**A STUDY ON MANAGEMENT OF CLAIMS AND DISPUTES IN TANZANIA CONSTRUCTION** **INDUSTRY: A CASE OF DODOMA REGION**

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**OF THE OPEN UNIVERSITY OF TANZANIA**

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# CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by Open University of Tanzania a dissertation titled ***“A Study on Management of Claims and Disputes in Tanzania Construction Industry- A case of Dodoma Region’****’*, in partial fulfillment of the requirements for the award of Master of Project Management.’’

# ……………………………………….

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Signature

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Date

# DEDICATION

I dedicate this research to Almighty God who gave me life, courage and power to pursue this study and my beloved parents, the late Mr. George Simon Mzena and Mrs Suzanna Yusto Malago for their prayers, support that inspired me to fulfillment of the entire study.

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# ABSTRACT

The construction industry is burdened with a lot of project performance matters which usually lead to claims and disputes between client, consultant and contractor. This study concerned with examining management of claims and disputes in Tanzania construction industry with special focus to Dodoma region. This study was applied both quantitative and qualitative approaches in form of interviews, questionnaires and observation from previous complete projects (case study). First a set of questions was distributed to committed project managers who are currently active in management of mega projects constructed around Dodoma region both public construction companies and private construction companies. Secondly, qualitative data was collected in form of interviews and observations from previous completed projects in order to extract clarify of the opinions expressed by project managers and other contract administrators regarding the management of claims and disputes in construction industries. The study identified the main causes of claims and disputes, the effectiveness of alternative dispute resolution methods, procedures and contractual provisional set forth in contract document in management of claims and disputes and challenges facing construction industry in mitigation of claims and disputes. Based on the findings, the study concluded that the major causes of claims and disputes need to be guarded against and incase disputes eventually occur, negotiation and conciliation method should be given the first priorities. The study recommended that the government should put in place strategies that are aimed and mitigating claims and disputes on construction projects. Professional bodies such as Engineers Registration Board (ERB) an Architects and Quantity Surveyors Registration Boards (AQRB) should enlighten professionals to always be ethical in their discharge of duties.

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# LIST OF ABBREVIATIONS

 ADR- Alternative Disputes Resolution

Arch - Architect

BOQ- Bill of Quantity

CL - Clause

EAIA- East Africa Institute of Architect

ENG- Engineer

FIDIC- International Federation of Consulting Engineer

IPC- Interim Payment Certificate

 MoW - Ministry of Works

 NCC National Construction Council

P.E – Professional Engineer

PPRA- Public Procurement Regulatory Authority

 QS - Quantity Surveyor

TZS - Tanzania Shillings

 VAT- Value Added Tax

#

# CHAPTER ONE

# INTRODUCTION

## Background of the Problem

### Construction industry in worldwide faced challenges in management of claims and disputes lead to significant affect project cost and time. A survey done on 2019, 2018 and 2020 in Asia, European and United state respectively, found that the large majority of claims and disputes involved some sort of delay and in various cases delay exceeded the original contract duration, as to the project cost, more than half of claims and disputes were an additional cost of at least 30% of the original contract values.

The rapid growth of the economy and population in Tanzania has created the great demand for construction of building and infrastructure development, However over the years, the frequency and several of claims and disputes increased to the extent that its affect overall projects timelines, budgets and overall performance. These conflicts may arise from various sources such as contractual ambiguities, differing stakeholder expectations, scope changes, delays, and differing interpretations. Addressing these issues effectively is crucial for maintaining healthy project relationships, minimizing legal actions and ensuring successful project outcomes. Therefore understanding the complexities of claim and dispute management within the construction sector is essential for improving industry practices and project delivery.

Unsuccessful handling of claims and disputes can lead to project delays, cost overruns, strained relationships and even legal battles. As result, there is a growing need to investigate and analyze strategies, processes and best practices for effectively managing claims and disputes in the construction industry. This study aims to explore into these intricacies and offer valuable insights to boost project success and mitigate adversarial situations.

## Statement of the research Problem

Most of construction projects in Tanzania are hindered by a number of challenges in effectively managing of claims and disputes, which have affected smooth trend during execution of the project lead to serious impacts on project timelines and budgets (Makoba 2020, p.45). A lot of money and time are used to deals with these claims and disputes which hinder general progress of the projects.

The construction industry is known for its intricate character and the frequent occurrence of claims and disputes, which have negative impacts on project performance, including cost overruns, delays, strained relationships among stakeholders and lawful battles. Despite the wide spread occurrence of claims and disputes in construction projects, there is a lack of comprehensive perceptive and effective management strategies to mitigate these challenges such as inadequate risk assessment and management, insufficient clarity in contract documents and communication gaps contribute a lot to the absence of vigorous frameworks (Marco 2017, P. 67). This study seeks to investigate the underlying causes, impacts and current practices related to claims and disputes and current practices related to claims and disputes with the objective of identifying best practices and proposing recommendations to enhance the management of claims and disputes in construction industry.

Various practical approaches and guidelines have been introduced to address these challenges, there is limited empirical research on the effectiveness of management techniques for claim and disputes in Tanzania construction industry.

This study seeks to address the gap by examining current practices, identifying key challenges and developing a systematic approach that contribution firms can use to minimize and resolve disputes, The study aims to contributes the academic field by providing a deep understanding of the factors influence claims and disputes and offering a validated model for effective dispute management in future contract.

## Objective of the Study

### 1.3.1 General Objective

The general objective of the study is to examine management of claims and disputes in Tanzania construction industry.

###  Specific Objectives

1. To identify common causes of claims and disputes in Tanzania construction industry.
2. To investigate the effectiveness of alternative disputes resolution methods in Tanzania construction industry from signing of contract to final account stage.
3. To examine procedures and contractual provisional set forth in contract document in management of claims and disputes in construction industry.
4. To examine challenges hindering construction industry in mitigation of claims and disputes in Tanzania projects.

## Research Questions

###  General Research Question

What are the mainly effective strategies and practices for managing claims and disputes in the construction industry, and how do they contribute to project success and stakeholder satisfaction?

### Specific Research Questions

1. What are prevalent causes of claims and disputes in construction projects and what are their fundamental triggers?
2. How effective are of alternative dispute resolution (ADR) mechanisms in resolving construction conflicts in Tanzania?
3. What are procedures and contractual frameworks are typically engaged in the construction industry to address and manage claims and disputes?
4. What are the challenges facing construction industry to mitigate claims and disputes and what measures can be implemented to mitigate these challenges?

## Significance of the Study

The study is very useful to contractors, subcontractors and stakeholders in construction industry because through this study, they can be able to apply proper practice of preparation, presenting, assessment and management of contractual claims and disputes in order to secure a smooth progression of works and also to give better way of avoiding claims and disputes in construction industry.

This study also has significant implications for project performance, cost savings, proper stakeholder relationships, industry practices and knowledge advancement. By addressing this significant issue, the study contributes to improving project outcomes, minimizing financial losses and support a more collaborative and efficient construction industry.

## Scope of the Study

This section defines the subject scope, geographical location and lastly time scope.

1. **Subject Scope**

The study was concentrated on managing of contractual claims and disputes, practical applicability in construction industries and problem encountered from tender stage to final account.

1. **Geographical Scope**

The study was conducted in Dodoma, since most of the building projects are taking places. Also there is availability of large number of demands of building projects for a new structure of large and modern building works are being erected.

1. **Time scope**

The study was covered thirty six weeks.

## Organization of the Study

This research structured into five chapters. The first chapter was focused on background of the problem, statement of the research problem, objectives of the study, research questions, significant of the study, scope of the study and overview of the research structure.

The second chapter is a survey of the literature, displaying numerous stated research concepts by various writers.

The third chapter was concentrated on the methodological approach to research. This chapter covers the research designs (quantitative /qualitative/mixed), data collection methods, sampling techniques and participant selection, data analysis techniques and ethical considerations.

The fourth chapter consists of research findings analysis, themes and discussion in which findings was presented after comprehensive review of data obtained.

Finally, chapter five describes on conclusion of the findings and recommendation based on the major findings of the study obtained.

# CHAPTER TWO

# LITERATURE REVIEW

## Introduction

The chapter illustrates the theoretical underpinning that guide how management of claims and disputes practices affect organization operations and performance as well as the empirical studies done worldwide, Africa and Tanzania. The literature review identifies and organized the concept in relevant literature areas, furthermore it’s very important in supporting the identification of research topic, question and hypothesis, identification the literature to which the research will make a contributions and contextualizing the research within the empirical sphere, building an understanding of theoretical concept and terminology that may be useful.

## Conceptual definition of terms

### Claims

In the construction industry, claims refer to disputes or disagreements that arise between parties involved in a construction project. A claim typically involves a request for compensation or a change in the terms of the contract due to issues such as delays, additional costs, design changes, defects, or other factors that affect the progress or outcome of the project (Marvis, 2019).

Kongkoon (2004) has defined claims as a formal request made by one party to another party seeking compensation, adjustments or resolution of a dispute arising from a construction project.

Claims typically arise when there is a disagreement or a breach of contract between the parties involved in the project, such as the owner, contractor, subcontractor or supplier. Claims and disputes in construction industry can cover a wide range of issues and can be related to: time and schedules, change order and variations, extra work and additional costs, design and specifications, defective work and non conformance, payment disputes, termination and suspension, damage and losses. When claims and disputes made it typically initiates a formal process of evaluation, negotiation and potentially dispute resolution, which can involve mediation, arbitration or litigation depending on the contract terms and governing laws (Alexander, 2019).

### Claims management

In construction industry claim management refer to the process of handling and resolving claims that arise during a construction project. It involves the systematic and organized approach to managing disputes, evaluating their validity and seeking appropriate resolution methods. Hence in order to deal with or control the claims effectively, parties concerned with them should establish good construction claims management processes in their organizations. The major issues in claims and disputes are identification of issues and parties responsible for the claims and ascertaining the time and cost impact of the claim (Booen, 2020).

The major primary objectives of claims management in construction industry are identification and documentation of potential claims, evaluation and analysis of claims to determine its merits, negotiation and resolution of claims, disputes resolution mechanisms and litigation. Effective claims management requires expertise in contract administration, legal aspects, project management and industry practices. It helps to ensure that claims are addressed promptly, fairly and in accordance with the contract terms, thereby minimizing disruptions to the project and preserving relationships between parties (Booen, 2020).

### Disputes in construction industry

Disputes in construction industry refer to disagreements that arise between parties involved in a construction project. These disputes can occur at any stage of the project and can involve various stakeholders such as owners/ clients, contractors, suppliers, architects, quantity surveyor and other parties involved in the project. Common disputes in construction industry are contractual disputes, payment disputes, design and specification disputes, construction defects, delay and disruption disputes and regulatory and compliance disputes (Callahan, 2018).

