**ASSESSMENT OF THE EFFECTS OF PROJECT PERFORMANCE ON GOVERNMENT PROJECT FAILURE IN TANZANIA, A CASE STUDY OF TANZANIA CIVIL AVIATION AUTHORITY**

**ZAWADI JUMA MAALIM**

**PG201700735**

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF PROJECT MANAGEMENT (MPM)**

**DEPARTMENT OF MARKETING AND ENTREPRENEURSHIP**

**OF THE OPEN UNIVERSITY OF TANZANIA**

**2020**

CERTIFICATION

I, the undersigned certify that I have read and hereby recommends for the acceptance of the dissertation titled; “Assessment of the effects of project performance on government project failure in Tanzania. A case of study of Tanzania Civil Aviation Authority (TCAA), in partial fulfillment of the requirements of the award of the Masters of Project Management.

…………………………………….

Dr. Raphael Gwahula

(Supervisor)

…………………………..

Date

COPYRIGHT

No part of this report may be reproduced, stored in any retrieval system or transmitted in any means, electronic, mechanical, photocopying, recording or otherwise without prior permission of the author or Open University of Tanzania in that behalf.

DECLARATION

I, Zawadi J. Maalim, do hereby declare that this dissertation report is the result of my own work and it has not been submitted or presented to any other Institute of higher learning for similar degree award.

……………………………………

Signature

……………………………………

Date

DEDICATION

This work is dedicated to my family for their life tolerance during my study period. However, the special dedication is to my parents Mr. Juma Maalim and Mrs. Hawa Ramadhani who took me to school and made me who I am today. Also to my children Matilda, Melchizedek and Melvin Gabriel Ngarina as an inspiration for them.

ACKNOWLEDGEMENT

The outcome of this research project is owed to several personal and institutional supports. In understanding of this kindness, first and foremost thanks is to almighty God while my special gratitude’s should go to my supervisor Dr. Raphael Gwahula for indefatigable cooperation and support in the research process.

Altogether much appreciation goes also to the Tanzania Civil Aviation Authority (TCAA) a host organization for allowing the employees to participate in the study and providing information on “*Assessment of the effects of project performance on government project failure in Tanzania.*” Finally I would like also to take this opportunity to express my sincere thanks to Master of Project Management course instructors and coordinators for their guidance and assistance throughout the entire period of my study.

My final word is “Thanks very much to all of you God bless you all”

# ABSTRACT

This study explores the general factors leading to government project failure in Tanzania and its effects to various stakeholders and beneficiaries, using Tanzania Civil Aviation Authority as case study. The study employed quantitative approaches with correlational study design, which was used to link between project performance and project failure while observing the response of dependent variable in respect to independent variable changes. Data was analyzed by descriptive analysis with frequency distributions, measure of central tendency which includes mean and median, measure of dispersion which used standard deviation and the range. The findings indicates **the major factors were** insufficient and delay of financing resources, inadequate project planning and feasibility studies, poor risk management, natural disasters. **While weak factors observed was l**ack of proper communications system, socio-cultural settings, and project design and scope changes **factors observed as weak on government project failures.** The study found major effects on the government itself, contributing to economic growth deterioration, poor customer satisfactions and government sector underdevelopment. The study also concluded that factors of government projects failures are significantly affecting the projects performance. The general recommendations was drawn from remedy measures including improvement of project management on the financing, scope changes, monitoring and evaluation, minimize political interferences, develop viable risk management action plans and enhanced communication and information provision among stakeholders.

Keywords: *Project, Government, Government project and Project failure.*

**TABLE OF CONTENTS**

[CERTIFICATION ii](#_Toc50406489)

[COPYRIGHT iii](#_Toc50406490)

[DECLARATION iv](#_Toc50406491)

[DEDICATION v](#_Toc50406492)

[ACKNOWLEDGEMENT vi](#_Toc50406493)

[ABSTRACT vii](#_Toc50406494)

[TABLE OF CONTENTS viii](#_Toc50406495)

[LIST OF TABLES xii](#_Toc50406496)

[LIST OF FIGURES xiv](#_Toc50406498)

[LIST OF ABBREVIATIONS xv](#_Toc50406499)

[LIST OF ABBREVIATIONS xv](#_Toc50406500)

[CHAPTER ONE 1](#_Toc50406501)

[INTRODUCTION 1](#_Toc50406502)

[1.1 Chapter Overview 1](#_Toc50406503)

[1.2 Background to Research Problem 1](#_Toc50406504)

[1.3 Problem Statement 7](#_Toc50406505)

[1.4 The Study Objectives 8](#_Toc50406506)

[1.4.2 Specific Objectives 8](#_Toc50406507)

[1.4.3 Research Questions 8](#_Toc50406508)

[1.5 Theoretical and Practical Significance 9](#_Toc50406509)

[1.6 Scope of the Study 9](#_Toc50406510)

[1.7 Limitations of the Study 10](#_Toc50406511)

[1.8 Structure of Dissertation 10](#_Toc50406512)

[CHAPTER TWO 11](#_Toc50406513)

[LITERATURE REVIEW 11](#_Toc50406514)

[2.1 Chapter Overview 11](#_Toc50406515)

[2.2 Theoretical Review 11](#_Toc50406516)

[2.3 The Concept of Project Management 22](#_Toc50406517)

[2.4 Empirical Literature Review 24](#_Toc50406518)

[2.5 Gap of Knowledge 30](#_Toc50406519)

[2.6 Conceptual Framework 32](#_Toc50406520)

[2.6.1 Dependent variable 33](#_Toc50406521)

[2.6.2 Independent Variables 33](#_Toc50406521)

[CHAPTER THREE 34](#_Toc50406522)

[RESEARCH METHODOLOGY 34](#_Toc50406523)

[3.1 Chapter Overview 34](#_Toc50406524)

[3.2 Study Area 35](#_Toc50406525)

[3.3 Research Approach 35](#_Toc50406526)

[3.4 Research Design 36](#_Toc50406527)

[3.5 Population of the Study 36](#_Toc50406528)

[3.6 Sampling Procedure and Sample Size 37](#_Toc50406529)

[3.7 Study Sample Size 37](#_Toc50406530)

[3.8 Types of Data 38](#_Toc50406531)

[3.8.1 Primary Data 38](#_Toc50406533)

[3.8.2 Secondary Data 38](#_Toc50406535)

[3.9 Data Collection Methods and Instruments 39](#_Toc50406536)

[3.10 Validity and Reliability 44](#_Toc50406541)

[3.11 Variables and Measurement Procedures 44](#_Toc50406542)

[3.12 Ethical Issues 45](#_Toc50406543)

[CHAPTER FOUR 47](#_Toc50406544)

[DATA PRESENTATION, ANALYSIS AND DISCUSSION OF THE FINDINGS 47](#_Toc50406545)

[4.1 Chapter Overview 47](#_Toc50406546)

[4.2 Response Rate 47](#_Toc50406547)

[4.2.1 Reliability Analysis 47](#_Toc50406548)

[4.3 Respondents Demographic Profile 49](#_Toc50406549)

[4.4 Inferential Statistics 58](#_Toc50406550)

[4.4.1 Research Specific Objective One 59](#_Toc50406551)

[4.4.2 Research Specific Objective Two 61](#_Toc50406554)

[4.4.3 Research Specific Objective Three 64](#_Toc50406558)

[4.4.4 ASummary for All Variables 66](#_Toc50406561)

[4.4.5 Beta statistics for all variables 67](#_Toc50406563)

[4.4.6 TCAA Projects Successfully Delivered in Terms of Agreed Schedule and Quality within the Last 15 Years 69](#_Toc50406564)

[CHAPTER FIVE 71](#_Toc50406565)

[SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS 71](#_Toc50406566)

[5.1 Chapter Overview 71](#_Toc50406567)

[5.2 Summary of the Research Findings 71](#_Toc50406568)

[5.3 Conclusion 73](#_Toc50406569)

[5.4 The Study Recommendations 76](#_Toc50406570)

[REFERENCES 79](#_Toc50406571)

[APPENDIX 87](#_Toc50406572)

**LIST OF TABLES**

[Table 3.1: Variable Measurements 40](#_Toc56969847)

[Table 4.2: Inter-Item Matrix 48](#_Toc56969848)

[Table 4.3: Items-Total Statistics 49](#_Toc56969849)

[Table 4.4: Respondents Gender Pattern 50](#_Toc56969850)

[Table 4.5: Respondents Age Pattern 50](#_Toc56969851)

[Table 4.6: Respondents Academic Qualification 51](#_Toc56969852)

[Table 4.7: Respondents Period been Working with TCAA 51](#_Toc56969853)

[Table 4.8: Criteria Used to Appoint the Project Managers or been Involved in Project Management 52](#_Toc56969854)

[Table 4.9: Areas for TCAA Staff Involvement in the Project Implementation Process 53](#_Toc56969855)

[Table 4.10: Achievement of Government Projects at TCAA Organization Goals 54](#_Toc56969856)

[Table 4.11: Measures of Autocorrelation Assumption-Durbin Watson 56](#_Toc56969857)

[Table 4.12: Test of Normality 58](#_Toc56969858)

[Table 4.13: Model Summary for Inadequate and Delay of Financing 59](#_Toc56969859)

[Table 4.14: ANOVA for Inadequate and Delay of Financing 60](#_Toc56969860)

[Table 4.15: Model Summary for Inadequate Project Planning and Feasibility Study 62](#_Toc56969861)

[Table 4.16: ANOVA Results on Inadequateof Project Planning and Feasibility Study 62](#_Toc56969862)

[Table 4.17: Correlation of Inadequacy Project Planning on Failure of Government Projects 63](#_Toc56969863)

[Table 4.18: Poor risk Management Model 64](#_Toc56969864)

[Table 4.19: ANOVA for Poor Risk Management 65](#_Toc56969865)

[Table 4.20: Correlation and Regression Analysis for Poor Risk Management on Failure of Government Projects 65](#_Toc56969866)

[Table 4.21: Model for Government Project Failures Variables 66](#_Toc56969867)

[Table 4.22: ANOVA for Government Project Failure Variables 66](#_Toc56969868)

[Table 4.23: Beta statistics Summary for all Variables 67](#_Toc56969869)

**LIST OF FIGURES**

[Figure 2.1: The Conceptual Framework Showing Variable Graphical Relationship 33](#_Toc56964567)

**LIST OF ABBREVIATIONS**

ANOVA Analysis of Variance

CRM Customer Relationship Management

GSM Global System for Mobile Communications

ICT Information and Communication Technology

IT Information Technology

TIRDEP Tanga Integrated Rural Development Programme

TCAA Tanzania Civil Aviation Authority

TTCL Tanzania Telecommunications Company Limited

# CHAPTER ONE

# INTRODUCTION

* 1. **Chapter Overview**

The current chapter describes the highlights on how government projects failure has turn into a rule rather than an exception. It provides a vibrant picture about project failure in the world and developing countries in particular, and how governments are wasting enormous sums of resources through project failures. It also gives an overview of project failure in the local context of this study.

* 1. **Background to Research Problem**

Grounds of government projects failing is among of the greatest debated issues in current years by academicians, practicing managers, governments, and countless social analysts globally. This propelled by the project initiation been widely practiced to deliver various human social and economic developments though their delivery success has been very challenging (Mallewo, 2014). Despite of most of these government projects involving the huge sum of capital projects that draws attention of project management field practitioners in the project failures trends worldwide as it generate huge losses.

In recent years there is dramatic increase of undesirable high rate of government projects being accomplished over budget, behind schedules and starved of meeting quality standards and scope desires (Shahid et al., 2017). While the oldest public projects such as pyramids building in Egypt, Great Wall of China managing projects were successfully achieved (Aziz, 2013). Despite of the efforts done in enhancing the project management, still researches show that governments around the world are losing enormous sums of money and resources via projects as an outcome of project failures (Panayides et al., 2015). According toKlein et al., 2015 who studied the failure of public projectsparticularly on various government IT projects worth $10 million reveal that only insignificant percentages (6.4%) confirmed successful, (52.2%) being challenged project and remained (41.4%) as failed projects.

China as other countries also faced with failures or partial failures on government projects have been noted in IT projects in China (Liu et al, 2011). **According to** Fiscal Times June 3, 2017 **the government project failures have been the growing problem facing both developing and developed countries. In USA the Health care project known as The Obamacare/ Affordable Care Web Site: 2013 initiated by former president Barack Obama costing** $600 million failed to provide Americans a fast, easy system to enroll for health plans. Similar to that **New York City’s Citi Time Project that estimated to cost $68 million but it cost $**700 million more but largely failed to automate payroll operations project goal in 2011.

The Hofstede Centre (2016) reports that the political influence play great part on the failure of public projects. The UK has experienced great project failures information technology (IT) projects between 2000 and 2008 whereby public sector found to make ineffective use of IT compared to the private sector. **Similar to that the U.K. Electronic Health Records Project of 2002-2011 with cost of $**16 billion was also failed to make an integrated electronic health records system for UK residents.  Other UK government projects failed involve the **Department for Transport Shared Services Centre project with the aim of designing IT human resources integration and financial resources planned to cost** £57 million, but scheme terminated at the cost of £81 million largely caused by management incompetence and rushing things to meet optimistic deadlines.

In developing countries particularly in Africa the government projects failures observed to be high compared to developed countries and has been one significant obstacle in development (Aziz, 2013). In their quest for development, developing countries’ governments engage in projects such as building of roads, dams, plants, pipes, industries, theatres, e-government services, telecommunication, ICT, and others. These projects, which are normally financed by the International Monetary Fund (IMF), World Bank or tax-payers; are facing several setbacks such as abandonment and cost deviations (Aziz, 2013), schedule deviation (Marzouk& El-Rasas, 2013), scope deviation (Liu et al., 2011), and stakeholders’ dissatisfaction (Bitler and Karoly, 2015).

For example, in International Development (ID) projects, failure has become a rule rather than an exception (Ika et al., 2012, Hermano et al., 2013).According to Haveman et al (2015) reported on enormous road construction projects failures in terms of plan and schedule deferrals associated with contractors and clients financial procedures and problems, contract modifications, economic difficulties, materials’ procurements, alterations in project design drawings, recruitment problems, equipment’s unavailability, poor supervision and management, meagre coordination’s and alterations in project specifications. Similarly, the government projects failures rate in Ghana, is also extraordinary and costing the huge sum of taxpayers money. Amponsah (2013) estimate in Ghana at minimum one out of each three government infrastructures development projects either fails or is defied to attain one among the project objectives of cost, time or scope.

Based on the increase of government project failures, researches show that companies and governments all over the world are losing huge sums of money through projects as a result of project failure (Panayides et al., 2015). This also observed by Ramazani and Jergeas (2015)where the researcher argued the changes in managing and controlling projects being the root cause of losing huge sums of public funds in IT and other related projects. According toNguyen et al (2015) who conducted the study in Ghana found that, the 2012 budget of the country borrowed US$3.0 billion from the China Development Bank (CDB) for development of infrastructures, however, the majority of these projects did not realized their projected objectives.

The increasing trend of government projects failures has been precarious and threats in achieving citizen’s development in most of the countries more severe in developing countries (Patanakul, 2014). Thus, many of government developments projects including construction of roads, dams, plants, pipelines, industries, e-government services, telecommunications, ICT, etc have been failing to achieve its national socioeconomic developmental goals.

