKGROUND INFORMATION

Please circle the most appropriate alternatives

1. What gender do you belong?

   (a) Male

   (b) Female

2. What is your age?

   (a) 20-30years

   (b) 30-40years

   (c) Above 40years

3. What is your highest level of education?

   (a) Certificate

   (b) Diploma

   (a) (c)Bachelor degree

   (c) Master's degree

   (d) Others specify

4. For how long have you been working in this organization?

   (a) Less than 5 years

   (b) 6-10 years

(c) 11-15 years

(d) 15-20 years

(e) 21-25 years

(f) More than 25 years

5. Kindly indicate your professional?

a) Architect quantity

b) surveyor engineer

c) project manager

d) others

**SECTION II: TECHNICAL CAPACITY OF CONTRACTORS**

To what extent do you agree with this statement? Please indicate your agreement or otherwise with the following statements using the following Likert scale.

**1= strongly disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= strongly agree**

| **Description** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| Projects are done to completion using skilled personnel | | | | | |
| Projects are supervised by qualified personnel | | | | | |
| Contractors maintain technical workers within the site | | | | | |
| Contracts are awarded to the correctly registered as per PPA requirement | | | | | |

**SECTION III: LEADERSHIP STYLE**

To what extent do you agree with this statement? Please indicate your agreement or otherwise with the following statements using the following Likert scale.

**1= strongly disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= strongly agree**

| **Description** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| Leadership skills is highly needed over the project life cycle | | | | | |
| Leadership style plays a vital role in ensuring decision making and project success | | | | | |
| Involvement leadership can lead to neglecting project | | | | | |
| Leadership styles involvement is the barrier to project completion or success | | | | | |

**SECTION IV: PROJECT COMMUNICATION**

To what extent do you agree with this statement? Please indicate your agreement or otherwise with the following statements using the following Likert scale.

**1= strongly disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= strongly agree**

| **Description** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| Project information is always communicated from a centralized point | | | | | |
| Relevant information is usually communicated within prescribed time | | | | | |
| Technical instructions are always issued through project manager | | | | | |
| The communication channel used is always agreed and accepted by all players | | | | | |

**SECTION V: COMPLETION OF PROJECTS**

To what extent do you agree with this statement? Please indicate your agreement or otherwise with the following statements using the following Likert scale.

**1= strongly disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= strongly agree**

| **Description** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| There has not been any increase in the cost of raw materials during construction of project | | | | | |
| The required equipment's are available at pre budget rates | | | | | |
| Labor costs more or less remained stable over the period of the current project | | | | | |
| The quantity of different type of resources required during the implementation phase matched with those estimated during planning stage | | | | | |

***Thanks for your time and participation***

## APPENDIX 2: RESEARCH BUDGET

| S.N | Item | No of Days | Cost Per Unit | Sub-Total | grand total |
|---|---|---|---|---|---|
| 1 | **TRANSPORTATION** | | | | |
| | Public transport | 30 | 10000 | 30,000 | |
| | Motorbike | 30 | 4,000 | 120,000 | **150,000** |
| | | | | | |
| 2 | Meals | | | | |
| | Breakfast | 30 | 2,000 | 60,000 | |
| | Lunch | 30 | 3,500 | 105,000 | **165,000** |
| | | | | | |
| 4 | **Communication** | | | | |
| | Internet | 90 | 25,000 @ Month | 75,000 | |
| | Airtime | 90 | 10,000 @ Month | 30,000 | **105,000** |
| | | | | | |
| 8 | **Stationary** | | | | |
| | Rim Paper (A4) | | | 10,000 | |
| | Printing & Copies | | | 50,000 | |
| | Pen | | | 10,000 | **70,000** |
| | **TOTAL** | | | | **490,000** |

## APPENDIX 3: WORK PLAN SCHEDULE

| | | WORK PLAN SCHEDULE | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2021 | | | 2022 | | | | | | | | |
| | | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JU | AUG | |
| 1 | Problem identification | | | | | | | | | | | | |
| 2 | Research dissertation writing | | | | | | | | | | | | |
| 3 | Draw up action plan | | | | | | | | | | | | |
| 4 | Pilot study | | | | | | | | | | | | |
| 5 | Validation of equipment | | | | | | | | | | | | |
| 6 | Data collection | | | | | | | | | | | | |
| 7 | Data entry and analysis | | | | | | | | | | | | |
| 8 | Result interpretation | | | | | | | | | | | | |
| 9 | Dissertation writing | | | | | | | | | | | | |
| | | | | | | | | | | | | | |