Resolving construction disputes often involves a combination of negotiation, mediation, arbitration or litigation depending on the specific circumstances and mechanisms outlined in the contract. The goal is to find a fair and adequitable resolution that minimizes projects disruptions, addresses the concerns of all parties involved and helps to complete the project successfully.

### Disputes resolution

Disputes resolution in construction industry refers to the process of resolving conflicts, disagreements or disputes that arise during a construction projects. It involves the use of various methods to reach a resolution and settle the issues in a fair and efficient manner. The aim of dispute resolution is to minimize project disruptions, preserve relationships and avoid lengthy and cost litigation. There are several common methods of disputes resolution in the construction industry such as negotiation, mediation, arbitration and litigation (Callahan, 2019).

The choice of disputes resolution method depends on various factors including the complexity of the disputes, contractual provisions, cost considerations and the desired outcome of the parties involved. Many construction contracts include provisions that outline the preferred method of disputes resolution, such as mediation or arbitration to encourage amicable resolution and avoid litigation (Chinyere, 2017).

### Alternative Dispute Resolution (ADR)

Alternative Disputes Resolution refers to a range of methods and processes used to resolve disputes outside of tradition litigation through the court system. ADR provides parties with alternatives avenues to settle their conflicts in a more informal, collaborative and efficient manner. It is often used as a means to avoid the time, expense and adversarial nature of litigation. ADR methods are often used in various sectors, including business, family, construction, labor and community disputes (Gregory, 2017).

## Theoretical literature review

In a study on management of claims and disputes in construction industry, it very essential to start with a theoretical literature review in order to form the theoretical base of our study.

### Source of Claims

### The claim may arise due to the owner, consultant, subcontractor or the main

### contractor. The following are common sources of claims and disputes in construction industry.

### Contractual issues

### Disputes may arise from disagreements over the interpretation or fulfilling of the contractual obligations. This can include disputes related to scope changes, delays, payment conditions, quality issues and contract termination (Maitisa, 2017).

### Design and specification issues

### Disputes always occur when there are errors, omissions or inconsistencies in project designs, drawings, or specifications. This lead to conflicts among the owner, consultants deals with design professionals and contractors regarding responsibility, liability and the necessary corrective measures.

### Change in scope of the project

### Any modification or changes in the project scope lead in disputes related to additional works, variation in costs, delays in completion of project or impacts on the project scheduling.

### Schedule delays

### Delay in project completion can lead to disputes over causes, responsibility and the resulting financial consequences, factors such as unforeseen site conditions on setting out of preliminaries works, weather, labor disputes or late delivery of materials can contributes to schedule delays.

### Cost overruns and payment issues

### Disagreement also arise regarding project costs, including disputes over pricing, payment schedules, progress payments or claim for additional compensation because of unforeseen events or changes in the works (Maitisa, 2017).

### Quality and performance issues

### Disputes may occur when the delivered works does not meet the required quality standards according to specification stipulated on contract documents or required performance, this lead to disagreements over occurrence of defects, non compliance with specifications or poor supervision of works and inadequate workmanship.

### It is very important to note that claims and disputes are often multifaceted and can involve a combination of these factors, resolving these factors typically requires a thorough understanding of contract provisions, effective communication, mediation, negotiation, or even legal recourse, depending on the severity and complexity of the dispute (Alexander, 2019).

### Types of Construction Claims

### In construction industry, various types of claims can rise during the course of a project, there are number of ways to classify construction claims, they may be classified by the related parties, right claimed, legal basic and characteristics of claims. By determining their relevant legal bases, construction claims can be divided into three categories.

### Contractual Claim

### Contractual claims in the construction industry refer to disputes or disagreements that arise from a breach or alleged breach of the terms and conditions outlined in a construction contract. These claims are typically based on the rights, obligations and remedies within the contractual agreement between the parties involved in the construction project such as the owner, contractor, subcontractors and suppliers. Some common examples of contractual claims include: Scope of the work, Contract changes and variations, Delay and time extensions, Payments disputes, Defective work and non conformance, Liquidated damage and Termination.

### Extra-contractual Claims

### These claims are not based on clauses within the terms of a contract, they also arise during construction but which are not capable of being derived from the conditions of contracts. They are claims, which the contractor consider the employer has a moral duty to pay, for example where late delivers of materials by supplier on a firm price contract resulted substantial price increases on materials or where difficulty was experienced by the contracts. Extra contractual claims can arise due to various factors such as negligence’s, fraud or misrepresentation, tort claims, third part claims, regulatory compliance and unjust enrichment.

### Ex-Gratia Claim

### Ex- Gratia claims are the claims that there is no ground existing in the contract or the law, but the contractor believes that has the rights on the moral grounds, eg. Additional costs incurred as a result of rapidly increased prices. Examples of ex gratia claims in the construction industry are goodwill settlement, customer satisfaction and mitigating future disputes. However, it is recommended that any ex gratia claim or settlement agreement be documented in writing to ensure clarity and avoid misunderstandings. Parties should consider consulting legal professionals to understand the potential implications and ensure that the ex gratia claim is in line with their legal rights and obligations (Hudson, 2018).

### Principle agent theory

Michael C. Jensen and William H. Meckling (1976) proposed the Agency theory to explain the conflict in interests and priorities that arises when one person or entity takes actions on behalf of another entity. Principal Agent theory explores the relationship between stakeholders and managers who are tasked with making decision on behalf of the principles.

Based on the principle agent theory, the relationships between the project owner/ client, the contractor and their project managers are system metric information and corresponding types of claims and disputes in different projects. This theory illustrates the inherent agency difficulties in construction project in which the client who may be the project owner delegates’ authority to the main contractor or other entity to complete the respective project assigned. This delegation of power can contributes and act as catalytic to rise of claims and disputes in construction projects when interest change direction. Through understanding of this theory, we can identify and analyze on how client related issues might contribute to claims and disputes in construction industry lead to poor project performance.

The primary unit of analysis in Principal-Agent Theory is the relationship between the principal (e.g., shareholder, owner) and the agent (e.g., manager, contractor). This relationship is analyzed through aspects like incentives, behaviors, and conflicts of interest within organizations or business arrangements.

Strength: Principle agent theory provides a clear framework for company officers and board members while making strategic decision, also Agency theory attempts to explain and resolve disputes over the respective priorities between principals and their agents, also this theory explore how monitoring and contractual arrangements can reduce the likelihood of the agents acting in self interest to the demand of principals.

Limitations: Principle agent theory illustrates an agency may have information that is unavailable to the principal or vice versa. These types of divergences may give rise to problems relating to monitoring, incentives, coordination and strategy.

### Contract Theory

Contract Theory was significantly developed by economists Oliver Hart and Bengt Holmstrom (2016). This theory explains the role of contract management in construction industry. By understanding different types of contract such as fixed price contracts, cost plus contract and design and built contract is crucial as they influence the parties’ form of contact incentives, risk allocation, and subsequently claims and disputes. Construction documents are legal documents that project managers and clients must use to define their roles and responsibilities, as well as procedures for management of construction projects. Construction contract management provides a mechanism to resolve disputes between parties if they arise also it provides for clear resolution of all matters regarding the project including scope, cost, time and risk allocation. Misunderstanding of construction contracts may lead to rise of disputes in construction project. Through understanding of this theory, a vast majority of contractual problems arise from lacunae in and misinterpretation of the clauses such as change in contract work, differing in unusual site conditions, suspension of work, variation in quantities, damage due to natural disasters, current fluctuation effect and escalation of price due to inflation etc. If this conflict is not clearly managed, claim are made by main contractors and further if claim did not get clearly resolved disputes arise.

The unit of analysis in Contract Theory is the contract itself, as well as the parties involved in the contractual agreement. The theory examines the structure of agreements, the incentives they create, and the responses of different parties under conditions of asymmetric information or uncertainty.

Strength: Contract theory provides a lawfully binding framework for construction industry, illustrates the rights and responsibilities of all parties form of contract, also it can structured to allocate risks between the parties which helps to manage uncertainties and ensure that each parties involved assumes risks they are best outfitted to handle.

Limitations: Construction industry are very complex in nature and dynamic which make difficult to anticipate and address every possible circumstances in a contract, this lead to disputes and disagreements between parties involved in the contract.

### Conflict Resolution Theory

Conflict resolution theory was significantly developed by Morton Deutsch in the mid of 20th century, conflict resolution theory provides strategies for disputes resolution. Litigation, arbitration, mediation and negotiation play imperative roles in resolving disputes in various construction projects. By reviewing these theories can help to grasp the various mechanisms available for managing claims and disputes in construction industry.

The unit of analysis in Conflict Resolution Theory is the conflict itself, which can occur at various phases, such as interpersonal, organizational, or international. The focus is on the dynamics, causes, and resolution methods of the conflict between individuals or groups.

Strength: Conflict resolution theories described a prearranged and dignified approach to addressing claims and disputes in construction industry, ensuring that conflicts are not left to escalate or faster, also effective conflict resolution can assist to minimize disruptions and delays in construction projects, ensuring that work executed on time, with effective budget and required quality.

Limitations: Construction industry are highly complex in nature which involved various stakeholders and prospective matter making conflict resolution difficulties to be solved, also in other scenario conflict resolution processes may not fully concentrate on the legal and contractual difficulties of construction projects leading to claims and disputes that may still require legal action to be settled.

## Empirical Literature Review

## Empirical literature review involves systematically examining previous empirical studies in order to provide an answer to a specific research topic. Under this section it will elaborate the relevant previous research that are interrelated with the methods used in this research as the references to develop the methods and solving the problems that will contributes the general understanding of current knowledge and identification of research gaps.

### Common Causes of Claims and Disputes in Construction Industry

Chaitanya (2019) did his study in Maharashtra, India on investigated common causes of claims and disputes in construction projects. The aim of the study was to identify and evaluate common causes and impacts of claims and disputes in building projects, including their effect on project cost, schedule, quality and overall project performance. An exploratory study technique was used and primary data collection techniques used in the study was structured questionnaires, semi structured interviews and different case study on various projects experienced contractual problems during execution of the projects. The study revealed that claims and disputes may arise due to the owner / client or the contractor. Chaitanya (2019) identify and evaluate common sources of claims and disputes in the construction industry which mostly of it based on contractual issues such as disagreements over the interpretation or fulfillment of the contractual obligations. These can include disputes related to scope changes, delays, payment terms, quality standards or contract termination.

Typical causes of claims and disputes that contractors and client need to consider include; lack of project planning and inadequate design, design changes, errors, omissions and extras, lack of coordination between project team, change of site condition, the combination of a fixed price contract and fast tracking, insufficient bid preparation time, misunderstanding of contract intensions, terms and conditions of the contract and unforeseen event.