The continuing government projects failure is largely associated with various institutional and structural factors including leadership, inefficiently managed resources, ineffectual stakeholder’s welfare backups and poor communications (Fallahnejad, 2013, Parker et al., 2013). This viewed as a result of the changing nature of managing organizations due to science and technological progress, complexities, competitiveness in global marketplace (Panayides et al., 2015, Nguyen et al., 2015).

This increases the government projects failures to deliver their designed and planned national socioeconomic development targets in many countries more severe in developing countries (Kaur & Sengupta, 2013). The researchers demonstrate that failures of governments’ projects comprise bad impacts on the development of the pillars of the countries' economies. The situation is contrary to projects significant roles to escalate the development and economical balance of the countries (Bawumia, 2015). Thus, these ongoing government projects failures in a country enclose important contributions in the country development that cannot be ignored by the governments (Kendrick, 2015).

The increased number of government projects failures suggest that project management is been facing various institutional and structural challenges in different phases of the projects. This is against the various theoretical benefits and empiricalbenefits which is likely to be gained by implementing PMM outlined by Terlizzi et al., (2016). Thus, in the current world projects management failed to provide proper indications on public projects executions particularly in developing countries. This means that, most of the opportunities of improving the government projects delivery performance is missed as they are highly characterized with inadequate of process descriptions in the PMM and lack of consistent follow-ups.

In Tanzania, similar to other developing countries the government project failures have been growing problem as many projects are operating in troubles and risking failures. Thus, many projects misses deadlines, risen costs, expenses changes, frustrating managers and stakeholders(Mallewo, 2014, Mhando et al, (2017) study the projects failures in the government infrastructural construction project in Tanzania found that project failures continues to be major and chronic problem. They mentioned various projects such as buildings, ports, bridges and roads have been failing in terms of scope, time, and cost. The failures have been extended to other public projects including failures of construction projects (Tanga Integrated Rural Development Programme (TIRDEP), government funded World Bank project of water and sanitation project failed to be delivered on 2003 up to 2010 (Mallewo, 2012, Mhando et al, 2017).

Generally, model project entails of three aspects including startup, implementation, and assessment whereby any blunder in stages is likely to result in the project failure in terms of expenditures, time and overall progress (Kaur &Sengupta 2013). Kendrick (2015) also asserted that the project success and failure is multidimensional matter and reliant on various factors such as inappropriate procurement practices, incorrect budgeting or deferring the project schedule. This has been contrary to public project goals of meeting stakeholders (citizens) development. Hence, meeting public development targets and the profits is the most significant benchmarks in the success of a project.

The literature acknowledge that government projects require and consume enormous capital spending from organizations and/or governments hence it is critical to partake upright project management practices to provide value for money in the projects (Mallewo, 2014, Ramazani & Jergeas, 2015; Klein et al., 2015, Mhando et al, 2017). Hence, continuing government project failure destroys shareholders’ value in the government sector. In this study, the researcher is going to demonstrate the various factors on government projects failures in order to avoid project failures and related effects on the country development.

* 1. **Problem Statement**

Although in the organization there are clear procedures on tendering process such as advertisement, evaluation and selection of the contractors and project consultants worldwide the project performance are still low by almost 80% (Barasa, 2014; Saxena, 2016). For years a considerable number of Government projects have been falling to timely delivering according to agreed timeframe. For example, TCAA projects of Voice Communication Control System were required to be delivered on November 2016 extended to January 2018 with an additional cost.

CATC Radar Simulator project were planned to be delivered on December 2017 were delivered at September 2018 with additional cost. Billing System project were planned to be delivered on October 2016 was delivered at August 2018 with additional cost. Solar Power for Lokisale and Mnyusi project required to be delivered on January 2018 was delivered on June 2018 with extra cost, additionally Flight Calibration of Air Navigation Equipment project failed to be delivered on December 2016 has been delivered on May 2017 with additional cost.

These trends of failure of the government projects in timely delivery of the intended results have continuing to increased budget (cost), late delivering (time) and an organized project portfolio in public sector (Mallewo, 2014). Hence, this project failure trends rises the questions what underline the failure of the government projects failures despite of following all initiation process that intended to be studied by this study.

* 1. **The Study Objectives**
		1. **Main Objectives**

The main study objective was assessment of the effects of project performance on government project failure.

* + 1. **Specific Objectives**
1. To assess effect of inadequacy and delay of financing on the government projects failures in Tanzania.
2. To assess the effect of inadequate project planning and feasibility study on the government project failure in Tanzania.
3. To assess theeffect of poor risk management on the government project failures in Tanzania
	* 1. **Research Questions**
4. What is the effect of inadequacy and delay of financing on the government projects failures in Tanzania?
5. What is the effect of inadequate project planning and feasibility study on the government project failure in Tanzania?
6. What is the effect of poor risk management on the government project failures in Tanzania?
	1. **Theoretical and Practical Significance**

The study involved broad project management hence the findings are likely to assist project managers to evaluate their project management processes with the use of solemn project management methods in government projects.The project failures have been a continuing issue in many governments as most of past governments have been facing similar problem. Hence, studying Tanzania context benefit the government by revealing more information on project failures, why government projects fail, and how this failure adversely impacts national development and stakeholders. This assists the government being extra proactive in endowing project contracts in the future period.

The findings of the study reveal how country good political and economic standing assist in the effective help the poor projects and enhance development.This study also donates to theories of project failures, causes of project failures and the effects of project failures in the country. This is a viable contribution to both the academic, practical and project management field on which researchers can be able to expand upon.

* 1. **Scope of the Study**

The study covered TCAA head office only, and focuses only causes/factors leading to government projects failures, socioeconomic effects resulted from project failure and the measures for avoiding government project failure in Tanzania. The research surveyed only head office management and various project papers and reports indicating the nature of the projects, cost planned delivery dates and additional costs that can be associated with failure causing factors.

* 1. **Limitations of the Study**

The study faced limitation based on constraints of access to the information and time. The project officials were skeptical in disclosing their information on security and responsibility reasons. Majority of personnel who are directly or indirectly engaged in the projects, feared to be reveal about the realities turned out adversely.

The study was limited to a TCAA projects targeting management and other project responsible employees for generalizing the findings to the entire insurance industry and to meet academic calendar for study completion.

* 1. **Structure of Dissertation**

The study is organized into five chapters as follows: Chapter one is the introductory chapter that covers the background to the study, problem statement, purpose of the study, objectives, research questions, significance of the study limitations, delimitations, and structure of dissertation.Chapter two consists of theoretical and empirical literature review, conceptual framework, and gap of knowledge on government project failures factors.

Chapter three is the research methodology part. It focuses on the research outlook, data collection: population, sampling, research instruments, data collection, credibility (reliability and validity) and ethical consideration of the study. Chapter four involve presentation of data and analysis of results and findings while chapter five deals with summary, conclusion and implications and Chapter Five involve the summary of the study findings, conclusion and recommendations of the study.

# CHAPTER TWO

# LITERATURE REVIEW

* 1. **Chapter Overview**

This chapter reviews previous researches done on factors for government project failures research problem to get insight what others done and find to gain in-depth understandings of a research problem. The chapter comprises two (2) main sections. Section one discusses the theoretical framework discuses concept of government project failures, definitions of key terms and theories guiding the study. Second part includes systematic review of empirical literature, conceptual framework explaining relationships on variables and gap of knowledge and research gap.

* 1. **Theoretical Review**

The study involves various key terms which is defined below:

**2.2.1 Definition of Key Concepts**

**Project:**Barnes (1989) explains a project as “something which has a beginning and an end”. However, the more comprehensive definition of the project adopted by the study was from Andersen et al. (1987) who describe a project as a “human endeavor which creates change, is limited in time and scope, has mixed goals and objectives, involves a variety of resources and is unique” Therefore the term project in this study is been regarded as a work in which human, material and financial resources are planned and systemized together in an innovative way, to carry out a distinctive scope of work, of agreed specifications, in constrictions of cost and time, so as to attain positive changes well-defined by quantitative and qualitative objectives.

**Government:** Is the political direction and control exercised over the actions of the members, citizens, or inhabitantsof communities, societies, and states. (https://www.dictionary.com/browse/government).

**Government project:** Government project is an indefinite one, referring to a project which is funded by governments through tax revenues and is normally possessed, operated, maintained or implemented the state organs. This involves major infrastructures works like roads, bridges, dams, railways or public facilities like hospitals, schools, prisons etc.

**Project Management:** Numerous authors have provided different definitions of the concept of project management. Project Management Institute (PMI, 2008) Guide to the Project Management Body of Knowledge (PMBOK Guide) defines it as “the application of knowledge, skills and techniques to implement projects efficiently and effectively. It’s a strategic competency for organizations, enabling them to tie project results to business goals and thus, better compete in their markets. This means project management comprises planning, organizing, directing, controlling and monitoring of firm resources for planned certain specific objective and goal.

**Project failure:** Advocates of the traditional definition of project failure such as de Wit (1988), Kappelman et al., (2006) describe that project failure is the situation where project fail to meet the scope, set time, cost and requirement. This implies that a project is alleged to be failure when it fails to meet one and/or all scope, set time, cost, and requirement constraints.

* + 1. **Theories Pertaining the Research Problem**

This part discusses the theoretical block(s) that reinforce and supporting the current study to achieve the objectives. To begin with, it discuss the theories by providing its implications in the research problem. This helps the researcher to develop a theoretical framework for the research. For the purpose of this study two theories are employed Stakeholders Theory and Agency Theory.

* + 1. **Stakeholder Theory**

Stakeholder’s theory promulgated by Freeman in 1984, theory asserts that organizations have “an ethical duty to stakeholders above and beyond what is required by law and, in particular, ethical duties that require the firm to operate in ways that will foreseeably reduce long-term profits” (Fontaine et al., 2006). The basis of employing the stakeholder theory is based on project management perspective as it has large implications to people, organizations, project or businesses.

Though previously it was rarely used researches on project management field nevertheless, globalization and development in management field reveals the importance of stakeholders in the project. For example Elias et al., 2002; Pan & Pan, 2006; Sæbø et al., (2011) project management and project failures studies have been done using stakeholders theory. In that matter current study employs it to examine the different stakeholders related with Tanzanian government projects undertaken and their respective roles in project failures. This based on the fact that all government project undertakings are based on the stakeholder’s needs agitations and participation.

Based on literatures the project failures is likely to affect various stakes involved in the project including governments, investors, citizens, suppliers, employees, and customers (Elias, Cavana& Jackson, 2002, Ballejos & Montagna, 2008). According to Missonier & Loufrani-Fedida, (2014)these stakeholders give inputs to the organization and anticipate outputs from it hence failure of the project will make them act for or against the organizations/government. The implications of the stakeholders theory is largely based on its introduction of the ethics in management field including project. Thus stakeholder clue is normally offered the importance of stakeholder’s management and a system of incorporating ethical values into management decision-making which is the key of project management (Pawłowska, 2004).

The theory provides two approaches of the stakeholder analysis and stakeholder synthesis or identification whereby the poor analysis and synthesis of stakeholders has been cited by various management studies as one of main cause for project failure.Furthermore, theory assists in describing organization as a collection of co-operative and competitive interests who hold an essential value. The theory is an instrumental that offers the link among means to an end this useful framework in testing the linkages between stakeholder’s management practices and organization or project goal attainment. This means that stakeholder theory is managerial in nature essential in avoiding both private and government project failures.

The major strength of the Stakeholder theory based on the fact that, “project managers have to make decisions which takes the interests of the project stakeholders into consideration” Wicks, Freeman & Parmar (2004) indicate that the theory strength includes its emphasis to the project managers to consider the project stakeholders interests, firm and stakeholders’ interactions in maximizing project goals. Other theory strengths is also useful in solving contradictions and conflicts easily in project management as it considers and harmonize the different interests of project stakeholders. These include government, contractors, consultants, and citizens.

Ballejos & Montagna, (2008) also assert that stakeholder identification and analysis is among the key elements for any project success contrary to that project failure risk is high. Thus, from this process the project can determine how to work with their power, influence, and interest on the project goal. In addition to the theory, Mitchell et al. (1997) ascertain three main benchmarks in project stakeholders management of power(ability to influence the firm)*,* legitimacy(relationships among stakeholders and the organization based on contracts and legal title*,* and urgency(the extent to which managerial deferral in solving the claim that unacceptable to stakeholders). This has been sometimes not been considered by the government projects undertakings in many countries largely associated with inadequate stakeholders identification and analysis.

Despite of all positive contribution to this research the theory has been also faced with some weaknesses and criticisms. Missonier & Loufrani-Fedida, (2014) also indicates the weakness in Freeman’s stakeholder’s definition as narrow and ambiguous open to contain virtually anyone as it describe stakeholders as only those who bears a risk or put a risk due to firm activities. Jensen (2010) identify the stakeholder’s theory weakness argued that it fail to illustrate how management can be able to make decisions to attain stakeholders satisfaction as it contains different stakes and interest in organization or project. Thus, it can efficiently serves interests of management arguing that it is difficult for project managers to capitalize on more than one organization direction. Though, the value of Stakeholders Theory is huge in theoretical explanation, unfortunately it remains too hard in practical application. For instance, government and other stakeholders may be unwillingly participating into the project or their interests being not observed.

Despite of this weakness critics, the theory is largely assist this study to examine how the Tanzanian government projects failure is contributed by project stakeholders related factors as it well agreed that effective stakeholder’s management is key to project success (Yong & Mustaffa, 2012). Theory describes the significance of efficient engagement of stakeholders for which increases passionate to the project hence reduce the obstacles and increasing the responsiveness in the projects rising problem. This also supported by Saebo et al., (2011) assert that eliminating obstacles, attending with cropping project issues, sufficient capturing all stakeholders’ desires/wants and transforming them into the project, will result to their satisfaction and eventually successful project delivery. Therefore the stakeholder’s identification and analysis for the government project is crucial in minimizing the project failures risk.

* + 1. **Agency Theory**

The second theory employed by the study was Agency theory. The theory explains the need of bilateral relationships between principals and agents. According to Eisenhardt, (1989) the theory perspectives of positivist indicates that the principal and agent can possess a conflicting goals; this is useful in describing governance ways to lessen the self-serving behavior among the project stakeholders that leads to project failures.

Agency theory explicates the relationship among the principal and the agent once the agent has been engaged by the principal to make decisions and act on their behalf (Donaldson & Davis, 1991). Thus in most of the government project the ownership and control are hugely separated though the project said to be for citizen development. This result to low support of stakeholders to the project due to the agency problem arises due to agency *cost* (Cuevas-Rodríguez et al., 2012).

In many government projects the bilateral relationships among principals and agents have been not effective in most cases the principles (government) have been making project decisions without full analysis of the agency interest. In many government projects normally involve three separate stakeholders, namely the funding agency that not directly use the project outputs, the executing unit, and the target beneficiaries who benefit from the project outputs.

Therefore bilateral relationships must be centered financial accountability (funding) by project management as it crucial in completing the projects within the time, cost and quality. Second, because of the common developmental, cultural and knowledge gap between donors and the target recipients, the likely mismatch between the real needs and capacity of the target groups and the understanding and development policies of the funding agencies may result in poor project design, a precursor of failure in the implementation. Third, confounding the requirements for financial accountability are the efforts by the funding agencies and the governments of the recipient countries to establish rules and procedures to regulate the disbursement and utilization of the development funds.

Therefore, the implication of theory in the study is identifying the prudence of relationships in government projects base on bilateral relationships between principals and agents. The theory postulates that two or more interested parties involved in the project are led by their agreeing on the utmost effective contract which aligns their interest due information asymmetry. Forsythe et al.,(2015) studied information asymmetry in a constructing information modeling system in Australia revealed that particular Agency system may sometimes not provide identical information objectively. This is likely to create mistrust and unprincipled behavior; it as well leads to potential project failures risks.

The strength is based on the fact that **Agency theory has been useful framework for designing governance and controls in the project in the public sector. Secondly assist in** describing the relationship among principals (government) and agents (contractors and consultants) and designation of activities control of the project implementation.

The theory weakness is fails to describe measures for solving conflicts or individual behavior weaknesses in many government projects the bilateral relationships among principals and agents that results from the principle (government) making project decisions without full analysis of the agency interest. This normally creates conflicts between funding agency that not directly use the project outputs, the executing unit, and the target beneficiaries who benefit from the project outputs.

Various studies have been investigating reasons of project failure it has been one of the prominent been discussed in management field. It involves the academia, practicing managers, governments, and social commentators in the world. Most of the studies done reveal several causes of project failures. Frimpong et al., (2003) and Long et al., (2004) acknowledged 26 and 64 reasons of public project failures correspondingly.

In the contemporary world projects are exceptional and unique based on the major variances which exist across them (Mir & Pinnington, 2014). Therefore their causes for failure are normally unique to certain industries and the systems in the nations where are been undertaken, geographical locations and socio-cultural settings (Mukabeta et al., 2008, Ahsan & Gunawan, 2010). Nevertheless, the project management studies indicate that there are shared reasons. These embrace: project expertise or knowledge’s, financing, planning, communication, changes in scope and project area social socio-cultural factors (Fabian & Amir, 2011).

* + 1. **Planning of the Project Design**

Planning of the project design is considered as among the key elements of each project as to poor plan evidently likely to cause its failure. Academicians believe that is the most common difficulties which contribute to project failures. Patanakul, (2014) assert that when project deliverables and means of achieving have not been clearly outlined in the project planning phase, it will be very difficult to attain them hence project will collapse. This means that projects commenced lacking understanding its content, baseline/restraints that can hinder goals and objectives are prone to failure. Amponsah (2012) in the studying the root causes of project failures to the poor initial planning phase of projects. The findings indicate ineffectual planning was accountable to failures of most of investigated project. For example, in construction projects in Nigeria, researches shows that planning and scheduling is main reasons for delays and failures Fagbenle, et al. (2004). An alike research also acknowledged the similar Incorrect Cost Estimations, Culture or Ethical Misalignment, Little Communication at Every Level of Management, problem in the Iranian construction industry (Pourrastam & Ismail, 2011).

* + 1. **Resources Availability**

The concept of resources entails a very extensive area and may be categorized as tangible or intangible resources (Saxena Akash, 2016)). Most of the project undertakings consist financial, human, goodwill, reputations, know-how capabilities, and material resources. Researches in various contexts indicate that various projects been unsuccessful because of deficiency of, or insufficient resources availability. Material Resources involves insufficient the physical goods needed for the execution of a project and, their absence projects that requires physical deliverables cannot be executed. Hence, in most cases, projects failures are associated with lack of or inadequate physical resources. For example, in research into conflict in the Bygga Villa project, the study revealed among the main cause for conflict among project partners was the shortage of resources leading to project failure at initial stage (Pourrostam & Ismail, 2011).

This also in line with stakeholder theory indicating that there is need of the stakeholders to participate and play their key roles in the project management. This is similar to the current Bygga Villa project whereby some of the project stakeholders did not provide resources needed in the project executions. This implies that projects lacking the resources is likely to generate conflicts between different stakeholders involved in a project and as result leads project failure. Shahid et al., (2017) also assert that problem does not only involve insufficient resources and personnel skills; purchasing the right materials resources but also avenue to a project’s success. This is the indication of effects of inadequate funding on the government projects as most of the government projects are huge and needs sound financial support.

The similar project failure challenges of lack of proper feasibility study, inappropriate change control mechanisms insufficient resources and personnel skills; was found to happen in the Malaysian public construction projects (Sambasian & Soon, 2007). In Jordan financial difficulties encountered by contractors is the key factor accelerating the buildings construction projects failures in the sector (Sweis et al., 2008). On other hand the financial inadequacies is been contributed by contractors or implementers underbidding to win the tenders or contracts. The government construction projects in Nigeria faces the similar problem of financing. Researches in construction projects demonstrate that financial difficulties in government were the main reason for projects delays. In Iran, construction projects delivery suffers from deferrals sourced from contractors’ financial problems (Pourrastam & Ismail, 2011).

In some aspects the project failures is been enhanced with Human Resources scarcity in the projects leads to competing for the same human resources, and shortage of professional’s n the project management. In several circumstances, projects have to hire the foreign experts who are expensive leading to financial difficulties. A vibrant example is the case of Malaysia where a research indicates that causes of construction project failures in Malaysia indicates that inadequate workers and shortage of skilled workers accounts for project failures (Sambasian & Soon, 2007). In project lack of skilled workers in most of developing countries means that projects have to depend on foreign workers and, although foreign workers to undertake project activities.

The necessity for the right people for the right job is essential in project management as the project needs precise people with proper skills to appropriately implement projects and managing risks. One of research on project failure argue that the failure of several projects may be partly attributed to lack of skills. Statistically, Frank (2002) as cited by Hwang & Ng (2013) indicates that project managers possess a 34-47% direct effect on project success, and hence failure to employ, train and nurture the right project manager for a project’s management pave the way for failure.

* 1. **The Concept of Project Management**

The concept of project management involves the discipline of initiating, planning, executing, controlling at the same time as closing practice the project or a work to achieve the target of the project (Daniel, Andrew & Naomi, 2013). So to achieve the project objectives and goals the project designers have to take distinctive and sole steps to ensure the proper usage of project management methodologies to accomplish the target of the projects. Despite of PMM been developed from industrial practices and international standards to make sure a high rate of success and avoid the project failure still there are wide failures of the projects.

For example, Kaur & Sengupta (2013) assert that, the majority of the electrical, IT, mechanical, or construction project fail and unsuccessful because of the inappropriate selection and usage of the proper project management methodologies. Similarly, Whitney & Daniels (2013) also identify that, about 80% projects ends up as "failures" largely resulted from inappropriate introduction and usage of project management methodologies. Daniel, Andrew & Naomi, (2013) they also identified that, for last 50 years of research project management field research indicates projects success rates are persistently low with high impact at macro level and at a country level.

Among the important factors to avoid the project failure is the application of Project management methodology (PMM) that involves practices, and guidelines are vital information's which project managers need to be appropriately maintain, reflecting the most current knowledge's and guidance's to attain flourishing projects upshots. Hence, for project managers to realize the project goals they must consider the project management methodologies perspectives of Quality, Cost and Time (Daniel, Andrew & Naomi 2013).

This certifies that, the field of project management has been among of the most essential focus in project management and business field. Therefore, the choice and implementation of proper project methodologies is not only imperative but also crucial in achieving the project goals and objectives. From the earlier studies indicates that, there are a number of project methodologies and techniques which is supportive to evade the project failures (Saxena, 2016). Project management involves a methodological approaches to planning's and guiding project processes from start to finish such as cautiously planned and organized effort to accomplish a specific one-time task, what resources are needed, and associating budgets and timelines for completion.

While the literature has touted e-Government as a tool for combating corruption, no study has discussed so far how corruption could influence e-Government project failure. This article tries to fill part of this void in past research by proposing a contextual framework that highlights the role corruption plays in stimulating the failure of e-Government projects in developing countries. Informed by prior relevant literature on general systems, organizational information processing, corruption, as well as e-Government, the proposed framework argues that the prevalence of corruption in developing economies could restrict moral and governance capabilities of administrative systems overseeing e-Governments in a way that could lead to the failure of these entities to produce initiatives that meet stakeholders' expectation.

* 1. **Empirical Literature Review**

Government project failures rate continues to be an important issue with alarming rate despite the growing understanding of the concept of effective project management maturity and steady stream of successful projects. Burke (2013) study on project failure indicates that beside of the team and the project managers, the external and internal environments of the organization may affect the project’s success. In order to achieve government project goals a healthy environment is crucial. Thus, project can have both external and internal factors impeding the project efficiencies which needs project manager’s vision to ascertain the factors and plan to overcome the problems. The internal environment factors affecting the progress of the project include implementer culture, policies, technology, values and the procedural structure of the organization. However, the external environment factors involve rules and regulations of the government, local infrastructure and the accessibility of skilful worker for the project (Leach, 2014).

Leach, (2014) also argue that many projects often fail to attain their goals because of a numerous of problems ranging from inappropriate project design, poor stakeholder management, deferrals in project identification and startup, deferrals in project execution, cost overruns, and poor coordination’s. Amade et al., (2014) studying Nigerian project failure in construction sector indicates that public sector projects in emerging nation such as Nigeria is predisposed to regular failures related to their complements in the private sector. The causes for this failures are accredited to the deferrals in internal bureaucracy linked with most public service institutions. Furthermore he added that in Nigeria public project fails also caused by cost related issues such as poor estimations, poor risk management practices that always pivots on clear cut knowledge’s of emergency requirements and management.

Amponsah (2012) added public sector project management is more difficult in relating to the private project management as most the government projects executed in prone environment to conflicts. This comes from the fact that the government projects involves a wide range of stakeholders with different interests that sometimes cannot be met by the project as result project fails to meet its development objectives. According to KPMG (2013) project survey study government or public sector projects indicates that; projects are distinctively placed to bring highly-tailored home-grown resolutions, grounded on key intuitions expanded from earlier work related public sector worldwide.

A treasured mix of resident professionals’ leads to paramount project performs that delivers valued and justifiable strategies in enhancing the public sector needs. However, in the current time the public sector project is challenged with a countless of hottest and multifaceted challenges. Continuous public inquiry and the requirement for fiscal sustainability and a continual escalation in demand for enhancing public services contributes on governments seeking for new methods for balancing efficient delivery of services while considers budget.(KPMG, 2013).

Acknowledging the similar government project failure in Nigeria, Olapade& Anthony (2012) research manifested that project failures can be accredited to happen in part when the different part delays in reliable performing its primary stated objectives. Identified that construction project failures have been largely accredited to several problems extending from the usage of poor quality materials, inexperienced personnel’s, failing planned and designed feasibility studies; abandonment of the importance of project planning processes; shortage in implementing multifaceted projects; meager and unsteady designs; corruptions; deferrals in payments, etc. The Olapade & Anthony (2012) also found the significant relationship between shortage of change management, deprived communications, insufficient resources, ailing well-defined project requirements and inadequate project risk management.

Indicating the similar project failures in Libya, Omran, et al., (2012) conducted study in evaluation of the factors for success of government construction projects in Wadi Alhaya. The study surveyed 44 respondents through questionnaires. The results from using relative importance index discovered that ten (10) factors stayed critical to the achievement of success in public sector construction projects. They comprise; contractor’s experiences, project manager’s leadership skills, labour efficiency, team members quality relationships, shortage of materials etc. thus in contrary these has been a leading factors propelling the project failure in the sector.

Based on increased project failures in public construction projects in Malaysia Yong & Mustaffa (2012) endeavored to study the principal factors that could be critical to the success of particular sector projects. They employed questionnaires data collection methods and mean score analysis. The findings identified 15 key factors a means of delivering public construction projects to realization and effective delivery. These included; client’s financial capabilities, controls of contractor’s works, consultant’s competences, and consultant’s capability to resolve project arising problems, etc. thus shortages in fulfilling these factors has been the reason for project failures in the sector in the country.

The problem of public project failures has been widely observed in many countries including Pakistan. Saqib, et al., (2008) conducting the research in assessing the factors critical for construction project’s success in Pakistan. The findings acknowledged the failures were attributed in ten (10) factors hinders the success of construction projects. The factors included inappropriate decision making, project manager’s experiences, contractor’s cash flows, contractor’s experiences, and well-timed decisions by clients among others.

Baccarini & Collins (2003) studied factors critical to the success of public projects in Australia. The study adopted a survey method using questionnaire to draw responses from (150) respondents with descriptive statistics viz frequency distributions analysis done. The results exposed that project’s understandings, knowledgeable and experienced project team, communications pattern, realistic schedules and cost estimates as well as sufficient project controls were lacked by many public projects. Conclude that failures of these key drivers has been leading to project delivery failures in public sector.

Another study in causes and effects of project failure in Malaysian construction industry by Sambasivan & Soon (2007) recognized six (6) key effects. The study employed questionnaire survey to collect data from clients, consultants and contractors. Thus project results indicates following project failure factors lack of contractor’s experiences, poor project management, lack of professionals, poor communications and shortage of materials. These factors were found significantly correlate with time wastages, increased cost, and disputes among stakeholders, arbitrations, litigations and project total abandonments. Implying that, the effects of the project failures can be outlined to specific causes of the project failures.

In addition the study conducted by Ejaz, et al., (2013) assessed most critical success factors due to failures of public mega construction projects in Pakistan. Survey method with the aid of questionnaires was employed in eliciting responses from professionals in the sector. The results from the research identified the mega construction project lack; planning efforts and scheduling, sufficient financing, capability of the project managers to decisions making, sufficient planning and specifications, communications and information managing, timely decisions making by government. Hussain et al., (2017) study on Critical Delaying Factors: Public Sector Building Projects in Gilgit-Baltistan. The study aimed at highlighting and ranking delaying factors in the Annual Development Programme public sector building arrangement projects using a relative importance index. 102 respondents participated in the study their information collected through questionnaires.

The findings revealed that problems in funding projects by contractors, deferrals in progress disbursements, disputes on land usages, inappropriate project feasibility studies, awarding projects to the lowermost bid amount, risky weather conditions, insufficient contractors’ experiences, and inadequate data gathering and survey prior project designing were the project delay factors leading to its failure.

Opawole, et al. (2013) studying Critical failure factors in road infrastructure development in the period of 1999 and 2008 in Nigeria. The study scrutinized road infrastructures development in Osun State, using structured questionnaire distributed to 74 construction professionals and 32 financial managers and directors in the public service. It also surveyed (17) road projects budgeted for implementation in particular study period. Data attained involves descriptive analysis through percentage and relative significance index. The findings showed poor execution incidences of road projects in the State which is associated to communication, financing and coordination’s matters. Results from the study offer information for change course of budgeting for road infrastructures developments in developing economy where road infrastructure financing rely on public financing.