Similarly, Konkoon (2016) did his research in Thailand to assess on contractor’s construction claims and claim management process. The aim of the study was to identify and assess common causes and impact of claims and disputes in building projects. The study used a questionnaire and in depth interviews with key informants, focus group discussion with construction experts. Results from this study indicated that change of design and specification, changes in project scope, schedule delays, quality and performance issues and cost overruns and payment issues such as over pricing, payment schedules, progress payments or claim for additional compensation due to unforeseen circumstances are mostly common causes of claims and disputes in construction industry.

Konkoon (2019) concluded that contractual claims impact public and private projects in term of cost and time performance also show that high level of professionalism is needed in handling construction projects in order to reduce occurrences of claims and disputes

Chinyere (2020) did his research in Nigeria to assess sources, procedures and arrangement for claims and dispute resolution management in construction development projects by using descriptive and quantitative analysis and revealed that claims and disputes may arise due to contractual problems in construction industry such as change in contract work, differing in unusual site conditions actually encountered, suspension of works, variations in quantities, damage due to natural disasters and force majeure and termination for the convenience of the client.

Similarly, Maitisa (2017) studied on construction claim management problem in South Africa by using correlation analysis and revealed that understanding what causes construction claims is the first step in avoiding them. According to his study design changes being introduced at the post tender stage is the main reason for claims. Second is due the project being implemented in unduly short time periods with inadequate site investigation, design work, tender and contract documentation and the third is due to inadequate specification of the precise scope of contract works. On claim management process researcher recommended that owners should ensure that a project is well planned from the beginning to minimize the need for changes orders. Both project team members should do what they can to ensure proper management and administration of the project, including proper and adequate staffing and coordination of the project, it very important for each party to understand their duties, responsibilities and obligations under the project contract and they have the ability to execute their duties and obligations as required by the validity contract.

 Marco (2017) conducted a study on causes of claims and disputes in construction industries and illustrates the procedures set forth in contracts on management of claims and disputes in Tanzania. Research approach used in this study was qualitative and quantitative approaches. The finding show that common causes of claims and disputes in construction industries are lack of project planning and inadequate design, design changes, lack of coordination between project teams, changes in contract work, differing in unusual site conditions actually encountered, suspension of work, variations in quantities, damage due to natural disasters and force-majeure, re-inspection and acceptance, termination for the convenience of the client, possession prior to completion, escalation of price due to inflation, acceleration of work progress, ripple effect, currency fluctuation effect, ambiguity in specifications and drawings. Researcher also illustrate procedures set forth in management of claims and disputes by identifying four phases used in claim management process such as claim prevention, claim mitigation, claim identification and quantification and claim resolution.

### Effectiveness of Alternative Disputes Resolution Methods in Tanzania Construction Industry from Signing of Contract to Final Account Stage

Harries, (2019) did his research in London on management of claims and disputes in construction industry by highlight the effectiveness of alternative disputes resolution mechanisms from signing of contract to final account stage in resolving construction conflicts by using the multivariate regression analysis and revealed that an effectiveness of alternative disputes resolution method is negotiation, mediation conciliation, determination, adjudication, dispute boards, arbitration and arbitration-mediation. Alternative disputes resolution process is essential to ensure that any contractual claims arising are dealt with in the way that it fair to each party involved, better training in the area of contract management to the professionals can be said to be of a great help for better understanding of the contract, also the requirement of contractor involvement during design process can improve constructability and reduce the probability of design changes.

Similarly, Callahan (2019) investigated on effectiveness of management of construction contract claims by using an integrated system approach and revealed that managing construction claims and disputes is a crucial aspect of project success and dispute resolution.

Marvis (2018) conducted a study on claim management and dispute resolution in construction projects in Morocco. Descriptive survey design involving both quantitative and qualitative method of data collection was used. The findings indicated that:

 The effective strategies and ways for claims and disputes management for construction industries are clear and transparent communication among all parties involved in a construction project can play a big role in prevent misunderstandings, disputes and claims. Therefore, companies must prioritize communication in their claims management strategy to minimize the risk of disputes and ensure project success.

Also, Construction companies can establish a clear and concise contract with detailed provisions and obligations that anticipate potential disputes and outline how they will be resolved. Construction companies can also consider involving third part experts such as mediators or arbitrators to assist in resolving disputes and claims. Overall, by proactively management claims and disputes, the building and civil companies can minimize their impact on project success and maintain positive relationships with all parties involved in respective project. Also, Prioritizing risk management: Construction companies should also prioritize risk management as part of their claims management strategy, effective and efficient risk management involves identifying potential risks and develop effective plans to mitigate them, writer insist that risk management should be an ongoing process that begins during planning phase and continues throughout the project lifespan. By proactively managing risks, construction companies can reduce the likehood of claims and disputes arising and minimize their impact.

Adrian (1998) studied on the management of claims in building contracts reveled an effective construction claim management process such as review the claim file and supporting documents prepared by the contractor and specify the legal basis of the claim, perform a site investigation and collect information about utilities, soil conditions, subsurface conditions, labor, weather, material, equipment and other related items, analyze the proof submitted by the contractor and decide if it is adequate or not for assertion, review the breakdown of the contractors bid, underlining the requirements mentioned in the contract for claim preparation and determine the sufficiency of the documents submitted by the contractor, review the site reports, records, documents to obtained a detailed understanding of the facts, compare the current schedule with the one submitted by the contractor in the claim file. Analyze the activities and determine the similarities and discrepancies assemble a meeting with the contractor and underline the statements to support factual analysis, calculate the overhead costs of the contractor by using daily reports, determine the strengths and weaknesses of the claim and prepare an action plan for managing and resolving the issue.

Also, Chiamaka (2018) did his research in Nigeria to access the effective claims and disputes management strategies for construction companies by using surveys, interviews and focus groupsreveled that effective claims management strategies are critical for construction industries to minimize disputes and maximize project success. Communication, documentation and technology are essential components of an effective and efficient claim management strategy; companies should establish communication protocols that ensure a timely and accurate exchange of information between parties. Moreover, parties should maintain detailed records of all project related activities, including change orders, project plans, specifications and contract documents, Through technology and developing comprehensive claim management, companies can proactively manage risks, avoid disputes and quickly resolve any issues that arise during the project, researcher insist that by taking these proactive and comprehensive approaches to claims management, construction companies can ensure that their projects are completed on time.

### Attorneys and Ndamugoba (2019) conducted a study to determine effective management of contractor claims in Tanzania projects, research approach used in this study was a cross sectional survey using a structured questionnaire and case studies. Specifically, the study aimed to investigate the effectiveness of how claims and disputes are currently being managed throughout the project phases in Tanzania. Results from the study show that construction claims can be made for a variety of reasons including schedule delays, cost overruns, defective work or contract disputes, the study show that construction disputes in Tanzania can be handled through various means including litigation, alternative dispute resolution (ADR) mechanism such as mediation, arbitration or adjudication. The choice of the appropriate dispute resolution mechanism depends on the nature and complexity of the dispute, as well as the preferences of the parties involved.

Mostly, for one to go to the construction industry Arbitration and Adjudication Board (CIArb) in Tanzania, the subsequent steps must be adhered to such as inclusion of an arbitration clause in the construction contracts and initiating the arbitration process.

### Procedures and Contractual Provisional Set Forth in Contract Document in Management of Claims And Disputes in Construction Industry

Harris and Maccafferr (1998) did his research in Amsterdam, Netherlands on procedures and contractual provisional set forth in contract document in management of claims and disputes in construction industry by using the multivariate regression analysis. The findings indicated that proper preparation, handling and preventing of claims should cover the following: Notice of intention to claims, under these contractor should select the relevant clauses in condition of contracts as the basis for his claim. A letter to consultants giving notice of the contractor’s intention to claim should state circumstances giving rise to the claims explain why the contractor consider the employer to be liable and should state the clause of the contract under which the claim is being made.

Contemporary records, under these supporting information, facts, and evidences is needed in order to prepare a sound and logical claim, types of information and facts needed include complete record of communication among parties.

Assessment of claims, the finding indicates that records and information mostly used in the formulation, assessment and settlement of claims including a master program indicating how the contractor has envisaged the sequence and timing of the various activities, a progress schedule to compare progress of the various activities against the master program, estimate of resources and expenditure each week or month, records of overtime worked and cost, progress photographs, site diaries and notices kept on meeting.

Similarly, Makoba (2020) studied the claims management in Tanzania construction sectors based on contractor’s perspectives by using the descriptive and qualitative analysis and revealed that better management of claims and disputes should considering the procedures set forth in contract documents such as notices of intension to claims, contemporary records and better way of assessment of claims. It is therefore recommended that effective and successful ways for management of claims and disputes should consider studying carefully tender documents, proper filling of contract documents, proper analysis of data to be used in preparation of construction claims, better understanding of specification and drawings, effective communication between client and contractor and action necessary when a cause of delay or loss occur.

## Research Gap

Various studied have been done both locally and internationally on the management of claims and disputes in construction industry (Chaitanya 2013, Konkoon 2004, Hunges 1992, Harris and Maccaffer 1996, Maitisa 2017, Makoba 2014, Marco 2017 etc) but there is a gap in research regarding specific causes of claims and disputes in Tanzania construction projects including their effects on project cost, schedules, quality and overall project performance, also previous studied does not examine in detailed procedures and contractual provisional set forth in contract documents on management of claims and disputes in Tanzania construction projects, However mostly of the findings of these studies cannot be generalized in Tanzania mostly of it based in internationally. By examining on management of claims and disputes in Tanzania construction industry this study was contributed a lot to existing body of knowledge on management of claims and disputes in different projects in Tanzania, Additionally, the study was provide valuable insights for project managers, stakeholders and other member of the project and policy makers in Tanzania who are responsible for improving projects performance.

## Theoretical Framework

## The theoretical framework of this study based on the understanding of common causes of claims and disputes in construction industry by illustrates legal framework and regulation governing construction claims and disputes such as FIDIC contracts, National Construction Council (NCC), PPRA and other local construction laws, also to explore effectiveness of alternative disputes resolution mechanisms such as litigation, arbitration, mediation and disputes review committee from signing of contract to final account stage, also to make assessment on case studies of successful claims and disputes management in different completed projects so as to discover the best practices and lessons learned from actual world examples.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter presents major approaches in data collection and analysis from various sources related to the topic. Various tools and techniques used to assist a researcher in data collection and analysis. The research was applying both quantitative and qualitative approaches in form of interviews, questionnaires and observation from previous complete projects (case study). First a set of questions was distributed to committed project managers who are currently active in management of mega projects constructed around Dodoma region both public construction companies and private construction companies. Secondly, qualitative data was collected in form of interviews and observations from previous completed projects in order to extract clarify of the opinions expressed by project managers and other contract administrators regarding the management of claims and disputes in construction industries.