Asad, et al. (2017) studying the Reasons for the failure of government IT projects in Pakistan after the introduction of information technology (IT). The study conducted through reviewing various literatures 20 articles from journals and conferences in the period of 10 years from 2003 to 2013. The results indicate that four reasons for the failure of IT projects in government sector in the country. The reasons involved Technology, Management, Politics and Finance issues. The study identify technology issues must be provided with newest ICT infrastructure with an experts to operate while management have to hire an experienced, skilled and highly motivated project managers to accomplish the it. Government must make new laws and regulations to aid the execution the projects consequently eradicate bureaucracy any power struggles in execution. However the budget allocated prior commencing the project to ensure timely completion of the project.

Another study by Opawale, et al., (2013) conducted in 2000 on government infrastructural development exposed that prior 1999, Nigeria was wasting almost around $265 million through various illegal procedures in the awarding of construction contracts done by government officials. These illegal practices was in terms of increased contract sums, usage of unqualified contractors, over-invoicing, giving contracts in deprived of budgetary provisions and furthermost deviation of construction contract funds to individual pockets. These contributed to significant failures of such government projects and consequent abandonment.

* 1. **Gap of Knowledge**

The theoretical and empirical literature reviewed shows that many studies have been conducted to determine the government project failures in various countries. These literatures have demonstrated common trends of the factors leading to projects failure in most of countries despite of variations in development, technology, policy and political ambitions. Literature identified a number of factors that cause projects to fail related to expertise or knowledge’s, financing, planning, communications, management, resources, scope change, socio-cultural setting and stakeholders involvement (Kaliba et al., 2009; Ochieg& Price, 2010; Pourrastam& Ismail, 2011; Opawale, et al., (2013); Damoah, 2015; Asad, et al.2017; Hussain et al., 2017).

However, this cannot be similar in all countries as the projects are unique due to the fundamental variances which exists across them including variations in contexts, respondents skills and experiences, moreover no project is alike to another. As studies confirmed that diverse respondents have dissimilar views when it arises to the virtual significances of particular causes (Pourrostam& Ismail, 2011). The study addressed the following theoretical gaps derived in Agency theory and stakeholder’s theory. Though Agency theory enlightens how best to establish relationships in which one party (principal) determines the work and which other party (agent contractor) performs or makes decisions on behalf of the principal but this described relationship has resulted to conflict leading government projects failures (Jensen &Meckling, 1976; Schroeder et al., 2011). This creates the theoretical gap been addressed by the current study.

Despite of stakeholder’s theory describing the consideration of the project parties’ interests important in realizing the project goal still the project failures continues. This creates the theoretical gap to examine by the study what happening in consideration of the stakeholder’s interests (contractors, consultants and project owners) in the government projects. Yet in Tanzania there is no study done in the examining what are the most reasons for government project failures in aviation sector compared to other sectors development projects.

Therefore the current study assessed what are underlining factors of government project failures in the Tanzanian context by surveying public aviation sector. This is to reveal and distinguish the reasons or factors associated with government project failures. Based on the project being not unique in different performing countries’ economic and administrative systems, geographical localities and socio-cultural settings.

* 1. **Conceptual Framework**

Under this section dependent variable and independents variables have diagrammatically linked together to get the true depiction of the research together with definition of the terms. This conceptual framework is interconnected set of ideas about how particular phenomenon functions or its related parts. It shows the causal or correlations pattern of interconnections across events, ideas concepts and knowledge as follows;

**Independent variables Dependent variable**

Inadequacy and delay in financing resources

Government project failure

Inadequate project planning and feasibility study

Poor risk management

Figure 2.1: The Conceptual Framework Showing Variable Graphical Relationship

**Source:** Researcher 2020

* + 1. **Dependent Variable**

The study dependent variable is government projects failure that is resulted from various independent variables associated with government projects failure.

* + 1. **Independent Variables**

Are those variables that the researcher has control over. Control may involve manipulating existing variables, modifying existing methods of instruction or introducing new variables in the research setting. The study involved three independent variables which are inadequacy and delay of financing, inadequate project planning and feasibility study, and poor risk management. To express the statistical relationship between the independent variable and dependent variable, the computation of regression coefficients were done using SPSS computer programme.

# CHAPTER THREE

# RESEARCH METHODOLOGY

* 1. **Chapter Overview**

The current chapter explains in detail on how the research has been organized, structured and conducted to provide meaning full information to the users. This includes provides research design, types of data, sources of data, data collection strategies, sample size and sampling procedures, data analysis strategies, validity and reliability and finally, ethical considerations.

* 1. **Research Philosophy**

Research philosophy refers to the assumptions and beliefs, which governs the manner we view the world involving positivism, interpretive and critical philosophies (Saunders et al., 2007). The positivist studies generally attempt to test theory (Mackenzie & Knipe 2006, Creswell, 2014) and are most commonly aligned with quantitative methods of data collection and analysis; and so they are usually quantitative research. For the current study positivism philosophy used in studying the project performance in relation to Government project failure. The positivism philosophy chosen as it grasps that “knowledge is based on natural phenomena and their properties and relations and interpreted through reason and logic, forms the exclusive source of all certain knowledge reality of the world is thought to arise out of the creation and exchange of social meaning during the process of social interactions” (Saunders et al., 2007).

The researcher used the positivism philosophy in assessing the effects of the project performance on the government projects failure in Tanzania. The philosophy was chosen in the perspective that, the required information under study behaves in the natural phenomenon where the researcher would collect such information, interpret and analyse the findings in logical reasoning(Saunders et al., 2007). Positivism approach have the attribute of manipulating and predicting the relationship between the dependent variable with the independent variables and through multiple regression analysis the relationship between project performance and the public project failure.

As the result of positivism approach, the study will obtain in depth information on public project management procedures in relation to the reasons which leads to the failure of such projects.

* 1. **Study Area**

The study was conducted in Dar es Salaam region in Tanzania. The Tanzania Civil Aviation Authority (TCAA) was the case study used to survey the factors for government projects. The case of study selected because it represent the typical delay/failure of organization projects. Moreover, the case of study is convenient for researcher in terms of data collection process and access of project data as researcher works at TCAA.

* 1. **Research Approach**

This study adopted quantitative approach which intended to explore in-depth information regarding TCAA projects failures. The quantitative approach emphasizes objective measurements and the statistical, mathematical and numerical analysis of data collected from questionnaires and survey of financial statistics (processed data) using computational techniques, such as frequencies and percentages.

* 1. **Research Design**

According to Kumar (2015) research design is the logical and systematic planning and directing the research work, it is comprehensive plan for data collection in any empirical research design. Being quantitative in nature the study employed exploratory design. Exploratory design refers as a study design that formulates a problem for more precise investigation or of developing the working from an operational point of view for discovery of ideas and insights (Kothari, 2004). Exploratory design helped to determine why and how the project government failures are happening from the identified factors in the study. Moreover, the design is useful in concept testing and allows multiple uses of secondary and primary data; it helps researchers to uncover latent causes to the problem.

* 1. **Population of the Study**

According to Kothari (2009), target population refers to the total number of elements of a specific population having common observable characteristic relevant to a research project. The population of the study involved TCAA employees.The TCAA have 451 direct employees (Annual report for the year ended 30th June 2019). However, the researcher used the purposive sampling and the simple random to sample frame of 170 employees who are directly involved in the TCAA project works planning, implementation, and management. This sample frame was selected for the reliability of information about the respective projects.

* 1. **Sampling Procedure and Sample Size**

According to Sekaran (2000), sampling is the process of selecting an appropriate number of sample units in a population in order to make it possible to do generalizations for the study. Based on time, cost and logistic, and human resources factors, this study used purposive sampling technique to select 7 management staff from five departments/sections who are dealing with the project directly. However, the remaining 163staff respondents were selected through random sampling method from the TCAA sampling frame. The benefit of using this method; it allows a researcher to include management and employees believed to have good backgrounds in TCAA project undertakings hence easy for them to identify the causes of project failure or delay at TCAA.

Moreover the simple random sampling was used to select respondents from other category of employees at TCAA from sampling frame. The simple random sampling technique were used as, it provides room for each member of the population and equal probability of being selected to participate in the study, so it reduces bias in participating in a research. The method provided a highly representative sample of the population being studied and useful in making generalizations of the population as it has external validity.

* 1. **Study Sample Size**

This study employed Slivanus (2004) formula in computing the sample size of respondents to participate in the study. The sample frame for this study was 170drawn from target population above. Thus, the sample size can be computed as indicated here under:

Sample size, n =

Where by:

n = Sample size required

N = Total number of population target

e = Level of significance at 0.05 (95%) or the standard error

By using the above formula, n =

 n = 119.2982456 ~120

 Therefore n=120

Despite of the expected study respondents being 120 the actual participated respondents were only 109, some were not able to return the questionnaires.

* 1. **Types of Data**

## The study will involve both primary and secondary data as follows:

# Primary Data

# These are raw data which was collected for the first time from TCAA staffs. It included researcher conversations with the respondents by using interview and note down each and everything stipulated in the interview guides.

# Secondary Data

Secondary data is kind of data which is collected and processed by other people for different purposes, these are second hands information. In this study, secondary data involved financial information, contracts other information data related to project paper and project reports.

Other secondary data was obtained from published and unpublished journal and reports from internet and library sources. The document to be reviewed helped to understand how the TCAA manage their government financed projects. Furthermore, the secondary data is very fundamental for researcher to understand financial implications of the projects and be familiar with the government projects failure research problem being studied.

* 1. **Data Collection Methods and Instruments**

The data collection for this study involved various methods and instruments as described below.

* + 1. **Questionnaire Survey**

The questionnaire survey were used to collect study data from other cadre of TCAA staff respondents including supervisors, and other staffs. The one hundred and twenty (120) structured questionnaire were prepared and used as instrument of quantitative data collection on Government/Organisation projects failure. The questionnaire as an instrument of data collection provided quantitative data from respondent’s views on factors contributes Government projects failure. The rationale of choosing questionnaire as an instrument of data collection based on its merit of being easier to administer and having minimum chances of occurring biases. Therefore, it allowed drawing of valid inferences from the population of the study.

* + 1. **Variable Measurements**

To measure the factors for government projects failures and effects of particular government projects failure used Ordinal scale measurement. This included 5 point Likert Scale ranging from strongly disagree to strongly agree. This allowed comparisons of the degree to which independent variables influence the dependent variable. The ordinal level of measurement of variables determines the correlations statistical analysis in the study.

Table 3.1: Variable Measurements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Types of Variable** | **Name of Variable** | **Definition of variable**  | **Measurement** | **Descriptive tools** | **Inferential tools** |
| Dependent Variable | Government project failure  | Project performance is beneath expectations and the contract is not apprehending the loss of the value of the service, | Likert scale | FrequencyPercentage | Simple/multiple linear regression |
| Independent Variables | Inadequacy and delay of fundingInadequate project planning and feasibility studyPoor risk management | Insufficient funds to complete projectsDelayed paymentsUnnecessary variationsBudget overrunsProject design and scope changesFailure to respond to unforeseen events | Ordinal scale measurement Ordinal scale measurement Ordinal scale measurement  | FrequencyPercentageFrequencyPercentageFrequencyPercentage | Simple/multiple linear regressionSimple/multiple linear regressionSimple/multiple linear regression |

**Source:** Researcher construction 2020

* + 1. **Data Analysis**

Based on the nature of this study as being exploratory study, respondents were analyzed through descriptive analysis and correlation method. Whereby the raw collected data was broken down into categories, coding, summarized and then transformed into standard themes to answer research questions. The quantitative data analysis utilized the inferential statistics which is the linear multiple regression which is used to analyze the strength and direction of the relationship between independent variables and dependent variable.

**Descriptive Analysis:** This analysis method describes the data and analyzes the relationships between variables in question (Marczyk et al, 2005). The quantitative procedures were used to help the tools in analyzing the data to realize the relationship between the dependent variable and independent variables. Data was analyzed by descriptive analysis with frequency distributions, measure of central tendency which includes mean and median, measure of dispersion which used standard deviation and the range.As Marczyk et al (2005) declare, the descriptive strategies are particularly useful because they help reduce the impact of unwanted bias even in times where the researcher is not aware.

**Correlation:** Correlations are the measure which provides information about the direction and magnitude of variables in question. The direction is indicated by the sign (negative or positive) while the magnitude of relationship is shown by the value (from 0 to 1). This analysis was conducted to establish the direction and intensity of the relationship between independent variables, being inadequacy and delay of financing, inadequate project planning and feasibility study and poor risk management; and dependent variable which was government projectsfailure.

The Spearman Correlation (rs) was used to examine associations between the variables that were measured on categorical scale. Tests of correlations establish whether the correlation is statistically significant and allow us to estimate the likelihood that a relationship between variables in a sample actually exists in the population and is not simply the result of chance by the measure of significance.

3

**Multiple and Simple Regression:** The regression was used to predict the values of dependent variable by the existing set values of independent variables. By the use of simple regression, the researcher predicted the relationship between dependent variable with a single independent variable while multiple regressions were used to predict three independent variables applied to predict the dependent variable. This study has three objectives which correlate to three identifiable research questions. In objective one, the researcher attempted to find out the impact of inadequacy and delay of financing on failure of government project where simple regression analysis *Y = ß***0**+ *ß*1*X* was used where *ß***0** and *ß***1**are coefficients of regression. In mathematical correlation, *ß***0**is the intercept of the variable Y and *ß***1** is the slope/gradient of the regression line, as such, it represents the way in which Y relates to X.

The second objective was to assess the impact of inadequacy project planning and feasibility study on failure of government project while the third objective was to assess the impact of poor risk management on failure of government projects and both used the same simple regression model as the first specific objective

The study also carried the multivariate analysis to assess the impact of one independent variable to the dependent variable in presence of other independent variables. Mathematically, the general regression analysis formula is represented as;

FGP = *ß****0****+ ß****1*** *IDF****+*** *ß****2*** *IPPF****+****ß****3****PRM****+*** *e***.**

**Where;**

FGP = Failure of government projects

IDF = Inadequacy and delay of financing

IPPF = Inadequacy project planning and feasibility study

PRM= Poor risk management

*ß****0 =*** Is the FGP intercept which is a constant being a dependent variable value, while all other

Independent variables remain 0.

*ß****1,*** *ß****2*** &*ß****3*** = these are regression coefficients/constants of independent variables of FGP**,** IDFand PRMin relation to FGP.

*e* **=** the error term

* + 1. **Analysis of Variance (ANOVA)**

By the use of the Statistical Package for the Social Sciences (SPSS), the researcher performed the analysis of variance test (ANOVA)applied to test significance of relationship between variables. This test is used to test the intensity by which the variables means differ from each other as suggests (Singh, 2006; Marczyk et al., 2005).The researcher used ANOVA in order to check the impact of independent variables through their means to the dependent variable. ANOVA has the advantage to the mean test on the way it could test the relationship of different means of different population while mean test tests the means of one population. Also the ANOVA technique increases the statistical power of analysis and reduces random variability between the variables.

The weakness of ANOVA testing is such that, it requires all the population means and variances from each data group to be equal. Also the technique requires the data used to be normally distributed and the items of inquiry should be obtained through simple random data sampling technique.Through ANOVA technique one can, in general, investigate any number of factors which are hypothesized or said to influence the dependent variable(Kothali, 2004). By the use of inferential statistics techniques such as ANOVA test and regression coefficients, the researcher is equipped with requisite tools to generalize the results of the sample to the population from which the sample was drawn.

* 1. **Validity and Reliability**

Issues of validity and reliability were taken into consideration in the study in order to ensure that the data is consistence and what is studied is what was supposed to be studies.

* + 1. **Validity**

The validity refers as degree of extent to which the data reflects to what it was supposed to explain and measure (Kothari, 2005). For quality control, a pre-test of instrument were done to few TCAA employees to give their opinion on the relevance of the questions. Furthermore, the variables and concepts embraced in theories and empirical literature assist to improve validity as well as consultations from supervisor.

* + 1. **Reliability**

Kothari (2009) define reliability as the degree to which an instrument measures the same way each time it is used under the same conditions with the same subjects. The study conducted a pre-test using questionnaire to make sure that it provides consistent results in a repeated time for the same respondent. The results of pre-test assisted researcher to improve the instrument of data collection and thereafter, utilize it in conducting data collection.

* 1. **Variables and Measurement Procedures**

In essence, there are two types of data commonly used in social research; qualitative and quantitative. It is alleged that, a good research effort considers the use of both types. Both approaches, in spite of their being distinct, can overlap and rely on each other in such a way as to give out not only meaningful data, but also reliable analysis and results (Ontario Human Rights Commission-OHRC, 2010).As per Kumar (2011), measurement is central to any enquiry.

In addition to the ideology and philosophy that underpin each mode of enquiry, the most significant difference between qualitative and quantitative research studies is in the types of measurement used in collecting information from the respondents. Further on, Kumar argues that, qualitative research mostly uses explanatory statements to seek answers to the research questions, whereas in quantitative research data are measured through the measurement scales (nominal, ordinal, interval or ratio). The greater the refinement in the unit of measurement of a variable, the greater the confidence placed in the findings by others, other things being equal (Kumar, 2011).

* 1. **Ethical Issues**

To make sure that the study is ethical the informed consent ethics were done by presenting an introduction letter from Open University of Tanzania to seek the consent of the TCAA authority’s permission of conducting survey and accessing various projects documents. Moreover, each interview sessions started with introduction briefing respondent’s aim of the study and self-introduction of the researcher to the interviewee. The researcher requested for the respondent’s cooperation in providing the essential information for the study. The respondents were guaranteed confidentiality of the information provided and that explained that the information is only for academic purposes uses. Respondents were assured of their personal protection and that they had authority to refuse or accept to be interviewed.

# CHAPTER FOUR

# DATA PRESENTATION, ANALYSIS AND DISCUSSION OF THE FINDINGS

# Chapter Overview

This chapter presents the analysis findings of data obtained from the field. The chapter includes the findings from descriptive statistics (frequencies/percentages) findings of demographic characteristics of the respondents. Also the Pearson correlation findings of the specific objectives that include findings on causes/factors leading to government projects failures, the socioeconomic effects resulted from project failure and **identified** measures for addressing government project failures in Tanzania. The interpretation done in terms of the strength of relationship using the values of the correlation coefficient varies between -1 and +1 and Correlation Coefficient Significance level (Sig. 0.05).

# Response Rate

From the sample of 120 employees working in Tanzania Civil Aviation Authority (TCAA) supplied with questionnaires, only 109 respondents returned the filled questionnaires which are 90.8% of the total sample. This completion rate is recommendable and acceptable as is above the one recommended by Mugenda and Mugenda (2003) who recommended 70% return rate.

**4.2.1 Reliability Analysis**

The reliability testing is done to assess the consistence of results in relation to different times and sample used from the same population. It is the measure how close the measures to the items intended to measure. The reliability is measured by the Croncbach’s alpha test where the closer the Cronbach’s alpha coefficient is to 1.0 the greater the reliability of variables under study. The closer to one the Cronbach’s alpha value is, the more reliable the value it is and it is showing that more likely all the variables to be measuring the same construct.

Table 4.1: Reliability Analysis

|  |
| --- |
| **Reliability Statistics** |
| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
| .793 | .779 | 3 |

**Source:** researcher, 2020

Table 4.1 presents the reliability test coefficients whereas; inadequate project planning and feasibility studies, poor risk management, and insufficient and delays of financing resources; with the value of 0.793 indicating that the reliability is at adequate level to indicate the variables having strong internal consistency of instruments used in data collection.

Table 4.2: Inter-Item Matrix

|  |
| --- |
| **Inter-Item Correlation Matrix** |
|  | Inadequate project planning and feasibility studies | Poor risk management | Insufficient and delay of financing resources |
| Inadequate project planning and feasibility studies | 1.000 | .399 | .082 |
| Poor risk management | .399 | 1.000 | .025 |
| Insufficient and delay of financing resources | .082 | .025 | 1.000 |

**Source:** researcher, 2020

There is a weak correlation between inadequate planning with insufficient and delay of financing resources (0.082), and there is weak relationship between with insufficient and delay of financing resources and poor risk management (0.025). The relationship between poor risk management and inadequate planning (0.399) is adequate to reveal their impact to the dependent variable (project failure).

Table 4.3: Items-Total statistics

|  |
| --- |
| **Item-Total Statistics** |
|  | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
| Inadequate project planning and feasibility studies | 6.9725 | 2.490 | .341 | .165 | .749 |
| Poor risk management | 7.1468 | 3.145 | .314 | .160 | .718 |
| Insufficient and delay of financing resources | 7.0917 | 4.214 | .066 | .007 | .856 |

**Source:** researcher, 2020

The results under table 4.3 indicated the effect on Cronbach’s alpha when one variable is removed at a time. Removing inadequate project planning and feasibility studies will lead to the alpha of 0.749 which has no effect to the general Cronbach alpha (0.793). Removing poor risk management would lead to the alpha of 0.718 which has very minimal effect to the general Cronbach’s alpha. On the other hand, removing the insufficient and delay of financing resources from the model would result to the alpha of 0.856 which is improved one compared to the original Cronbach’s alpha of 0.793.

# Respondents Demographic Profile

The study contained different demographic characteristics of respondents obtained in the study area. It focuses on respondents’ Gender, Age, Education level/Academic qualifications, experience, and Occupation. The demographic characteristics have been important information in understanding the project failure problems in TCAA.

* + 1. **Respondents Gender Pattern**

Table 4.4: Respondents Gender Pattern

|  |
| --- |
| **gender** |
|  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Male | 73 | 67.0 | 67.0 | 67.0 |
| female | 36 | 33.0 | 33.0 | 100.0 |
| Total | 109 | 100.0 | 100.0 |  |

**Source:** Research findings, 2020

From the findings shown in Table 4.3, indicates the participation of all genders males and female. The female participated were 36(33%) and male respondents participated were 73(67%) This indicates male respondents dominated the study suggesting the presence of gender disproportion at TCAA.

* + 1. **Respondents Age Pattern**

Table 4.5: Respondents Age Pattern

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Frequency** | **Percent** | **Valid Percent** | **Cumulative Percent** |
| Valid | 18 -30 years | 25 | 22.9 | 22.9 | 22.9 |
| 31 -50 years | 70 | 64.2 | 64.2 | 81.7 |
| Above 50 years | 14 | 12.8 | 12.9 | 100.0 |
| Total | 109 | 100.0 | 100.0 |  |

**Source:** Research findings, 2020

However, the study also comprised respondents with different ages. Figure 4.4 above indicates that respondents with age between31-50 years were more participated comprised 70 (64%). This age group followed by respondent with age between 18-30 which comprised of 25(22.9%) While the least age group of respondents were with the age above 50 years old which comprised of 14(12.8%) while least age group of respondents were between 18-30 years which comprised of 10(19.6). This result implies that most of the respondents who were involved in the study were in have substantial age reflecting the high experiences on government projects.

* + 1. **Respondent’s Academic Qualifications**

Table 4.6: Respondents Academic Qualification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Frequency** | **Percent** | **Valid Percent** | **Cumulative Percent** |
| Valid | Certificate/Diploma level | 23 | 21.1 | 21.1 | 21.1 |
| Bachelor Degree | 65 | 59.6 | 59.6 | 80.7 |
| Postgraduate Diploma/ Maters Degrees | 21 | 19.3 | 19.3 | 100.0 |
| Total | 109 | 100.0 | 100.0 |  |

**Source:** Research findings, 2020

Education level is an important in understanding the projects dynamics in both private and public sectors and determinant in participating in government projects. Figure 4.5 above reveal that more than a half of respondents 65(59.6%) respondents possessed a bachelor degree in various disciplines followed by 23(21.1%) of respondents possessed certificates and diploma while 21(19.3%) possess master’s degree in various disciplines. Findings indicate that the majority of respondents have a university level of education implying that the respondents were well equipped and understanding with the issues relating to government projects dynamics. Hence they provide the perfect and relevant information sought for the study.

* + 1. **Respondents Working Experience at TCAA (in Years)**

Table 4.7: Respondents Period been Working with TCAA (in years)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Frequency** | **Percent** | **Valid Percent** | **Cumulative Percent** |
| Valid | Below 5 years | 37 | 33.9 | 33.9 | 33.9 |
| 5 -10 years | 52 | 47.7 | 47.7 | 81.6 |
| Over 10 years | 20 | 18.4 | 18.4 | 100.0 |
| Total | 109 | 100.0 | 100.0 |  |

**Source:** Research findings, 2020

Respondents were asked to indicate for how long they have been with TCAA the results in figure 4.6indicates that most of respondents 52(47.7%) of respondents have been working with TCAA for the period between 5-10 years. This followed by 37(33.9%) respondents worked for a period of below 5 years. While 20(18.4%) respondents worked for more than 10 years. The findings indicate that most of the respondents have been with TCAA for the period of 5years above72(66.1). This suggests that the respondents had enough experience with TCAA that make them witness the organization project implementation hence provides them substantial experiences. This was significant criteria for valid and reliable information needed for the study.

* + 1. **Criteria used to appoint the Project Managers or Involved In Project Management**

Table 4.8: Criteria used to appoint the Project Managers or been Involved In Project Management

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Frequency** | **Percent** | **Valid Percent** | **Cumulative Percent** |
| Valid | Possessed authority and power to control the project | 9 | 8.3 | 8.3 | 8.3 |
| Knowledge and skills in project management | 55 | 50.5 | 50.5 | 58.8 |
| Project management experience | 14 | 12.8 | 12.8 | 71.6 |
| Technical competence | 31 | 28.4 | 28.4 | 100.0 |
| Total | 109 | 100.0 | 100.0 |  |

**Source:** Research findings, 2020

The study examined what criteria have been used in selecting or appointing the project managers or stakeholders in project management. The findings in figure 4.7 shows that the most major criteria been considered were staff knowledge and skills in project management55(50.5%) that assist in ability of overseeing the project implementations. The technical competence 31(28.4%) has been also identified to second major criteria been considered for staff involvement in the government project followed by project management experience of staff14(12.8%) this involves skills and abilities in managing the various project activities such as engineering, civil works, management, accounting etc. Possessed authority and power to control the project9(8.3%) that involves representation based on the rank such as been in management team or engineering cadres.

The findings indicates that the employees involvement in project managing and supervision depends on diverse criteria though there are guidelines that stipulate that for engineering or construction IT projects, should involve professionals in related field to represent organization in the public project implementations. This also identified by Amade, (2014) investigating containing failure and abandonment of public sector construction projects in Nigeria assert that for the effective project management needs the full equipped professionals in project management and various project activities based on the nature of the public sector projects been executed.

* + 1. **Areas For TCAA Staff Involvement in the Project Implementation Process**

Table 4.9: Areas for TCAA Staff Involvement in the Project Implementation Process

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Planning process | 58 | 53.2 | 53.2 | 53.2 |
| Designing project | 10 | 9.2 | 9.2 | 62.4 |
| Project scope changes | 9 | 8.3 | 8.2 | 70.6 |
| Project management and supervision | 22 | 20.2 | 20.2 | 90.8 |
| Monitoring and evaluation of project activities | 10 | 9.2 | 9.2 | 100.0 |
| Total | 109 | 100.0 | 100.0 |  |

**Source:** Research findings, 2020

TCAA staff involvement in the project implementation process is one of key factor in ensuring the project management for avoiding the project failures. The study identified various areas whereby the staff are involved in the government projects at their organization stipulated in figure 4.8 as follows; most of respondents 58(53.2%) identified that staff are getting involved in project planning process followed by involvement in project management and supervision process 22(20.2%). Respondents 10(9.2%) also identified to involved in designing project and 10(9.2%) also identified staff are been involved in the monitoring and evaluation of project activities. However few respondents 9(8.3%) mentioned that the TCAA staff are getting involved in the project scope changes.

* + 1. **Achievement of Government Projects at TCAA Organization Goals in Relation to the Following Project Aspects**

Table 4.10: Achievement of Government Projects at TCAA Organization Goals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Frequency** | **Percent** | **Valid Percent** | **Cumulative Percent** |
| Valid | Cost maintaining | 14 | 12.8 | 12.8 | 12.8 |
| Time of delivery | 39 | 35.8 | 35.8 | 48.6 |
| Deliverables of outputs | 26 | 23.9 | 23.9 | 72.5 |
| Stakeholder satisfaction | 11 | 110.1 | 10.1 | 82.6 |
| Contribution to national development | 19 | 17.4 | 17.4 | 100.0 |
| Total | 109 | 100.0 | 100.0 |  |

**Source:** Research findings, 2020

Project achievement can be observed in various aspects ranging from cost, time management, outputs and satisfactions. The study examined achievement in various government projects aspects been implemented at TCAA. The findings figure 4.9 indicates that there is significant achievement in time delivery which is identified by 39(35.8%) respondents, followed by deliverable outputs 26(23.9%), contribution to national development identified by 19(17.4%). Furthermore cost maintaining 14(12.8%) and achievement observed in stakeholder satisfaction was the least achievement aspect identified by 11(17.4%) respondents.

The findings suggest that generally the achievement on government projects implemented by TCAA have not successfully achieved as still there is some untimely delivery of project outputs, variations in cost maintaining leading to poor customer or organization satisfaction. Though in few cases the late completion of the projects have significantly contributes to national development. This also observed in the study done by Shahid et al., (2017) investigating critical delaying factors: public sector building projects in Gilgit-Baltistan, Pakistan that revealed that most of government projects have failed to achieve its delivery goals in terms of time agreed, cost maintaining and quality project outputs.

* + 1. **Testing of Assumptions**

According to Curran-Everett and Benos (2004), it was elaborated that scientific literatures not free from statistical areas and Field (2009) further added that approximately 50% of the articles published contain at least one error in it. Most statistical techniques like regression, correlation, t-test, and analysis of variance (ANOVA) are operated basing on the assumption that the sample in question and population from which the sample was drawn are normally distributed. The assumptions are made so as to generalize the results from the regression statistics to represent population parameters.

* + 1. **Test Of Autocorrelation Assumption by Durbin–Watson Test**

Autocorrelation is the measure of independence between two residue terms (Field, 2009). This assumption is measured with the aid of a Durbin–Watson test of correlation where the terms need to be uncorrelated or independent. The test statistic can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated. A value greater than 2 indicates a negative correlation between adjacent residuals, whereas a value below 2 indicates a positive correlation (Statistics Solutions, 2013). With the results in Table 4.11 it was found that the Durbin-Watson value‘d’ was 1.513, which lays within acceptable values and thus assumed that there were no first order linear auto-correlation errors in the multiple linear regression data, implying that the regression model was correctly specified with uncorrelated variables and allegedly enhancing its accuracy.