## 3.2 Research Philosophy

This is a research guiding principle or general idea of what constitutes good research, in this research a mix philosophy and approaches such as positivity philosophical and inter positivism philosophy approach was utilized. According to Oak (2019), positivism philosophy recognizes that the human beings are not neutral observers and the research process is influenced by subjective biases and values. By using this philosophical approach, the researcher aimed to address the limitations of a purely objective approach and account for social construction of reality.

## 3.3 Research Approach

These are the research strategies and a technique that was used during the study, the research utilized a quantitative and qualitative methodology to gather and analyze data. A quantitative approach emphasizes the use of precise measurements and statistical analysis of data acquired through questionnaires, surveys and pre existing statistical data using computer tools. In this study, questionnaires were used as primary tools for data collection. The use of questionnaires provided a researcher with quantifiable data that could be statistically analyzed to test the research hypothesis. Qualitative data which are preferred to as data that has been analyzed and already attached with some meaning was collected through reading various books, journal articles and previous research reports By employed a quantitative and qualitative methodology, this study provided a rigorous and systematic approach to establishing correlation between the efficient claim management and project performance.

## 3.4 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with the economy in procedure.

Kothari, (2004) stated two basic approaches to research; one being quantitative approach and other are qualitative approach. According to Saunders et al. (2009) research design is more concerned with overall plan how the researcher is to conduct his research. Saunders et al. (2009) went on to state that research design amounts to a general plan of how the researcher will go about answering the research questions, writing clear objectives derived from research question, the source where data collected and the inevitability of constraints along the path including the discussion of ethical issues. This study was used mixed research design approach to collect data in which both qualitative and quantitative data were collected. Under this study tools used for collecting quantitative and qualitative data are surveys, questionnaires, structured interviews, observation and document review. The rationales for choosing this design were due to its ability of giving both objective (numerical data) and subjective (views) information for supporting each other. Also mixed research design having uniqueness of flexibility in integrating or mixing quantitative and qualitative information within single study (Wisdom and Creswell, 2013)

The data was analyzed by using descriptive statistic method. The descriptive statistics method is the simplest method of analysis which provides a general overview of the results (Creswell, 2017). It can be range from simple counts such as the frequency of occurrences. The descriptive method analyses in percentages and contains actual numbers. The frequency is presented in the form of tabulation, a bar chart, a pie chart or graphs.

## 3.5 Area of the Study

The study was conducted in Dodoma region because most of the major projects are taking place, also there is availability of large number of demands of building project of a new structure design of large are being erected.

## 3.6 Population of the Study

According to Crotty (2016), the population of the study is related to the whole set of factors that will be examined. The population of this study based on the professionals on construction project basically located at Dodoma region such as the project managers, architects, quantity surveyors and engineers.

The list of construction companies and professionals in Tanzania construction industry was collected from umbrella boards such as Contractor Registration Board (CRB), Engineers Registration Board (ERB) and Architect and Quantity Surveyors Registration Board (AQRB)) which houses the contractor companies, consultant firms, project managers, engineers, architects and quantity surveyor. This study population will be made of forty four (44) construction professionals from construction companies and consulting firms, where the unit of analysis was comprises of Quantity surveyors, Architects, Engineers and Project managers as shown in Table 3.1

Table 3. Research Population

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Item** | **Number of registered companies** | **Number of registered project manager** | **Number of registered architects** | **Number of registered quantity surveyor** | **Number of registered engineer** | **Total no. Pm, Eng, Arch and Qs** |
| Contractors | 10 | 6 | 4 | 6 | 6 | 22 |
| Consultants | 8 | 6 | 4 | 8 | 4 | 22 |
| **TOTAL** | 18 | 12 | 8 | 14 | 9 | 44 |

##

## 3.7 Sampling Design and Sample size

### 3.7.1 Sampling Design

According to Kothari (2004), sampling design is a definite plan for obtaining a sample from a given population. It refers to techniques the researcher would adopt in selecting items for the sample. In qualitative research, only a sample of a population is selected for any given study. Therefore, in this study sample design was divided into two broad areas, probability and non probability sampling approaches.

In this study the sample units was forty four (44) construction experts from construction industries starting with project managers, engineers, architects and quantity surveyors, also other data obtained through conducting document review based on observation, analyzing and evaluation from previous completed projects which experience claims and disputes.

Under this study sample selection was taken into account rather than a random sample because not every projects or experts experiences claims, so due to this reason non probability sampling was used, that is judgmental or purposive sampling. This sampling techniques gives chance to get exactly projects which experience claims and disputes and provide the ways of management of a particular claims and disputes.

### 3.7.2 Sample Size

This research selected sample of participants that are considered appropriate rather than a random sample because of the nature of the study (Thompson, 2007). Thus a non random purposive sampling was preferred in this study.

Total size of sample for the study was forty (40) construction experts started with project managers at a senior level and they referred other project managers or contract managers such as engineers, architects and quantity surveyor at the operational level. This sample size was calculated under the following formula:

$$n=\frac{N}{1+N.e^{2}} $$

Where: n=number of sample N=total population e= standard error of sample-5%-0.05

$n=\frac{44}{1+44\*0.05^{2}}$ n= 40

Therefore, the sample size for this study was 40 construction industry professionals both from contractors and consultant firms.

Table 3. Sample size

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S/n** | **Experts** | **Registered Contractors** | **Registered Consulting firms** | **Total Population** | **Sample size** | **% of Sample size** | **Data Collection Tools** |
| 1. | Project manager | 6 | 6 | 12 | 11 | 91.66 |  Interview |  |
| 2. | Registered Engineer | 6 | 4 | 10 | 9 | 90.00 | Interview and Questionnaires |
| 3. | Registered Architect | 4 | 4 | 8 | 7 | 87.50 | Interview and Questionnaires |
| 4. | Registered Quantity surveyor | 6 | 8 | 14 | 13 | 92.85 | Interview and Questionnaires |
|  | **TOTAL** |  |  | **44** | **40** | **90.50** |  |

##

## 3.8 Method of Data Collection

Both primary and secondary data was collected from the field in order to get required data. Primary data was collected from respondents by using interviews methods, while Secondary data was collected from the available records of project experience claims and disputes in construction companies and consultant firms.

###

### 3.8.1 Secondary data

Secondary data which are preferred to as data that has been analyzed and already attached with some meaning was collected through reading various books, journal articles and previous research reports. Also a various projects executed by local and international companies was reviewed for the purpose of fulfilling the need for the objective of the study.

### 3.8.2 Primary data

Primary data which are the first hand pieces of information from respondents was collected through self administered interviews about the influences of project manager on how to manage claims and disputes in construction industry by sort out the causes and impact of claims and disputes from design stage to operational phase.

##

## 3.9 Data Collection Tools

This section explains ways in which the research will be carried out. The section was also elaborated why certain approaches was preferred. The technique chosen for this study are most effective and efficient ways of fulfill this research study objectives.

###

### 3.9.1 Interviews

This was carried out to different experts from construction companies and consultant firms so as to acquire both qualitative and quantitative data concerning management of claims and disputes in construction industries. Interview was carried out to forty (40) respondents from building contractor companies and consulting firms in which unit of analysis based on project managers, engineers, architects and quantity surveyors.

Kothari (2004) explains that this method of collecting data is largely dependent upon the interviewers structured way of conducting the interview. Interview is defined as a research strategy to find out from people things that ordinary one cannot directly see or observe (Newnan and Benz, 1998). Interviews are effective and more efficient because they address many questions and hypothesis (Creswell, 2017).

###

### 3.9.2 Structured Questionnaires

### Questionnaires were designed to reach out selected significant number of construction experts that work consistently on construction projects. The questionnaires method was preferred due to it easier to develop, more reliable and provides data that can be easily to analyze also it is feasible to give an empirical test to each statement for discriminating ability.

### Data for this study was collected from employees from building contractor companies and consulting firms in which twenty one (21) questionnaires was distributed to building contractor professionals and eleven (11) questionnaires was distributed to consulting firms experts. The total questionnaires distributed were thirty two (32).

## 3.10 Reliability and Validity of Data

### 3.10.1 Reliability of Data

Reliability of data is the extent to which data collection instruments yield consistent findings, According to Thompson (2019), dependability is a key factor in establishing the study credibility. A pilot study was carried to test the reliability of the research instruments using Cronbach’s Alpha Co. The consistency of responses to all items used to evaluate the elements of the conceptual framework is measure by Cronbach’s alpha. It employs a reliability coefficient that a range from 0 to 1 with the reliability rising as the value gets closer to 1. A minimal reliability value of 0.7 is great value (Shields, 2019).

###

### 3.10.2 Validity of data

To guarantee validity and quality of the responses the interview was properly and systematically structured and sought to record the responses accurately and completely (Kothari, 2004). Newman and Benz (1998) started that when it comes to semi structured interviews validity may be diminished if researcher demonstrates bias.

The validity of this research instrument measured through the opinion of experts especially the research supervisor in which will evaluate the tools used to gather the data and make any required adjustments or any modifications in light of the topic being investigated.

## 3.11 Data Analysis

Kombo and Tromp (2006) define data analysis as a process of examining what has been collected in survey or experiments and making deductions and inferences. This involves uncovering underlying structures, extracting important variables, detecting any anomalies and testing any underplaying assumptions. It is from the results of such analysis, the researcher are able to make sense of the data. The analysis of data requires a number of closely related operations such as establishment of categories to raw data through coding, tabulation and then drawing statistical references (Kothari, 2004).

According to Saunders et al. (2009) until quantitative data is processed and analyzed, conveys very little meaning to most of people, Saunders et al. (2009) advises on two ways of analyzing data, the deductive analytical approach and inductive analytical approach. Due to the nature of this research since data was collected both quantitatively and qualitatively required integrated data analysis method. According to Yin (2003) data analysis can be defined as categorizing, tabulating testing or combination both qualitative and quantitative evidence.

Quantitative statistical data for questionnaires used statistical package for social science (SPSS version 27.0.0 for MACOS) and Microsoft excel for further editing and analysis; the data was analyzed by using descriptive statistic method.

The descriptive statistics method is the simplest method of analysis which provides a general overview of the results (Creswell, 2017). It can be range from simple counts such as the frequency of occurrences. The descriptive method analyses in percentages and contains actual numbers. The frequency is presented in the form of tabulation, a bar chart, a pie chart or graphs.

# CHAPTER FOUR

# FINDINGS AND DISCUSSIONS

#

## 4.1 Introduction

# This chapter presents, analyzes scientific findings and discussions based on data collected. The main objective of this research was to examine management of claims and disputes in Tanzania construction industry, taking a case study of Dodoma region. Data were collected form construction professionals form Prisons Corporation Sole, Fizam Contractor Co. Ltd and BeTAS Consultant Co. Ltd. In order to get a real picture and relevant information on management of claims and disputes in Tanzania construction industry different completed projects (refer as case study), questionnaires and interviews were used as means of data collection so as to achieve the objective of the study.

# The results presented rely on information obtained from sample respondents and were examined by descriptive statistics analysis.

## 4.2 Characteristics of Sample Respondents

During data collection, thirty two (32) questionnaires were distributed to construction experts, twenty one (21) questionnaires were distributed at building contractors experts, nineteen (19) were return back, likewise out of eleven (11) questionnaires were distributed to building consulting firms experts, ten (10) were return back. Of the total of thirty two (32) questionnaires distributed, only twenty nine (29) were return back. Table 4.1 shows the questionnaires distributed and that which were received.

|  |  |  |  |
| --- | --- | --- | --- |
| Number | Group | No. questionnaires distributed | No. questionnaires received |
| 1. | Contractors experts | 21 | 19 |
| 2. | Consultants experts | 11 | 10 |
|  | Total | 32 | 29 |

Table 4. Sample Respondents from Questionnaires

Similarly, the interviews were carried out to forty (40) respondents from building construction industries starting with project managers, engineers, architects and quantity surveyors. The information obtained were organized and transcribed for making a common theme that fits to the qualitative information of the study. Table 4.2 shows expected planned interviews and actual interviews conducted.

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Group of experts** | **No. planned interviews** | **No. interviews conducted** |
| 1. | Project managers | 12 | 11 |
| 2. | Engineers | 10 | 9 |
| 3. | Architects | 8 | 7 |
| 4. | Quantity surveyors | 14 | 13 |
|  | **Total** | 44 | 40 |

Table 4. Sample Respondents from Interviews

##

## Also other information obtained through conducting document review based on observation, analyzing and evaluation from previous completed projects which experience claims and disputes. The names of the projects investigated and assessed have been withheld for security purpose and ethical issues. Table 4.3 shows number of projects investigated which experience claims and disputes in construction industry.

# Table 4. Numbers of Project Experience Claims and Disputes

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Group** | **Name of Project experience claims** | **No of projects** |
| 1. | Contractors companies | Project A and B | 2 |
| 2. | Consulting firm | Project C and D | 2 |
|  | **Total** |  | **4** |

In order to get a real picture and relevant information on management of claims and disputes in construction industry, the investigation involved gathering the relevant data primarily by analyzing four (04) completed projects which experience claims and disputes, the exercise was very difficult because most of contractors and consulting firms are reluctant to reveal their documents especially when weakness in one part is observed.

## 4.2.1 Gender, Education level, Age and Level of Experience of Respondents

Four crucial characteristics of respondents were considered which include gender, education level, Age and level of experience of respondents as shown in Table 4.4.

The construction activities conducted in Dodoma region by building contractors companies and consultant firms involved participation of both gender perspectives (male and female), the data illustrated in Table 4.4 below indicates that the majority of respondents from group of building contractors and consultant firms were male (80%) while 20% are female. This result shows that female (20%) involvement in the sector of construction is very minimal as compared to male. This is supported by the results conducted by UNIDO (2019) which indicates the importance of enhancing and supporting women in participates in construction industry.

During data collection, professionals were required to state their level of education as indicated in Table 4.4, the level of respondent’s education was indicated as follows, Bachelor degree were 47.5%, Masters were 42.5% and 10% were PhD holders. These results show that all respondents for the study were educated and qualify to give useful information.

On Table 4.4, it indicated that 37.5% of the respondents are 45-55 years of age, 25% are above 55 years, 20% are 36-45 years, and 17.5% are 18-35 years of age. This shows that the majority of the respondents are aged between 45 and 55 years and this shows they are still in good working ages.

Table 4.4, show that 42.5% of the respondents had experience of 21 years to 30 years, 25% of the respondents had more than 30 years of experience, 22.5% of the respondents have experience of 11 years to 20 years, 5% of the respondents had experience of 6 years to 10 years and 5% of the respondents had experiences of 1 year to 5 years.

Table 4. : Gender, Education level, Age and Level of Experience of Respondents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/no** | **Characteristics of respondents** | **Group** | **Frequency** | **Percentage** | **Cumulative percentage** |
| 1. | Gender | Male | 32 | 80 | 80 |
|  |  | Female | 8 | 20 | 100 |
|  | **Total** |  | 40 | 100 |  |
| 2. | Education level | Bachelors | 19 | 47.5 | 47.5 |
|  |  | Masters | 17 | 42.5 | 90 |
|  |  | PhD | 4 | 10.0 | 100 |
|  | **Total** |  | 40 | 100 |  |
| 3. | Age characteristics | Above 55 | 10 | 25.0 | 25 |
|  |  | 45-55 | 15 | 37.5 | 62.5 |
|  |  | 36-44 | 8 | 20 | 82.5 |
|  |  | 18-35 | 7 | 17.5 | 100 |
|  | **Total** |  | 40 | 100 |  |
| 4. | Level of experience | 1 to 5 years | 2 | 5 | 5 |
|  |  | 6 to 10 years | 2 | 5 | 10 |
|  |  | 11 to 20 years | 9 | 22.5 | 32.5 |
|  |  | 21 to 30 years | 17 | 42.5 | 75 |
|  |  | Above 30 yrs | 10 | 25 | 100 |
|  | **Total** |  | 40 | 100 |  |

##

## 4.2.5 Analyzing and Evaluation of Completed Projects experience Claims and Disputes

## In order to get a real picture on management of claims and disputes in construction industry, the investigation involved gathering the relevant data primarily by analyzing and evaluating four completed projects that experience claims and disputes from group of construction companies and consultant firms such projects are Proposed construction of fuel station and business mall to be built at Msalato area in Dodoma city council, Design and built of Administration block and staff houses to be built at Viwandani area in Dodoma region, Upgrading of about 112km of the road from gravel to double surface bitumen standard from St Gema hospital area to Nanenane and proposed construction of Rayson hotel to be built at Nanenane area in Dodoma region.

##

## 4.2.5.1 Project Review No. 1

# Project name: Proposed construction of fuel station and business mall at Msalato area

**Duration:** 40 week

1. **Description of the project**

The project was the construction of proposed fuel station and business mall built at Msalato area. The contractor was to build the station and business mall within the contract period, due to delay in starting a work the employer gave notice of determination to the contractor when he was about to start the work. Letter of intent was sent to the contractor and no other contractual documents involved. In their letter of intent form, client to contractor it was stated that “This is the letter of award and your acceptance letter of this award shall be legally binding contract’’, it further stated that “This is the letter of award and your acceptance letter of this award shall be legally binding contract’’, it further stated that “please mobilize your machinery plant, manpower on site or before 10th February, 2022.

1. **Background information on the areas of claims**

Contractor was claiming for loss and expenses incurred to perform all the preliminaries works at the site and extension of time, but client send the matter to the National Construction Council (NCC) to seek some advice on how to resolve the dispute. NCC decided to make arrangement for all the parties to visit the site including NCC as a witness at the same time.

In the claim contractor include the following:

1. Cost of hiring plants Tzs. 10,500,000/=
2. Cost of preparation of temporary buildings including site office, toilets etc taken as lumpsum Tzs. 15,000,000/=
3. Cost of wages of idle labour Tzs. 4,655,000/=
4. Salaries of skilled labour and site foreman to the whole contract period Tzs. 17,400,000/=

The total amount so claimed was Tzs. 47,555,000/= the contractor refused to pay on the grounds that there was actually delay on starting of the works and also no any site development.

1. **Evaluation of the claims**

From the observation no proof was seen for the claim submitted in loss and expense as a result of delays, disruption and postponement of works. NCC proved that there was no specific disruption of the works in the sense that periods when the labour force was practically or wholly standing idle at the site no evidence and nobody was at the site nor the temporary building for residence. Therefore the cost of idle time stipulated by the contractor was also not proved; neither salary for the site engineer, quantity surveyor, site foreman, clerks of works, plant etc were not proved. From the observation, disruption in this case has no effect on the efficiency of the project and its resultant productivity and profitability on the contractors side since on the site visit, nothing and nobody was present and hence no development was done so far. NCC was of the opinion that the claim presented by contractor was not realistic. Furthermore, since there was no temporary office on the site, NCC could not even check if;

1. There was realistic working programme, proper prepared and detailed programme which could have been vital aid to prove disruption of the programme particularly when it was to give NCC critical activities claimed to have been done by the contractor.
2. There was a resource allocation programme to show the number of operatives to be employed per week/month/year and the amount, type of plant used or which was expected to use.
3. Claim which was put on preliminaries was also unrealistic because no development of the site was done.
4. Claim on all risk insurance as stipulated on special condition of contract claimed by contractor was told to produce receipts from National Insurance Corporation (NIC) for approval
5. NCC observed that consultant did not made any site visits on the site at the date of possession to inspect on existence of contractors insurance is on good faith, renewal dates, and had covered all the required amount. It was heard that it was already paid and thus he could claim it. But he was supposed to give evidences.
6. NCC noted that the contractor cannot claim for loss of profit because no evidence was seen during site visit if key operatives were on site idle for longer period.
7. **Ruling of the Case**

NCC concurred in the decision with the client on the similar grounds after the site visit. The consultant in this case did not ascertain any amount by the contractor due to the reason that there was no any site preparation had been undertaken should not be considered as appropriate.

NCC should call another meeting for the parties to enter into conciliation. Unless the two parties disagree, then they will enter into Arbitration. But in this case they have to agree and select which rules will be used or apply the stipulated clause 36 of E.A condition of contract.

When contractor was contacted refuse to enter into conciliation or arbitration and requested client to negotiate on the matter without NCC to intervene on the matter issued, at the end employer send a letter to NCC to inform on the outcome that they have already resolved the issue.

1. **Comments**

Having gone through the contractor’s claims process, notification, preparation, presentation and evaluation review and actions, I have the following comments:

* From above case it is observed that without enough evidence on the claim employer will be reluctant to pay the certificate.
* The evaluation of the claims in this project was fair and based on the adequacy of the proof provided and supporting documents. The client was aware of keeping information on site records and inception report.
* The contractor suffered financial harm due to poor planning, insufficient plants and equipments and late mobilization of required resources.
* The contractors claim in this project was prepared and presented in accordance with the contract provisions but it lacks some important supporting documents for the successful of their claims. But in some parts the contractor seems to be aware of the procedures in the contract documents and proved that a well prepared claim based on the appropriate clauses.

## 4.2.5.2 Project Review No. 2

# Project Name: Design and Built of Administration block and Staff houses in Dodoma

**Duration:** 60 weeks.

1. **Background of the Case**

On 26th April, 2020 employer entered into contract with contractor for construction of administration blocks and staff houses. The contract sum was Tzs. 2,800,000,000/= VAT Inclusive. As per contract the documents were prepared and signed by both parties. During the execution of works, consultant inspected the works and prepared interim payment certificate which were addressed to employer for payment. Execution of the works started smoothly up to interim certificate no. 3, from there the project was subjected to various problems including management problems, cash flow problems, determination of contractor’s employment under the contract subsequently taking over the site.