Table 4.11: Measures of Autocorrelation Assumption-Durbin Watson

|  |
| --- |
| **Model Summaryb** |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .774a | .599 | .759 | 3.21299 | 1.513 |

**Source:** researcher, 2020

**Test of Multicollinearity:** Multicollinearity is the assumption through which the independent variables need to be not correlated. It is the measure of the extent to which a variable can be explained by the other variables in the analysis ([Hair Jr](https://www.amazon.com/s/ref%3Ddp_byline_sr_book_1?ie=UTF8&field-author=Joseph+F.+Hair+Jr&search-alias=books&text=Joseph+F.+Hair+Jr&sort=relevancerank), [Black](https://www.amazon.com/William-C.-Black/e/B00L3O86RG/ref%3Ddp_byline_cont_book_2) & [Babin](https://www.amazon.com/Barry-J.-Babin/e/B006L2RG4E/ref%3Ddp_byline_cont_book_3), 2010). This is measured by the tolerance value and variance inflation factor (VIF). It is required that VIF should not exceed the value of 10 and tolerance value should not be less than 0.1, otherwise, it is suggested that there is possibility of multicollinearity problem.

As per the results below, the tolerance value for each independent variable is greater than 0.1; thus, it indicates that there was no violation of the multicollinearity assumption. This is also supported by the VIF threshold which is well below the cut-off of 10 thus indicating no concern with multicollinearity; thus all variables will be retained.

**Table 4.12: The Results of the Test of Multicollinearity Assumption**

|  |
| --- |
| **Collinearity Statistics** |
|  | **Tolerance** | **VIF** |
|  |  |  |
| Information flow/communication  | .648 | 3.312 |
| Technology | .911 | 1.111 |
| Policy framework | .558 | 4.376 |
| Speed and Timing | .987 | 2.709 |

**Source:** researcher, 2020

**Test of Homoscedasticity assumption:** Homoscedasticity usually depicts a situation where the error term in the relationship between the independent and dependent variable is the same across all values of the independent variables (Statistics Solutions, 2013a).  This assumption is measured by the aid of chi-square calculated value (expected) in relation to the chi-square observed value (critical). Whenever calculated chi-square is greater than critical chi-square at any chosen level of significance, the homoscedasticity hypothesis is rejected in favor of heteroscedasticity.

**Test of Normality:** Normality is the vital assumption in regression analysis for statistical inference. This is important in cases of confidence interval construction and on decision which measure, parametric or non-parametric to be used to analyse the respective data (Binder & Roberts, 2009; Carter Hill et al 2011). The Kolmogorov-Smirnov and Shapiro-Wilk test were used for testing normality. The Sig. value (p-value) of more than .05 indicates the normal distribution of variables. From the test where the researcher obtained p-value less than 5%(.000) which implies that the test was significant.

Table 4.12: Test of Normality

|  |  |  |
| --- | --- | --- |
| Variables | Kolmogorov-SmirnovaStatistic df Sig. | Shapiro-WilkStatistic df Sig. |
| Inadequate and delay of funding | .170 |  166 | .000 | .906 |  168 | .000 |
| Inadequate project planning and feasibility study | .147 |  166 | .000 | .910 |  168 | .000 |
| Poor risk management | .252 |  166 | .000 | .810 |  168 | .000 |
| Failure of government project | .199 |  166 | .000 | .858 |  168 | .000 |

**Source:** researcher, 2020

# Inferential Statistics

This analysis was done by the researcher to determine the nature and relationship between independent variables and dependent variable. Correlation and linear regression analysis were carried out and used to describe and measure the degree of association between variables or sets of scores. Pearson correlation coefficient was used to establish the direction and intensity of the relationship between independent variables and dependent variable. (Marczyk et al, 2005).

On further analysis, the linear regression model summary and analysis of variance (ANOVA) were generated and the estimates of outcome or a value on a dependent variable in relation to the values of one or more independent variables (Elliott & Woodward, 2007) The overall multiple regression eventually was done so as to establish the relationship between the dependent variable, failure of government projects and independent variables, inadequacy and delay in financing, inadequacy of project planning and feasibility study and poor risk management.

# Research Specific Objective One

# H0 “Inadequacy and delay of financing has no effect on the government project failure”

# Ha “Inadequacy and delay of financing has the effect on the government project failure”

Through null and alternative hypothesis, the study objective one relating to the inadequacy and delay of funding was tested. The hypothesis testing used the factors such as the delays and nonpayment of contractors, exhaustion of budgets before the project completion and the failure to commence projects which are committed to contractors. The findings indicate that;

Table 4.13: Model Summary for Inadequate and Delay of Financing

|  |
| --- |
| **Model Summary** |
|  | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .845a | .714 | .781 | .56118 |

**Source:** Researcher, 2020

The model summary indicated in table 4.13 has coefficient of determination (R-square) of 0.714. His high value of R-Square which means 71.4% of the variation in the government project failure is explained by the independent variable.The adjusted value of R-square of 0.781 which is likely more the same as the value of R-square off 0.714, this indicates the sample selected in the study was representative of the population under consideration. The higher percentage of efficiency of determinations explains the model to be fit and significant to explain the variables.

Table 4.14: ANOVA for Inadequate and Delay of Financing

**ANOVAa**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | .749 | 4 | 9.858 | 74.133 | .000b |
| Residual | 26.443 | 104 | .169 |  |  |
| Total | 27.193 | 108 |  |  |  |

**Source:** Research, 2020

Table 4.14generates ANOVA statistics relating to inadequacy and delay of financing where the results reveals that, there was a statistically significant difference between the variables’ means as generated by one-way ANOVA F(4,104) = 74.133, with significant level,*p* = .000.By using the p-value of 0.000 which is less than 0.05, the researcher rejects the null hypothesis.

*“Inadequacy and delay of funding has statistical effect on the government project failure”*

The availability and timely disbursement of funds is key aspect on the performance of the government projects. For better project performance, prior and proper budgeting, and planning of the projects before implementation, the public projects should be carried on only if the funds to implement them are available. Public contract management need to be observed and the accounting officers are supposed to commit themselves in the contracts which have funds allocated for.

The Table 4.15 shows the relationship between the inadequate and delay of funding and the government project failure. The Pearson correlation of .404 indicates the medium positive relationship between the variables. This means that, as the inadequate and delay of funding increases, the government project failure also increases.

**Table 4.15: Correlation of Inadequacy and Delay of Funding on Failure of Government Projects**

|  |
| --- |
|  |
|  | **Failure of government projects** | **Inadequacy and delay of funding** |
| Failure of government projects | Pearson Correlation | 1 | .404 |
| Sig. (2-tailed) |  | .055 |
| Sum of Squares and Cross-products | 17.754 | -6.543 |
| Covariance | .147 | -.367 |
| N | 109 | 109 |
| Inadequacy and delay of funding | Pearson Correlation | .404 | 1 |
| Sig. (2-tailed) | .055 |  |
| Sum of Squares and Cross-products | -6.543 | 17.754 |
| Covariance | -.367 | .147 |
| N | 109 | 109 |

**Source:** Researcher, 2020

# Research Specific Objective Two

# H0 “Inadequacy project planning and feasibility study has no effect on the government project failure”

# Ha “Inadequacy project planning and feasibility study has the effect on the government project failure”

Through null and alternative hypothesis, the study objective two relating to the inadequacy project planning and feasibility study was tested. Through this objective the researcher used criteria such as occurrence of project unnecessary variations, budget overruns, project design and scope changes, and the failure to meet completion time. The findings indicate that;

Table 4.15: Model Summary for Inadequate Project Planning and Feasibility Study

|  |
| --- |
| **Model Summary** |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .891a | .794 | .845 | .38086 |

**Source:** Researcher, 2020

The model summary indicated in table 4.15 above has coefficient of determination (R-square) of 0.794. This high value of R-Square which means 79.4% of the variation in the government project failure is explained by the independent variable.The adjusted value of R-square of 0.845 which is likely more the same as the value of R-square of 0.794, this indicates the sample selected in the study was representative of the population under consideration. The higher percentage of efficiency of determinations explains the model to be fit and significant to explain the variables.

Table 4.16: ANOVA Results on Inadequateof Project Planning and Feasibility Study

|  |
| --- |
| ANOVAa |
| **Model** | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| 1 | Regression | 3.127 | 6 | 10.436 | 61.819 | .000b |
| Residual | 38.778 | 102 | .169 |  |  |
| **Total** | **41.905** | **108** |  |  |  |

a. Dependent Variable: Government project failure

**Source**: Researcher, 2020

Table 4.16 generates ANOVA statistics relating to inadequacy of project planning and feasibility study where the results reveals that, there was a statistically significant difference between the variables’ means as generated by one-way ANOVA F(6,102) = 61.819, with significant level,*p* = .000.By using the p-value of 0.000 which is less than 0.05, the researcher rejects the null hypothesis.

*“Inadequacy project planning and feasibility study has statistical effect on the government project failure”*

For better project performance, prior and proper budgeting, and planning of the projects before implementation, the public projects should be planned and the resources require to accomplish such projects need to be ascertained. In order for the public entities to perform in their respective projects, planning is the key and initial stage of project performance. Better project planning and feasibility study relating to the expected projects need to be carried by the skilled personnel. The proper planned projects with professional taken feasibility study results into elimination of unnecessary variations, continuous changes in projects’ scope and design, budget overruns and the failure to keep with project completion schedules.

Table 4.17: Correlation of Inadequacy Project Planning on Failure of Government Projects

|  |  |  |
| --- | --- | --- |
|  | **Failure of government projects** | **Inadequate project planning and feasibility studies** |
| Failure of government projects | Pearson Correlation | 1 | .265 |
| Sig. (2-tailed) |  | .061 |
| Sum of Squares and Cross-products | 112.588 | -18.353 |
| Covariance | 2.252 | -.367 |
| N | 109 | 109 |
| Inadequate project planning and feasibility studies | Pearson Correlation | .265 | 1 |
| Sig. (2-tailed) | .061 |  |
| Sum of Squares and Cross-products | -18.353 | 42.745 |
| Covariance | -.367 | .855 |
| N | 109 | 109 |

**Source**: Researcher, 2020

The Table 4.17 shows the relationship between the inadequate project planning and feasibility study and the government project failure. The pearson correlation of .265 indicates the weak positive relationship between the variables. This means that, as the inadequate planning and feasibility study increases, the government project failure also increases.

# Research Specific Objective Three

# H0“Poor risk management has no effect on government project failure”

# Ha “Poor risk management has effect on the government project failure”

Through null and alternative hypothesis, the study objective three relating to the poor risk management was tested. Through this objective the researcher used criteria of government institutions failure to respond from the occurrence of unexpected events and failure of projects due to the unforeseen events.The findings indicate that;

Table 4.18: Poor risk Management Model

**Model Summary**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |
| 1 | .585a | .339 | .645 | .98086 |

**Source:** Researcher, 2020

According to the model, the R-square obtained is 0.339 which means 33.9% of the variation in the government project failure has been explained by the model. This is not good model because the majority of reasons causing the government project failure (66.1%) have not been explained by the variables. The big difference between R-square (33.9%) and the adjusted R-square (64.5%) indicates that the sample selected for the study is not good representative of the population. As the result of this the responses which would have been received if the population was used would amount to 64.5% of coverage relating to reasons of such project failures.

Table 4.19: ANOVA for Poor Risk Management

|  |
| --- |
| **ANOVA** |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 9.697 | 4 | 2.087 | 3.566 | .074 |
| Residual | 42.565 | 104 | 1.453 |  |  |
| Total | 52.262 | 108 |  |  |  |
| **Source:** Researcher, 2020 |

The ANOVA table 4.19 above, reveals the information acquired relating to the poor risk management. The findings indicate the results generated by one-way ANOVA F (4,104) = 3.566, *p* = .074). With p value of .074 which is higher than the significance level 0.05, (.074 >0.05). This result means that there is no statistical effect between the poor risk management and the government project failure. As the result of this p-value (.074) the null hypothesis accepted.

*“Poor risk management has no effect on the risk management has government project failure”*

**Table 4.20: Correlation and Regression Analysis for Poor Risk Management on Failure of Government Projects**

|  |
| --- |
| **Correlations** |
|  | Failure of government projects | Poor risk management |
| Failure of government projects | Pearson Correlation | 1 | .358\*\* |
| Sig. (2-tailed) |  | .010 |
| Sum of Squares and Cross-products | 112.588 | -29.647 |
| Covariance | 2.252 | -.593 |
| N | 109 | 109 |
| Poor risk management | Pearson Correlation | .358\*\* | 1 |
| Sig. (2-tailed) | .010 |  |
| Sum of Squares and Cross-products | -29.647 | 60.745 |
| Covariance | -.593 | 1.215 |
| N | 109 | 109 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). |

The table 4.20 shows the relationship between the poor risk management and the government project failure. The pearson correlation of .358 indicates the medium positive relationship between the variables. This means that, as the poor risk management of the respective projects increases, the government project failure also increases.

# A Summary for All Variables

# Regression Summary for All Variables

Table 4.21: Model for Government Project Failures Variables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |
| 1 | .891a | .794 | .845 | .38086 |

**Source:** Researcher, 2020

Table 4.22: ANOVA for Government Project Failure Variables

|  |
| --- |
| **ANOVAa** |
| **Model** | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| 1 | Regression | .537 | 1 | .537 | 12.155 | .000b |
| Residual | 26.656 | 107 | .249 |  |  |
| **Total** | **27.193** | **108** |  |  |  |
| a. Dependent Variable: Government projects failure |
| b. Predictors: (Constant), inadequate project planning and feasibility study, poor risk management, inadequacy and delay of funding |

**Source:** Researcher, 2020

The model summary indicated in table 4.21 above has coefficient of determination (R-square) of 0.794. This high value of R-Square which means 79.4% of the variation in the government project failure is explained by the independent variable. The adjusted value of R-square of 0.845 which is likely more the same as the value of R-square of 0.794, this indicates the sample selected in the study was representative of the population under consideration. The higher percentage of efficiency of determinations explains the model to be fit and significant to explain the variables.

Results shows vividly that there exists a relationship between inadequate and delay of funding, inadequate planning and feasibility study and poor risk management in failure of government projects at TCAA where R= 0.891. By the use of coefficient of determination*R*2 = 0.794, the study revealed that the independent variables contribute 79.4% on the failure of government projects. On the other hand, table4.22 gives analysis of variance (ANOVA) results where it indicates that the model of failure of the government project and the independent variables was statistically significant having a value of F(1,107)=12.155 and with p-value .000 which is less than 5% (0.05). The overall regression model used is concluded to be a better prediction of the failure of government projects.