The contractor failed to define the roles and responsibility of each party, misdirection of certificate to employer caused unnecessary delays of payment. The payment for certificate no. 3 was delayed; this caused cash flow problems on the part of the contractor. When payment was made, it was not enough to make the project self financing and escalation of prices of building materials and other construction resources.

For proper implementation of the project, contractor requested for financial assistance. The parties to the contract agreed employer to purchase required materials for the works. A result material were purchased not in accordance with working programme, prices were highly inflated, materials were made available to contractor after high demanding because they were locked in the employers store and not even shown to the contractor.

1. **Dispute**

Employer refused to pay materials fluctuations to the contractor on the ground that materials were supplied by employer despite the amount deducted on interim payment certificate. Also employer refused to pay interim certificate and due to delayed payment of certificate, the contractor is claimed Tzs. 86,245,000/= for price fluctuations, interest based on delayed payment on certificate no. 3 and loss of profit. The consultant failure to administer the project proficiently and caused cash flow hardship to the contractor, this made the contractor unable to finance the project.

The contractor was of opinion that the employer decision was unfair and therefore, requested NCC to intervene under arbitration clause 36 of E.A condition of contract.

1. **Ruling of the Case**

NCC wrote to the client to respond to the allegations as it was putdown by the contractor client say that contractors own ideas because he has not instructed to do so. Client said the contractor decided to do so in order to earned money and the board has not budgeted for that NCC tied to communicate with management members if they accepted the items added in the project. Therefore NCC calls the meeting of two parties together and reconciles them. It was successful and the contractor paid interest due to delay on payment of certificate, price fluctuations plus the loss of profit.

1. **Comment**

From above case it is evidence that lack or improper management of contractual claims can lead to determination of the employment and hence arbitration or generally construction disputes. Also every contractual claim must have its origin; evidence is normally required to be submitted. This can be either instruction issued in writing or any other documentary evidence.

## 4.2.5.3 Project Review No. 3

**Project Name:** Upgrading of about 112km of the road from gravel to bituminous standard

**Duration:** 100 weeks

1. **Description of the Project**

The contract signed on the 17th June, 2020; the project involved upgrading of about

112KM of the road from gravel to bituminous surface standard. The new road was supposed to be consisted of 6.5M wide paved, carriageways with 1.5 shoulders on both sides, four (04) new bridges and thirty two (32) box culverts. The construction contract using FIDIC condition of contract was signed for a contract sum of TZS. 23,567,000,000/= VAT inclusive.

1. **Background Information on the areas of Claims**

The contractor for upgrading road project submitted a notification for claims to the engineer for 267 days extension of time and financial compensation.

The claims files were:

* Claim no. 1: Delay of advance payment
* Claim no. 2: Delay for approval of exemption certificates
* Claim no. 3: Out of date design and survey information
* Claim no. 4: Insufficient mobilization period
* Claim no. 5: Change of the types of base course
* Claim no. 6: Delays in interim payment certificates

Three months later the contractor withdrew claim no. 1, claim no. 2 and claim no. 4 for the extension but reserved his right for financial compensation.

**Claim no. 3: Out of Date of Design and Survey Data**

According to the contract, the works commenced on 14th July, 2020 and during execution the contractor indicated that during setting out exercise a lot of survey points were missed and by using the available points the road could shift 80M away from existing alignment. The regional engineer issued the first correct data to the contractor 2 months later, and issued the last correct data 10 months later. The contractor demanded that, although he received the notice to proceed 3 months before commencement date and the notice of site possession 2 months earlier, he could not commence the works as required without the bases survey data. The contractor indicated that as result of this the he suffered delays according to clause 6.3 and clause 6.4. The contractor requested to be compensated for the lost time and extra cost as per clause no. 44 of special condition of contract. The contractor also requested for a 90 days of extension of time.

**Claim no. 5: Change of Base Course**

The contractor strongly believed that the alternative number two use of cement stabilized base would be adopted, because during negotiation meeting and during various post contract discussions this was strongly recommended. The contractor also reported that on 18th October, 2020 he received instructions issued by consultants informing him that the employer approved the change from Crushed Rock Base (CRB) which was alternative to Cement Stabilized Base (CSB). Then on 18th December, 2020 contractor received another instructions informed him about the engineer rejection to use CRB and instead proceed with CRR base construction as per contract.

The contractor contended that this was unexpected and filed claim for equipment and materials he had prepared for CSB become redundant. Also he remarked that the equipments and materials for CRR could not be made available to site immediately since they needed preparation and mobilization time. The contractor reported that he had to do the following before he could proceed with CRR construction;

* Conduct exploration for suitable source of stone for CRR
* Ensure enough drilling capacity for blasting
* Send rock samples for laboratory testing in University of Dar es Salaam. In this claim contractor requested for 198 days of extension of time.

**Claim no. 6: Delays in Payment of IPCs**

The contractor claimed that due to delays in settling his interim payment certificates, he could not follow his planned programme and hence the works delayed. The contractor informed the consultant that due to above reasons he is forced to reduced the rate of production, then according to clause number 69.4 he claimed for a 147 days extension of time and financial compensation. In order to support his financial claim the contractor submitted the following;

* Additional overheads expenses calculation sheets
* Depreciation of equipments
* Calculation sheet for additional cost for salary and local staff
* Insurance cost sheets
1. **Evaluation of the Claims**

The consultant examined the contractor’s claims and gives his recommendations as follows;

1. Claim no. 3 Out of date design and survey data

The consultant noted that the contractor submitted his intention to claim as required under clause 53.1 of general condition of contract. The consultant comments were as follows;

The works commencement date as per contract was 14th July, 2020, the contractor was late and slow in mobilization to the extent that by 14th August, 2020 he was not able to start any works due to lack of vital equipment at site, for example the crusher plant was not mobilized at all.

The consultant recommended that the contractor is entitled to time of extension of 58 days to be awarded for the delay related to out of date design and survey data.

1. Claim no. 5 Change of base course

The consultant observed that the contractor submitted his notice of intention to claim on 8th January, 2021 as per clause 53.1 of general condition of contract, the consultant comments were as follows;

* No written instructions were issued by the consultant to the contractor in respect of this as required in clause 54.5 of the condition of contract
* Both the notification and withdrawal letters were initiated and authorized by the employer
* The contractor claims is not acceptable unless for the period from when the notice was given on 18th October, 2020 and withdrawn on 18th December, 2020.
* The contractor has not submitted any substantiation for the financial claims.
* The consultant recommended a 60 days extension of time.
1. Claim no. 6 Delay payment on IPCs

The consultant comments towards the claims as follows;

* In accordance with clause 60.8 an IPC should be paid within 28 days if not paid an employer shall pay an interest upon the unpaid sum
* In accordance with clause 69.1 if the payment not made within 56 days after the date of payment is due, the contractor in accordance with the clause 69.4 can suspend the works or reduce the rate of works. In addition, he is entitled to receive an extension of time and financial compensation.
* Regarding the main item on the critical path for completion of works (i.e construction of CRR base) the trend indicated that there was a slowdown of rate of production.

Employers review of the contractor claim and consultant assessment and accepted the consultant assessment and awarded a 58 days time extension to the contractor and then financial compensation amounting to TZS. 298,771,326.27/= due to claim no. 3 also contractor was entitled to financial compensation amounting TZS. 178,110,124.12/= for the claim no. 6

**Comments**

Having gone through the contractor claims process, notification, preparation and presentation, consultant evaluation, employer review; I have the following comments to make;

* The contractor claims in this project was prepared in accordance with the contract provisions. The contractor seem to be aware of procedures in contract documents and proved that a well prepared claim based on the appropriate clauses and founded on the facts that are clearly recorded, presented and provable are successful.
* Consultant evaluation of the claims in this project was fair and based on the adequacy of the proof provided and supporting documents. The contractor was aware of keeping information on site records and inception report.
* The employer suffered financial harm due to consultant out of date data.

## 4.2.5.4 Project Review No. 4

**Project name:** Proposed construction of Rayson hotel to be built at Nanenane area in Dodoma.

**Duration:** 137 week

1. **Description of the Project**

The site for this project was at Dodoma city council, the contract was signed on 15th April, 2021 between SS (the employer) and DD construction companies (the contractor). The contract sum was TZS. 865,700,000/= during execution of works contractor raised claim for payment for the works already executed on site, but employer refuse to make payment on time. Payment which was delayed was for certificate no. 2, 3 and 4, this caused cash flow problems on the part of the contractor. When payment was made, it was not enough to make the project self financing and escalation of the prices of materials and other construction inputs. For proper implementation of the project, the contractor requested for financial assistance.

1. **Background Information on the Areas of the Claims**

The consultant’s failure to administer the project proficiently caused cash flow hardship to the contractor unable to finance the project, Due to these the contractor made an application for the claims as follows;

Claim no. 1: Delay payment for preliminaries amount to TZS. 145,500,000/=

Claim no. 2: Claim for interest on delayed payment

Claim no. 3: Extension of time 130 days

1. **Evaluation of the Claim**

The contractor sends the matter to NCC for the reconciliation. After NCC had gone through the presented claims and see how the consultant ascertained it and see all important supporting documents of presented claims, they were opinion that the contractor was right on his claims for financial compensation and awarded a 97 days’ time extension.

1. **Comments**

Having gone through the contractor’s claims process, notification, preparation and presentation, I have the following comments to make;

* The contractor’s claims in this project was prepared and presented in accordance with the contract provisions.
* The consultant evaluation of the claims in this project was fair and based on the adequacy of the proof provided and supporting documents.
* The employer suffered financial harm due to consultant out of date data and insufficiently running of the project.

## Common Causes of Claims and Disputes in Tanzania Construction Industry

## The first objective of this study aimed at identification of common causes of claims and disputes in Tanzania construction industry, all data from interviews, questionnaires and observation done from previous completed projects were analysis together to avoid monotonous.

Table 4. : Common Causes of Claims and Dispute in Tanzania Construction Industry (40 respondents)

MC-Most Common = 3, C-Common =2, R-Rarely=1, NE-Not Exist=0

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Causes of Claims and Disputes on Projects** | **M.C** | **C** | **R** | **N.E** | **Average** | **Rank** |
| 1. | Change in design and specification issues | 105 | 10 | 0 | 0 | 57.50 | 1 |
| 2. | Change in scope of works | 99 | 14 | 0 | 0 | 56.50 | 2.5 |
| 3. | Poor planning and late mobilization | 93 | 18 | 0 | 0 | 55.50 | 4 |
| 4. | Quality and performance issues | 94 | 16 | 0 | 0 | 55.00 | 5.5 |
| 5. | Unauthorized variations  | 84 | 24 | 0 | 0 | 54.00 | 6 |
| 6. | Poor communication between parties  | 90 | 20 | 0 | 0 | 55.00 | 5.5 |
| 7. | Cost overruns and payment issues | 96 | 16 | 0 | 0 | 56.00 | 3 |
| 8. | Cost related to the resolution of the disputes  | 60 | 24 | 8 | 0 | 30.66 | 8 |
| 9. | Escalation of price due to inflation | 84 | 20 | 2 | 0 | 35.33 | 7 |
| 10. | Lack of documentation | 99 | 14 | 0 | 0 | 56.50 | 2.5 |

**Source;** Researcher (2024)

Based on the result from table 4.3 Change in design and specification issues was considered to be the most significant causes of claims and disputes in construction industry (rank 1) followed by change in scope of works (rank 2.5), lack of documentation (rank 2.5), cost overruns and payment issues (rank 3), poor planning and late mobilization (rank 4), quality and performance issues (rank 5.5), poor communication between parties (rank 5.5), unauthorized variations (rank 6), escalation of price due to inflation (rank 7) and cost related to the resolution of the disputes (rank 8).