# Beta statistics for all variables

Table 4.23: Beta Statistics Summary for all Variables

|  |
| --- |
| **Coefficients** |
| Model | UnstandardizedCoefficients | Standardized Coefficients | t | Sig. |
|  B |  Std. Error | Beta |
| 1 | (Constant) | 2.347 |  1.221 |  | 2.087 | .021 |
| Inadequate and delay of fundingInadequate project planning and feasibility studyPoor risk management | .175.421.323 | .079.092.095 | .375.369.998 | 5.7593.98510.100 | .000.000.000 |
| a. Dependent Variable: Government project failure |

**Source:** Researcher, 2020

The summary of beta coefficients in table 4.26 with positive values for all independent variables signifies that there is a positive relationship between the dependent variable and all the independent variables and with p-value less than 0.05 (0.000<0.05) showing the statistical significance between variables. As a result a regression model to predict the failure of government projects was defines as; FGP = 2.347 + 0.175IDF + 0.421IPPF**+** 0.323PRM***,*** the equation reveals that the failure of government projects is positively and significantly affected the inadequacy and delay of funding, inadequacy project planning and feasibility study and poor risk management.

As per the values given in the table 4.26 above there is existing relationship between Inadequate project planning and feasibility study and the project failure which is positively medium relationship represented by r of 0.421. This means as the inadequate project planning and feasibility study and the project failure increase by 1 unit, it causes the project failure to increase by 0.421. The study also revealed the medium positive relationship between poor risk management and the failure of public projects where the relationship is shown by r of 0.323. This means that as the poor risk management increase by 1 unit, it causes the project failure to increase by 0.323.

The relationship between Inadequate and delay of funding and the public project failure indicated the weak positive relationship with r of 0.175. This means that as the inadequate and delays of funding increase by 1 unit, it causes the project failure to increase by 0.175. As the result of this regression model out of three independent variables two were significantly affecting the dependent variable (poor risk management and inadequate project planning and feasibility study) while one was positively and weakly (inadequate and delay of funding) affecting the failure of public projects.

# TCAA Projects Successfully Delivered in Terms of Agreed Schedule and Quality within the Last 15 Years

Following the identified project failures factors at TCAA the study also assessed the number of projects that are successfully delivered in terms of agreed schedule and quality within the last 15 years. The findings indicates that most of respondents 77(70.6%) agreed that no any government project up to now that have fully completed within agreed schedules. In addition to the findings 17(15.6%) indicates that about 4 -7 government projects have successfully delivered within the agreed schedules while 15(13.8%) respondents indicates that Over 7 government projects have been successfully been delivered within the agreed schedules.

This findings signifies that the factors that contributes the government projects failures are still have significant effects in public sector project performances and failures. That it is commonly in most of the government projects to be delivered beyond of the agreed schedules also noted in other government construction projects such as CATC Radar Simulator project, Billing System project, Tanga Integrated Rural Development Programme (TIRDEP)and other delayed construction projects. From the findings indicates that respondents were differently rate the performance successfulness of government projects implemented at TCAA in terms of the following aspects; respondents rate negative weak relationship selected performance aspects of time of delivery (-1), cost maintaining (-0.396), quality of the project outputs (-0.295), project scope and design (-0.490), customer/organization satisfaction (-.326) with sig. below 0.05.

Thus, respondent’s negative rating means there is no significant effective performance in the aspects selected as all of them shows significant negative effects in government projects performances. This also supported by Amponsah (2012), Patanakul, (2014) studies found that public projects have been successful in attaining cost upholding, value of the project outputs, changes in project scopes and design resulted to considerable customer satisfaction.

* + 1. **Various Steps Taken by TCAA in Case of Project Failure**

From the findings suggest that various steps taken by TCAA in case project failure whereby the main step taken involves Initiating new/review project appraisal process41(37.3%), Project process is temporarily suspended30(27.5), Re-defining project scope/design or contract terms 21(19.3%), and in few17(15.7%) respondents agreed that in few cases the projects are ultimately cancelled (abandoned). The findings also noted by Asad et al., (2017) study in Pakistan andSaxena, (2016) study in Ireland on public sector financed projects failure. They concluded that in most failure projects have been resulted to temporarily abandoned until the new design, ensuring reliable source of financing been reviewed and have been set clearly.

Despite of these been identified by respondents from TCAA believed to be effective in addressing the government projects failures it been observed to not effectively employed as the organization faces projects delay and failures. This suggests that the public institutions have to put more efforts in adhering the project management knowledge and skills in multiple angles to avoid the projects failures.

# CHAPTER FIVE

# SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

* 1. **Chapter Overview**

This chapter presents the summary of study findings related to research objectives and study conclusions, general recommendations and specific recommendations for future research. The main objective of the study is to assess the factors affecting the project failure in Tanzania.

* 1. **Summary of the Research Findings**

The study included the respondent’s demographic characteristics involved female and male with different ages ranged between18 to 60 years. The study involved respondents with reasonable academic qualifications of bachelor degree above in various disciplines such as business, management, education, social, medicine, finance and administration. The respondents involved had enough experiences at TCAA of over six years above.

* + 1. **Findings on Factors Leading to Government Projects Failures in Tanzania**

**From the** Pearson correlations **findings many factors were identified to have significant impact though they differs in level of effects.** The major factors leading to government project failures indicate both positive and negative direction of the relationships. **The most significant factors observed includes** insufficient and delay of financing resources, inadequate project planning and feasibility studies, poor risk management, natural disasters with the government project failures implemented at TCAA.

However, the weak positive relationship between were observed from inflation prices effects inadequate stakeholder’s involvement variables with government project failures. **While** Lack of proper communications system, socio-cultural settings, project design and scope changes **factors observed to have strong negative effects on government project failures. This implies that** factors have significant contribution in the government projects failures in term of delivery time, costs variations and project output as per agreed contract.

* + 1. **The Socioeconomic Effects Resulted From Project Failure**

Based on the Pearson correlations findings the following effects were found to be major effects in project failures in Tanzania. These includes the effects to government itself, contributing to slow down economic growth of the country, resulting to poor customer satisfactions and government sector underdevelopment. While significant weak positive relationship were observed on increasing project costs, creating bad image for government, causing loss to financial institutions that financing projects, erupting of disputes among stakeholders and projects failed total abandonments.

Contrary to above positive related variables the findings indicates the weak negative effects on the emotional stress on citizens (-.065) effect on the project failures. The general view suggests that the government project failures have significant effects to several areas in development sectors and stakeholders in the country.

* + 1. **Remedy Measures for Addressing Government Project Failures**

From the Pearson correlation coefficients findings indicates various remedies measures that found to have strong relationship with government project failures prevention. These measures involve establishing of cost management based on financial standards and procedures in managing the projects, improvement of project communication management on project roles and progress, ensuring the adequate and timely financing of the project, initiate monitoring and evaluation and develop risk management action plan for addressing both external and internal project hazards.

The current study findings indicate positive weak relationships with remedies measures on government projects failures. The weak Pearson correlations relationship observed on introduction of project management methodology guidelines to ensure projects target (scope), be on time (schedule), available resources (cost), and satisfy the customers, the government assurance on availability of project management human resources, elimination of uncomplimentary legal and regulatory environment in project implementation. These remedy measures are found to have a tangible contributions in reducing or avoiding the government project failures in the country.

* 1. **Conclusion**

The primary objective of government project implementations is to improve society socio-economic development so to ensure that all citizens are living in better standards. However, the study find out that still the for the government project to attain the national of enhancing citizens it has long way to go. This have largely contributed by various structural and institutional factors that have been hindering the move ranging from technical expertise, inadequate planning, financing delays, poor communication system and other macroeconomics variables such as inflations etc. Despite of various remedy measures been taken by the government still the project failures continues to exist seriously affecting various stakeholders and beneficiaries. In recent decades government have been experiencing the burden resulted from its project failures such as time wastages, doubling the project costs, financial losses and general downturn of the socioeconomic development in the country this against the National Strategy for Growth and Poverty Reduction (MKUKUTA), and The Tanzania Development Vision 2025 and other development initiatives formulated by the government for moving to medium economy in 2025.

**Inadequacy and delay of financing the government projects:** The majority of government projects failure is caused by the delay and absence of funds to finance such projects. The projects are commenced without having funds in place for its construction completion instead there is part of it and sometimes are lately provided. To ensure that funds are paid on time, government needs to ensure that projects funds are available and released before the commencement of projects.

Bureaucratic processes in government payment systems need to be assessed to reduce the procurement delays and projects disruptions due to the lack of materials or unpaid contractors. From the majority of previous literature relating to the release of project funds, the studies elaborated on the perspective of the financiers of the projects rather than clients point of view (Kaliba et al., 2009; Ahsan & Gunawan, 2010; Fugar & Agyakwah‐Baah, 2010; Aziz, 2013).

**Inadequate project planning and feasibility study:** The government projects are affected by the political aspects where the political leaders require the projects to commerce so as to be completed earlier. This has the political intention of improving taxpayers’ welfare through the respective projects. Despite the good initiatives and requirements of such leaders, the impact of prior planning of projects is given less weights by the political leaders. As the projects lack the important preparation such as feasibility study, environmental impact assessment, and planning on scope and its timing; the implementation results would oftenly be against the expectations of the government. Previous studies elaborated the problem of lacking of project planning as the key and major cause of project failure in respect of government projects (Killick, 2008; Amoako & Lyon, 2014).

**Poor risk management:** Risks are unforeseen events which could affect the fulfillment of the objectives. The government project failure is caused by not having preparation against the expected risks which would attack the respective project. The study revealed that the risk management action plan was not development in majority of projects and the few plans developed was not implemented. The management of the procuring entity is required to assess and analyse the risks expected to affect the project and create the risk register which would clearly elaborate all the risks in place. Through risk register the managements would have the ability to assess the risks and take the right corrective action to respond towards the respective project risk.

The major risks affecting government projects are such as materials price fluctuations, delay of payments to contractors, failure in project monitoring and evaluation, political interference on technical aspects of the project, corruption of government officials and unforeseen natural calamities such as floods, earth quakes.

* 1. **The Study Recommendations**

From the findings the study agrees that project failures have been growing in the country, this is the problem that has to seriously addressed hence the following recommendations were developed;

Theoretical implication

1. The managers of projects needs to undertake realistic and meaningful execution plans such as costs performance plans have to be drawn up for all projects and ratified prior budgetary allocation are done.
2. Stakeholders have to introduce project management methodology guidelines to ensure projects target (scope), be on time (schedule), available resources (cost), and satisfy the customers. This can ensure the cost management been established based on financial standards and procedures in managing the projects.
3. The government required to allocate reliable budgets and provide project funds timely so as to enable projects implementation.

Practical implication;

1. The Tanzanian government needs to make sure that projects resources such as funds are available and timely paid to contractors to ensure the implementation process does not break due to lack of funding.
2. Tanzanian government needs to develop the projects monitoring and evaluation system that will be free from political interferences and ensure that appropriate trainings is provided to particular practitioners.
3. It is also recommended that government projects have to be left with technocrats and professionals to manage government projects instead of being political patronage. Thus political factors risk must be eliminated/avoided to ensure the continuity and commitment in government projects.
4. The government should develop public project Risk Management Action Plan for addressing both external and internal project hazards this will minimize the rate of public projects failures in the country.
5. The project stakeholder’s communication and information should be enhanced in making vital decision making to get quality project output delivery that hang on the resources provided by the contractors and the owner’s satisfactions level.
	* 1. **Recommendations for Future Research**

First and foremost, this current research scope based on TCAA and did not make any comparisons of various public sectors within government projects as hence more study needs to investigate other public sectors project implementation to compare their specific project performances. Therefore the comparative study is crucial in project failure in Tanzania other government sectors. This may assist policy makers to identify what sectors are more vulnerable in government project failure in the country.

Moreover, the government projects are sometimes influenced by political pressures particularly from party politics on which their failures is likely to be rooted. In that sense more empirical study and exploration should done to discover the linkage among government project failures and politics motives based on regimes changes in the country.

**REFERENCES**

Abbas, A. Faiz, A. Anam, F. & Ander, A. (2017). *Reasons for the failure of government IT projects in Pakistan:* A contemporary study, Dalian: IEEE.

Ahonen, J. J. & Savolianen, P. (2010). Software engineering projects may fail before they are started: Post-mortem analysis of five cancelled projects. *Journal of Systems and Software*, 83(11), 2175–2187.

Ahsan, K. &Gunawan, I. (2010). Analysis of cost and schedule performance of international developmental projects. *International Journal of Project Management,* Vol. 28, No. 1; pp. 68–78

Amade, B, (2014). Containing Failure and Abandonment of Public Sector Construction Projects in Nigeria. A Seminar Paper of the Department of Project Management Technology, for a PhD, Federal University of Technology, Owerri, Nigeria, December, 2014. Pp 1-35

Amponsah, R. (2012). The Real Public Project Failure Factors and the Effect of Culture on Project Management in Ghana. Ghana Institute of Management and Public Administration (Gimpa) Accra, Ghana. ICBE-RF Research Report No.45/12.

Asay, M. (2008). The UK has wasted over $4 billion on failed IT projects since 2000. retrieved on 12th March, 2020 from; http://news.cnet.com/8301-13505\_3-9840497-16.html.

Aziz, R. F. (2013). *Factors causing cost variation for constructing wastewater projects in Egypt*. *Alexandria Engineering Journal,* 52(1), 51–66.

Baccarini, D. & Collins, A. (2003). Critical Success Factors for Projects, In Brown, A. (ed), Surfing the Waves: Management Challenges; Management Solutions. Proceedings of the 17th ANZAM Conference, 2 -5 December, 2003, Fremantle, Western Australia

Ballejos, L. C. & Montagna, J. M. (2008). Method for stakeholder identification in inter--organizational environments. *Requirement Engineering,* 13, 281-297.

Barasa, H. W. (2014). Procurement Practices Affecting Effective Public Projects Implementation in Kenya: A Case Study of Kenya Civil Aviation Authority. *European Journal of Business Management.* 6(6), 49-67.

Cornwall, A. (2008). Unpacking 'community participation': models, meanings and practices. *Community Development Journal,* 43(3), 269-283.

Cuevas-Rodríguez, G., Gomez-Mejia, L. R., & Wiseman, R. M. (2012)*.* Has Agency Theory Run its Course? Making the Theory more Flexible to Inform the Management of Reward Systems. Corporate Governance: An International Review, 20(6), 526–546.

Daniel, S., Andrew, D. & Naomi, B., (2013). Thinking the ontological politics of managerial and critical perform activities: An examination of project failure. *Scandinavian Journal of Management,* 29(3), 282-291.

De Wit, A. (1988). Measurement of project management success. *International journal of project management,* 6(3), 164-170.

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management,* 16(1), 49–65.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy ofManagement Review*, 14(4)*,* 532–550.

Ejaz, N., Hussain, J., Shabbir, F., Shamim, M. A., Naeem, U. A. & Tahir, M. F. (2013). Assessment of Most Critical Success Factors for Mega Construction Projects in Pakistan. *Life Science Journal,* 10(10), 255-261.

Elias, A. A., Cavana, R. Y. & Jackson, L. S. (2002). Stakeholder analysis for R & D project management. *R&D Management,* 32(4), 301-310.

Espiner, T. (2007). Seven in 10 governments IT projects fail. Retrieved on 01st June, 2011 from;: www.silicon.com/management/public-sector/2007/05/18/failed-seven-out-of-10-gov-it- projects-39167189/.

Fabian, C. & Amir, A. (2011). *The Chad-Cameroon Pipeline Project--Assessing the World Bank's Failed Experiment to Direct Oil Revenues towards the Poor*. The Law and Development Review, 4(1), 32-65.