## 4.4 Effectiveness of Alternative Disputes Resolution (ADR) Methods in Tanzania Construction Contracts

The second objectives of this study aimed at investigating the effectiveness of alternative dispute resolution method in construction industry. Researcher utilized a three point scale, the three point scale ranges based on the mean values as follows: A mean score of 1-2.4= average effective, mean score of 2.5-3.9= effective and mean score of 4.0-5.0= very effective. Additionally, the standard deviation was considered as measure of dispersion. All findings are presented in the table 4.4 below.

Table 4. : Effectiveness of the Methods of Alternative Dispute Resolution in Construction Contracts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Disputes Resolution Methods** | **Mean** | **Std. Dev** | **Rank** | **Effectiveness** |
| 1. | Negotiation | 4.69 | 0.82 | 1 | Very effective |
| 2. | Mediation conciliation | 4.15 | 0.72 | 2 | Very effective |
| 3. | Arbitration | 3.42 | 0.84 | 3 | Effective |
| 4. | Adjudication | 3.38 | 0.94 | 4 | Effective |
| 5. | Arbitration mediation | 2.81 | 0.96 | 5 | Effective |
| 6. | Disputes boards | 2.40 | 1.01 | 6 | Averagely effective |

**Source:** Researcher (2024)

Based on the results from table 4.4, the findings indicated that negotiation was very effective method adopted to settle disputes arising from construction industry (Mean=4.46, S.D=0.82), the process may be bilateral (between two parties) or it could be multilateral (many parties). Indeed, this is informal process in legal aspect but if an agreement is reached through the process it may have the usual legal significant. Respondents adopted this method because the process was very fast and does not involve additional expenses and discussions are held between parties in a cordial and peaceful atmosphere. Such a negotiation approach can lead to better alignment between parties involved resulting in improved organization performance through efficient problem resolution.

Respondents also strong indicated that mediation and conciliation was very effective method for dispute resolution (Mean=4.15, S.D=0.72), under this method the parties are assisted by one or more neutral third parties in their efforts towards settlement. These mediators do not sit in judgment but to advice and consult impartially with the parties the object of assisting in bringing about mutual agreeable solution to the problem. Many respondents opt for this method in resolving disputes because it has certain inherent advantage over the more formal and legal process, example, it could be a lot less time consuming and even involve lesser costs and the outcome could be more satisfying to the parties, it also open channels of communication and contributes greatly to preserving or enhancing a professional relationship. Further respondents agreed that the exercise may be said to empower the parties and give greater confidence in the ability to handle disputes.

It was found that arbitration, adjudication, arbitration-mediation was effective method for dispute resolution with mean score of 3.42, 3.38, 2.81 and standard deviation of 0.84, 0.94, and 0.96 respectively, followed by disputes boards with averagely effective of mean score of 2.4 and standard deviation of 1.01.

## Procedures and contractual provisional set forth in Contract Documents in Management of Claims And Disputes in Construction Industry

The third objective of this study sought on examine procedures and contract provisions set forth in contract documents in management of claims and disputes in construction industry.

## 4.5.1 Procedures in Management of Contractual Claims and Disputes

 The respondents from group of contractors and consultants experts (Project managers, Engineers, Architects and Quantity surveyors) agreed that claim identification with mean score of 3.61 and 3.88, claim notification (mean score of 3.52, 3.86), claim examination (mean score of 3.43, 3.78), claim documentation (mean score of 3.42, 3.45), claim presentation and negotiation (mean score of 3.52, 3.29) are strongly construction claim procedures to ensure contractual entitlements in management of claims and disputes in construction industry as shown in table 4.5.

Table 4. : Procedures in Management of Construction Claims and Disputes in Tanzania

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/no** | **Procedures in management of claims and disputes** | **Contractors****experts****Mean score** | **Ranking** | **Consultants****experts****Mean score** | **Ranking** |
| 1. | Claim identification | 3.61 | 1 | 3.88 | 1 |
| 2. | Claim notification | 3.52 | 2 | 3.86 | 2 |
| 3. | Claim examination | 3.43 | 3 | 3.78 | 3 |
| 4. | Claim documentation | 3.42 | 4 | 3.45 | 4 |
| 5. | Claim presentation and negotiation | 3.32 | 5 | 3.29 | 5 |

**Source:** Researcher (2024)

## 4.5.1.1 Claim Identification

The respondents agreed that by adopting strategies that will detect claim situations, claim identification could be streamlined. Most of the interviewees were concerned about the regular review of project documentation and agreed that project cost and payment forecasting are the two most significant strategic that will detect claim situation. The interviewees highlighted that quantity surveyors, project managers and site engineers are the key professionals that can be involved in claim identification.

According to the respondents from the contractors the main problem in identification of claims is lack of awareness of the site staff and insufficient time due to high workload. From respondents from consultants, insufficient skilled personnel for detecting a claim and poor communication between site and head office are also considered as the main problems in this stage. Off all the problems listed, both experts form contractors and consultants agreed that ambiguous procedures in claim identification posed the least problem in identification of claims. It is revered that situations related to skills and awareness off staff are raised to be the most severe problem in the claim identification process. Site members are expected to understand contract provisions as agreed and signed by contracting parties. The lack of awareness, skills and knowledge of site personnel may cause loss of chances for the rights to declare a claim as shown in table 4.6 below.

Table 4. : Problems in Identification of Claims

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/No.** | **Problems in Identification of Claims** | **Contractors experts****Mean score** | **Ranking** | **Consultants experts****Mean score** | **Ranking** |
| 1. | Lack of awareness of site staff to notice a claim | 3.38 | 1 | 3.89 | 2 |
| 2. | Insufficient contract knowledge by site staff | 3.35 | 2 | 3.62 | 4 |
| 3. | Insufficient time due to high workload | 3.28 | 3 | 3.60 | 5 |
| 4. | Insufficient skilled personnel for detecting a claim | 3.24 | 4 | 3.90 | 1 |
| 5. | Poor communication between site and head office | 3.20 | 5 | 3.78 | 3 |
| 6. | Ambiguous procedures in claim identification | 2.88 | 6 | 3.52 | 6 |

**Source:** Researcher (2024)

## 4.5.1.2 Claim Notification

Respondents agreed that after it is established by the contractor that it is an extra

works, the contractor is required to inform the consultant within the time frame stipulated on contract documents and clarify his intention to claim extra rates for the same.

Generally the findings from respondents concluded that inaccessibility of supporting documents needed for notice, ambiguous procedures in notice preparation, poor communication/ instruction issued to proceed with submitting the notice and insufficient time to thoroughly prepare the notices due to high workload as the major problems in claim notification. See the table 4.7 for findings and analysis

Table 4. : Problems in Claim Notification

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/No** | **Problem in Notification of Claims** | **Contractors experts****Mean score** | **Ranking** | **Consultants experts****Mean score** | **Ranking** |
| 1. | Inaccessibility of supporting documents needed for notice | 3.4 | 1 | 3.45 | 2 |
| 2. | Ambiguous procedures in notice preparation | 3.2 | 2 | 3.38 | 4 |
| 3. | Poor communication and instructions to proceed with submitting the notice | 3.10 | 3 | 3.60 | 1 |
| 4. | Insufficient time to thoroughly prepare the notice due to high workload | 3.00 | 4 | 3.40 | 3 |
| 5. | No standard form used for preparing the notice | 2.90 | 5 | 3.30 | 4 |

**Source:** Researcher (2024)

## 4.5.1.3 Claim Examination

The next procedure is examination of claims set forth in contracts documents through table 4.8, it can be seen that unavailability of crucial records used to analyze and estimate the potential recovery, insufficient time required to thoroughly examine and analyze claim due to high workload and poor communication between parties to gather the required information to analyze a claim are the top three problems experienced by contractors and consultants team as approved by both parties. Respondents indicated that records availability is very crucial in analyzing and estimating the expenses of claims. Lack of legal /contract to establish strong and valid reasons on which the claim stands also add to the problems in claim examination process. Knowledge and awareness in law and contract amongst the contractors and consultants needed to be highlighted.

Table 4. : Problems in Examinations of Claims

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/No.** | **Problems in Examinations of Claims** | **Contractors experts****Mean score** | **Ranking** | **Consultants experts****Mean score** | **Ranking** |
| 1. | Unavailability of records used to analyze and estimate the potential recovery | 3.29 | 1 | 3.78 | 1 |
| 2. | Insufficient time to thoroughly examine claim due to high workload | 3.15 | 2 | 3.54 | 3 |
| 3. | Poor communication to gather the required information to analyze a claim | 3.04 | 3 | 3.60 | 2 |
| 4. | Lack of legal/ contract to establish the base on which the claim stands | 2.95 | 4 | 3.51 | 4 |

**Source:** Researcher (2024)

## 4.5.1.4 Claim Documentation

An effective and efficient documentation will provides proof for the alleged claim and improve the chances of winning a claim. Based on the outcome of the findings, both parties form of contract seem to agree without doubt that verbal instruction issued by employer, some instructions is not kept in writing and ineffective record keeping system contributes a lot to the problems in claim documentation process. Ineffective records keeping also contribute to this problems and it is recommended for contractors to have a systematic documentation system as stipulated in table 4.9 below.

Table 4. : Problems in Documentation of Claims

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/No.** | **Problems in Documentation of Claims** | **Contractors experts****Mean score** | **Ranking** | **Consultants experts****Mean score** | **Ranking** |
| 1. | Verbal instructions issued by employer | 3.8 | 1 | 3.7 | 2 |
| 2. | Some of instructions not kept in writing | 3.75 | 2 | 3.86 | 1 |
| 3. | Ineffective record keeping system | 3.65 | 3 | 3.65 | 3 |
| 4. | Inaccessibility of documents when needed | 3.50 | 4 | 3.25 | 5 |
| 5. | No standard form used to record the data during construction | 3.40 | 5 | 3.50 | 4 |

**Source:** Researcher (2024)

**4.5.1.5 Claim Presentation and Negotiation**

Under this process, the completed claim documents will be submitted and presented for employer for assessment and comment. If the documentation stage is not properly

managed, it will affect this process and as result cause a failure in claim process.