Fagbenle, O. I., Adeyemi, A. Y., & Adesanya, D. A. (2004). The impact of non-financial incentives on bricklayers’’ productivity in Nigeria. *Construction Management and Economics,* 22(9), .899-911.

Fontaine, C., Haarman, A. & Schmid, S. (2006) The Stakeholder Theory of MNC. Retrieved on 01st March, 2020 from; http://www.edalys.fr/documents/ Stakeholders%20theory.pdf.

Forsythe, P., Sankaran, S. & Biesenthal, C. (2015). How far can BIM reduce information asymmetry in the Australian construction context? Project Management Journal, 46(3), 75–87.

Frimpong, Y., Oluwoye, J. & Crawford, L. (2003). Causes of delay and cost overruns in construction of groundwater projects in developing countries; Ghana as a case study. *International journal of Project Management,* 21(5), 321–326.

Heeks, R. (2006). Health information systems: Failure, success and improvisation. *International Journal of Informatics,* 75(2), 125-137.

Hussain, S., Zhu, F., Ali, Z.; Aslam, H. D., Hussain, A. (2018). Critical Delaying Factors: Public Sector Building Projects in Gilgit-Baltistan, Pakistan. *Buildings*, 2018, 8, 6.

Janssen, M. & Klievink, B., (2010). ICT-project failure in public administration: The need to include risk management in enterprise architectures. In Proceedings of the 11th Annual International Digital Government Research Conference on Public Administration Online: Challenges and Opportunities (pp. 147-152). Digital Government Society of North America, Puebla Mexico May, 2010.

Kaliba, C., Muya, M. & Mumba, K. (2009). Cost escalation and schedule delays in road construction projects in Zambia. *International Journal of Project Management,* 27(5), 522–531.

Kaur, R. & Sengupta, J. (2013). Software process models and analysis on failure of software development projects*. International Journal of Scientific & Engineering Research,* 2(2), 1-4.

Kendrick, T., (2015). *Identifying and managing project risk: essential tools for failure-proofing your project*. 3rd Ed., AMACOM.

KPMG, (2013). Project Survey Report 2013. Strategies to capture business value. Retrieved on 27th August, 2019 from; www.kpmg.com/nz.

Krejcie, R. V. & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement,* 30, 607-610.

Liu, J. Y., Chen, H., Chen, C. C. & Sheu, T. S. (2011). Relationships among interpersonal conflict, requirements uncertainty, and software project performance, *International Journal of Project Management,* 29(5), 547-556.

Long, N. D., Ogunlana, S., Quang, T., & Lam, T.C. (2004) Large construction projects in developing countries: a case study from Vietnam. *International Journal of Project Management,* 22(7), 553–561.

Mallewo, A. (2014). **Assessment Of Application of Project Management Concepts in Building Projects in *Tanzania*: ase study**Building Projects in Dar es Salaam. unpublished Master Dissertation, Ardhi University, Dar es Salaam, Tanzania.

Marzouk, M. M. & El-Rasas, T. I. (2014). Analyzing delay causes in Egyptian construction projects. *Journal of Advanced Research*, 5(1), 49–55.

McManus, J. & Wood-Harper, T. (2008). A study in project failure. Retrieved on 21st March, 2019 from; <http://www.bcs.org/server.php?show=Con>Web Doc.19584.

Mir, F. A. & Pinnington, A. H. (2014). Exploring the value of project management: Linking Project Management Performance and Project Success. *International Journal of Project Management*, 32(2), 202-217.

Missonier, S. & Loufrani-Fedida, S. (2014). Stakeholder analysis and engagement in projects: From stakeholder relational perspective to stakeholder relational ontology. *International Journal of Project Management*, .32(7), 1108-1122.

Mitchell, R. K., Agle, R. B. & Wood, J. D. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of who and What Really Counts. *The Academy of Management Review*, 2(4), 853-886.

Mukabeta, B., Owei, V. & Alexander, H. (2008) Questioning the pace and pathway of e-government development in Africa: A case study of South Africa’s Cape Gateway Project. *Government Information Quarterly,* 25(4), 757-777.

Nguyen, A. T., Nguyen, L. D., Le-Hoai, L. & Dang, C. N. (2015). *Quantifying the complexity of transportation projects using the fuzzy analytic hierarchy process.* *International Journal of Project Management,* 33(6), 1364-1376.

Olander, S. (2007). Stakeholder impact analysis in construction project management. *Construction Management and Economics*, 25(3), 277-287.

Olapade, O. & Anthony, O. (2012). Abandonment of Building Projects in Nigeria- A Review of Causes and Solutions. International Conference on Chemical, Civil and Environmental Engineering (ICCEE2012) 24-25, March, Pg 253-255, Dubai.

Opawole A., Jagboro, G. O., Babatunde, S. O. & Opawole, M. O. (2013).Critical failure factors in road infrastructure development in Osun state, south western Nigeria, *International Journal of Development and Sustainability,* 2(1), 240-253.

Pan, G. & Pan, S. L. (2006) Examining the coalition dynamics affecting IS project abandonment decision-making. *Decision Support Systems,* 42(2), 639-655.

Panayides, P. M., Parola, F. & Lam, J. S. L (2015). The effect of institutional factors on public–private partnership success in ports projects. Transportation Research Part A: *Policy and Practice,* 71, 110–127.

Parker, D., Verlinden, A., Nussey, R., Ford, M., Pathak, R.D., (2013b). Critical evaluation of project-based performance management: change intervention integration. *Int. J. Product. Perform. Manag.,* 62(4), 407–419.

Patanakul, P. (2014). Managing large-scale IS/IT projects in the public sector: Problems and causes leading to poor performance. *Journal of High Technology Management Research,* 25(1), 21-35.

Pawłowska, A. (2004). **Failures in large systems projects in Poland: Mission [im] possible?***Information Polity,* 9, 167-180.

PMI, (2000). *A guide to the project management body of knowledge.* 4th Ed., Newtown Square, PA: Project Management Institute.

Pourrostam, T. & Ismail, A. (2011). *Significant Factors Causing and effects of Delay in Iranian Construction Projects.* Australian *Journal of Basic and Applied Sciences,* 5(7), 45-450.

Ramazani, J. & Jergeas, G. (2015). Project managers and the journey from good to great: The benefits of investment in project management training and education. *International Journal of Project Management,* 33(1), 41-52.

Sæbø, L. S. & Flak, M. K. (2011). **Understanding the dynamics in e-participation initiatives: Looking through the genre and stakeholder lenses.** *Government Information Quarterly*, 28, 416-425.

Sakyi, D. I. (2015). An Investigation into the Causes and Effects of Project Failure in Government Projects in Developing Countries: Ghana as a Case Study. Unpublished Master Thesis, Liverpool John Moores University, Liverpool, UK.

Sambasivan, M. & Soon, Y. W. (2007). Public sector Causes and effects of delays in Malaysian Construction Industry. *International Journal of Project Management,* 25(5), 517–526.

Saqib, M., Farooqui, R. U. & Lodi, S. H. (2008). Assessment of Critical Success Factors for Construction Projects in Pakistan.First International Conference on Construction in Developing Countries (ICCIDC-1). Advancing and Integrating Construction Education, Research and Practice, August 4-5, 2008, Karachi, Pakistan.

Saxena, A. (2016). Avoiding Project Failure by using Project Management methodologies. Unpublished Master Dissertation. Dulbin Business School. Ireland.

Shahid, H., Fangwei, Z, Zaigham A., Hassan, D. A. & Abasal, H. (2017). Critical Delaying Factors: Public Sector Building Projects in Gilgit-Baltistan, Pakistan. International University, Gilgit-Baltistan, Pakistan.

Sweis, G. Hammad, A. A. & Shboul, A. (2008). *Delays in construction projects*: The case of Jordan. *International Journal of Project Management,* 26(6), 665–674.

World Bank (2012).Ghana Projects & Programs. Retired on 23rd June, 2020 from; http://www.worldbank.org/en/country/ghana/projects.

Yusuph, B., Mhando, Ramadhan, S., & Alinaitwe, H. M. (2017). Perspectives of the Causes of Variations in Public Building Projects in Tanzania. *International Journal of Construction Engineering and Management,* 6(1), 1-12.

Zhang, L. (2013) Managing project changes: Case studies on stage iteration and functional interaction. *International Journal of Project Management,* 31(7), 958-970.

**APPENDIX**

**THE QUESTIONNAIRE FOR TCAA STAFF**

Dear Respondents,

I am a Masters student of Open University of Tanzania (OUT) conducting a study on: **ASSESSMENT OF THE EFFECTS OF PROJECT PERFORMANCE ON GOVERNMENT PROJECT FAILURE IN TANZANIA**: TCAA AS A CASE STUDY. In facilitating the study I kindly request you to respond on the questions stipulated in the study. I assure you that information been provided will be treated confidentially. By completing this questionnaire, it implies that you consent to participate in this research.

Thanks for your awaited co-operation.

Yours sincerely,

Zawadi Maalim

**PART A**

**DEMOGRAPHIC INFORMATION**

Date……………………………….

Please tick as appropriate

1. Age: (a) Between 20 - 35 (b) 36 – 50 (c) 51 – 60 (d) 61-65
2. Sex: Male Female
3. What is your highest educational qualification or nearest equivalent?(a) Certificate/diploma (b) Bachelor degree ( ); (c) Postgraduate diploma/Master’s degree ( ); (d) Professional PhD
4. How long have you been working at TMA (in years)?

Below 5 years

Between 5 to 10 years

Above 10 years

**Part B: Project Management Performance**

1. What criteria are used to appoint the project managers or been involved in project management team for the project
2. Knowledge and skills in project management ( )
3. Individual capability ( )
4. Project management experience ( )
5. Technical competence ( )
6. Possessed authority and power to control the project implementation ( )
7. Been working at TCAA where did you been involved into the following project process?
8. Planning ( )
9. Designing project ( )
10. Scope changes ( )
11. Management and supervision ( )
12. Monitoring and evaluation ( )
13. Citizens are main beneficiaries of government projects, how can you describe their involvement of public in government projects process?
14. To high extent are been involved ( )
15. To moderate extent are been involved ( )
16. To low extent been involved ( )
17. Not involved at all ( )
18. What are the activities been employed by your organization in process of project implementation?
19. Conducting daily/weakly meeting of stakeholders to discuss project results to keep them up-to-date of the project ( )
20. Ensure of project management team constant communication in the project execution process ( )
21. Linking of all activities done to the larger project plan ( )
22. Discussions of a project plan of action with the project management team and stakeholders
23. Documenting all changes to the project plan and design ( )
24. Allocating resources for a project ( )
25. Supervision through physical presence at the work site ( )
26. Assessing the project risks ( )
27. In your organization who categorically responsible for handling project implementation management? Circle all that apply
28. Senior Manager ( )
29. Board of Director ( )
30. Structural Engineers ( )
31. Consultants ( )
32. Contractors ( )
33. All Staff ( )
34. How do you rate the achievement of government projects in your organization goals in relation to the following project aspects? (With 1 being the least achieved and 5 the highest achieved?
35. Cost maintaining ( )
36. Time of delivery ( )
37. Deliverables of outputs ( )
38. Stakeholder satisfaction ( )
39. Contribution to national development ( )
40. From the following list identify the possible causes of TCAA project failure

(Please tick (√).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Factors influence the failure of Tanzanian government projects** | **1** | **2** | **3** | **4** | **5** |
| Lack of project expertise or knowledge’s,  |  |  |  |  |  |
| Inadequate project planning and feasibility studies |  |  |  |  |  |
| Lack of proper communications system  |  |  |  |  |  |
| Poor risk management  |  |  |  |  |  |
| Insufficient and delay of financing resources  |  |  |  |  |  |
| Socio-cultural settings  |  |  |  |  |  |
| Inadequate stakeholder’s involvement |  |  |  |  |  |
| Project design and scope changes |  |  |  |  |  |
| Natural disasters |  |  |  |  |  |
| Inflation prices effects  |  |  |  |  |  |

**1=Strongly disagree 2=Disagree 3=Not sure 4=Agree 5 = Strongly agree**

1. In your organization how many projects have been successfully delivered in terms of agreed schedule and quality within the last 10 years?
2. No any project ( )
3. Below 3 projects ( )
4. 4 -7 projects ( )
5. Over 7 projects ( )
6. How can you rate the performance successfulness of the previous completed organization projects in terms of the following aspects?

 1 - Low, 2 – Rather Low, 3 - Average, 4 – Rather High, 5 – High, N/A

1. Time of delivery ( )
2. Cost maintaining ( )
3. Quality of the project ( )
4. Project scope and design ( )
5. Customer/organization satisfaction ( )
6. What are the steps taken by your organization (TCAA) in the case of project failure?
7. Project process is temporarily suspended ( )
8. Re – defining project scope, design or contract terms ( )
9. Initiating new/review project appraisal process ( )
10. The project’s process is ultimately cancelled (abandoned) ( )
11. Charging the contractors/consultants in court of law or arbitration measures ( )

**PART C: GOVERNMENT PROJECT FAILURE EFFECTS**

1. What are the effects of Tanzanian government project failure on key stakeholders

**1=Strongly disagree 2=Disagree 3=Not sure 4=Agree 5 = Strongly agree**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **1** | **2** | **3** | **4** | **5** |
| Time wastages |  |  |  |  |  |
| Increased project cost  |  |  |  |  |  |
| Disputes among stakeholders, arbitrations,  |  |  |  |  |  |
| Emotional stress on citizens |  |  |  |  |  |
| Poor customer satisfactions  |  |  |  |  |  |
| Project total abandonments |  |  |  |  |  |
| Government sector underdevelopment |  |  |  |  |  |
| It slows down economic growth  |  |  |  |  |  |
| Bad image for government |  |  |  |  |  |
| Loss to financial institutions |  |  |  |  |  |

**PART C: GOVERNMENT PROJECT FAILURE REMEDIES**

1. **Due to increased trends of** government project failures what measures should be taken for avoiding taken by TCAA in Tanzania?

 **1= Strongly disagree 2= Disagree 3= Not sure 4= Agree 5 = Strongly agree**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | **1** | **2** | **3** | **4** | **5** |
| Project cost management have to be established based on financial standards and procedures in managing the projects |  |  |  |  |  |
| Government must ensure a sufficient and timely financing of the project |  |  |  |  |  |
| The government has to ensure availability of project management human resources  |  |  |  |  |  |
| Uncomplimentary legal and regulatory environment have to be eliminated in project implementation  |  |  |  |  |  |
| It is necessary to establish proper, monitoring and evaluation can lead to timely, accountability and right management of the projects |  |  |  |  |  |
| Political factors risk must be eliminated to ensure the continuity and commitment in government projects.  |  |  |  |  |  |
| Develop Risk ManagementAction plan for addressing bothexternal andinternal project hazards |  |  |  |  |  |
| Enhancement of project communication management on roles and progress of the projects |  |  |  |  |  |
| Introduction of project management methodology guidelines to ensure projects are in target (scope), be on time (schedule), be implemented within available resources (cost), and ultimately satisfy thecustomers |  |  |  |  |  |

Thanks