Inaccessibility of relevant documents to submit along with claim, insufficient skilled personnel in preparing a claim submission and poor communication among staff in presenting a claim are mutually agreed by both parts (contractors and consultants) to be the major problem in presentation of claim.

The purpose of negotiation is to achieve an agreement through discussion and compromise. The respondents agree that disagreement arising during negotiation, unsatisfactory evidence to convince other parties and poor negotiation skills is the main problems hindering claim settlement. The problems related with not having good negotiation skills with experienced workers are predictable; a lot of contractor does not have a committed unit or individual with responsibility of managing the claims.

Table 4. : Problems in Claim Presentation and Negotiation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/No.** | **Problems in Claim Presentation and Negotiation** | **Contractors experts****Mean score** | **Ranking** | **Consultants experts****Mean score** | **Ranking** |
| **A.** | **Claim Presentation** |  |  |  |  |
| 1. | Inaccessibility of relevant documents to submit along with the claim | 3.25 | 1 | 3.60 | 1 |
| 2. | Insufficient skilled staff in preparing a claim submission | 2.90 | 2 | 3.20 | 3 |
| 3. | Poor communication in presenting a claim | 2.84 | 3 | 3.50 | 2 |
| **B.** | **Claim Negotiation** |  |  |  |  |
| 1. | Disagreement arising during negotiation | 3.80 | 1 | 3.55 | 1 |
| 2. | Unsatisfactory evidence to convince other parties  | 3.78 | 2 | 3.45 | 3 |
| 3. | Inadequate time due to high workload | 3.60 | 3 | 3.50 | 2 |

**Source:** Researcher (2024)

## 4.5.2 Contractual Provisional set forth in Contract documents in Management of Claims and Disputes in Construction industry

# The findings indicated that mostly of contract documents provides necessary clauses guided a project manager on how to manage claims and disputes in construction projects as illustrated on table 4.11 based on assessment of twenty five (25) construction projects.

Table 4. Contractual Clauses Set forth in Contract Documents in Management of Claims and Disputes (Based on Assessment of Twenty Five Construction Projects)

|  |  |  |  |
| --- | --- | --- | --- |
| **S/No.** | **Contractual Clauses on contract documents** | **No. projects fulfilled procedures** | **Percentage** |
| 1. | Clauses on notice of intention to claims | 25 | 100% |
| 2. | Clauses on contemporary records (significant documents) | 25 | 100% |
| 3. | Clauses based on claim evaluation | 24 | 96% |
| 4. | Clauses based on assessment and presentation of claims and disputes | 22 | 88% |

**Source:** Research (2024)

Based on results form table 4.11 which presented in percentages, respondents strongly agreed that clauses guided on notice of intention to claims and clauses guided contemporary records (significant documents) come top with 100%, followed by clauses guided on claim evaluation with 96% and clauses based on assessment and presentation of claims and disputes with 88% are strongly significant clauses which guided project manager and other construction stakeholder on management of claim and disputes as stipulated on contracts documents.

## 4.5.3 Management strategies adapted to Mitigate Claims and Disputes in Construction industry

## The information on management strategies adopted to mitigate claims and disputes in construction industry were collected through questionnaires and interview guides. The results from this study revealed that there’s several strategies adopted to mitigate claims and disputes in construction industry as illustrated below on table 4.12:

Table 4. : Management Strategies adopted to Mitigate claims and Disputes (40 Respondents

MC-Most Common-3, C-Common-2, R- Rarely-1 N.E-Not Exist-0, A- Average, R- Rank

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S/no** | **Management strategies to mitigates claims and Disputes** | **M.C** | **C** | **R** | **N.E** | **Average** | **Rank** |
| 1. | Studying carefully tender documents (know your contracts) | 108 | 8 | 0 | 0 | 58 | 1 |
| 2. | Proper project planning and executions | 84 | 24 | 0 | 0 | 54 | 5 |
| 3. | Manage changes and delays in contract | 90 | 20 | 0 | 0 | 56 | 3.5 |
| 4. | Effective communication between parties form a contracts | 105 | 10 | 0 | 0 | 57.5 | 2 |
| 5. | Select the most suitable contractual and procurement model | 87 | 22 | 0 | 0 | 54.5 | 4 |
| 6. | Resolve dispute early | 75 | 30 | 0 | 0 | 52.5 | 6 |
| 7. | Proper contract administration throughout the contract period | 96 | 16 | 0 | 0 | 56 | 3.5 |

**Source:** Researcher (2024)

Based on the results form table 4.12, respondents agreed that studying carefully tender documents (know your contract) was considered to be the most management strategies to be adopted by construction terms in mitigation of claims and disputes in construction industry (rank 1), followed by effective communication between parties form a contract (rank 2), manage changes and delays in contract (rank 3.5), proper contract administration throughout the contract period (rank 3.5), select the most suitable contractual and procurement model (rank 4), proper project planning and executions (rank 5) and resolve disputes early (rank 6).

* 1. Challenges Hindering Construction Industries in Mitigation of Claims and Disputes in Tanzania Projects

The forth objective of this study sought examine challenges hindering construction industry in mitigation of claims and disputes in Tanzania projects, Researcher utilized a five point scale. The scale ranges are as follows, A mean score of 1-1.4 present no extent, mean score of 1.5-2.6 present Little extent, Mean score of 2.7-3.6 present Moderate extent, Mean score of 3.7-4.4 present Large extent and Mean rating from 4.5-5.0 are Very large extent.

Also, the Standard Deviation (S.D) was considered as measure of dispersion where a low value indicated data closely clustered around the mean and the high value indicated greater dispersion.

Table 4. Challenges hindering construction industry in mitigation of claims and disputes in Tanzania project

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S/No | Challenges in Mitigation of Claims and Disputes  | Mean | S/D | Interpretation | Ranking |
| 1. | Poor communication between parties  | 4.7 | 0.8 | Very large extent | 1 |
| 2. | Ambiguity in contract language | 3.8 | 0.7 | Moderate extent | 5 |
| 3. | Inadequate documentation, evidences and facts | 4.6 | 0.9 | Very large extent | 2 |
| 4. | Contractual compliance | 4.5 | 0.8 | Very large extent | 3 |
| 5. | Late submission of claims | 3.5 | 0.8 | Moderate extent | 6 |
| 6. | Lack of management strategies to mitigate claims in building contracts | 4.1 | 0.9 | Large extent | 4 |
|  | COMPOSITE MEAN | 4.2 |  |  |  |

# Source: Research (2024)

To a very large extent, respondents indicated that poor communication between parties can lead to misunderstandings and delays in resolving claims and disputes (Mean=4.7, S/D=0.8). Respondents suggested that the companies or organization should places a high emphasis on fixing poor communication by develop clear line of communication between parties involved in the contracts, also by maintain regular contact with all parties involved in the project to ensure that everyone is up to date on project status.

Findings showed that inadequate documentation, evidences and facts to a very large extents are the challenges in resolving construction claims (Mean=4.6, S/D=0.9). Respondents’ emphases that if there is no enough or well kept documentation, it can be very hard to backup claims and prove entitlement. This implies that it is important to conduct regular reviews of the project documentation to ensure that it is complete and accurate. This can help to identify any potential issues early on and address them before they become very serious.

Results found that to a very large extent contractual compliance are strongly challenges hindering construction industry in mitigation of claims and disputes (Mean=4.5, S/D=0.8). This indicated that failure to comply with contractual requirements can lead to a denial of entitlement.

The result indicated that, to a large extent lack of management strategies to mitigate claims in building contracts are among of challenges hindering construction industry (Mean=4.1, S/D=0.9). The respondents agreed that the most effective ways of managing disputes are reducing uncertainties in the project phases, setting up contingency plans, construction warrant and guarantee, retention money and escalation of contract clause. This implies that contractual parties needed to efficiently carry out their responsibilities as per contract to reduce contractual disputes and difficulties. For this problem to be forestalled, clear contract terms, efficient and effective management strategies, special and general conditions of contract should be inserted clearly.

It also observed that ambiguity in contract language are among of the challenges facing construction industry in mitigation of claims and disputes although the rating was moderate extent (mean=3.8, SD=0.7). Respondents mention several solutions to address ambiguity in contract language including clarification of terms, incorporation by reference and expert review.

The findings suggest that late submission of claims are among of the challenges facing construction industry in mitigation of claims and disputes although the rating was moderate extent (Mean=3.5, SD=0.8). Respondents agreed that contractors fail to obtain financial compensation which he is entitled because of late submission of claims or his intention to submit one.

The composite mean of 4.2 reflects the challenges facing construction industry in mitigation of claims and disputes which affect organization performance as assessed by the respondents. This score falls within the large extent range, indicating that on the whole, challenges hindering construction industry in mitigation of claims have a large extent impact on organization performance.

* 1. Inferential Statistics

The study employed inferential statistics such as correlation analysis, multicollinearity assessment and regression analysis. These techniques are utilized to identify relationships between variables which can help in decision making.

## 4.7.1 Correlation analysis

This study explored the correlation analysis, a fundamental statistical technique used to examine the relationship between independent variables with dependent variable; findings are presented in table 4.14

Table 4. Correlations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Claim management process | Dispute resolution mechanisms | Contract management | Project performance |
| Claim management process | Pearson correlation | 1 |  |  |  |
| Sig.tailed |  |  |  |  |
| N | 40 |  |  |  |
| Dispute resolution mechanisms | Pearson correlation | .487\*\* | 1 |  |  |
| Sig.tailed | .000 |  |  |  |
| N | 40 | 40 |  |  |
| Contract management | Pearson correlation | .256\*\* | .550\*\* | 1 |  |
| Sig.tailed | .000 | .000 |  |  |
| N | 40 | 40 | 40 |  |
| Project performance | Pearson correlation | .379\*\* | .530\*\* | .648\*\* | 1 |
| Sig.tailed | .000 | .000 | .000 |  |
| N | 40 | 40 | 40 | 40 |

# Source: Research (2024)

In the study, significant positive correlations were found between various aspects of claims and disputes management processes and project performance. Specifically, a strong positive correlation was observed between project performance and claim management process (r=0.379, p<0.001), disputes resolution mechanisms (r=0.530, p<0.001), contract management (r=0.648, p<0.001). These findings suggest that as the effectiveness and efficiency of management of claims and disputes increased, there is a corresponding positive impact on project performance.

## 4.7.2 Multicollinearity

# This study also examined multicollinearity, multicollinerity occurs when independent variables are highly correlated, potentially affecting the reliability of our results. The study assessed this by checking two key criteria, the tolerance, which should be >0.1 and the VIF (Variance Inflation Factor) which should be less than 5.

Table 4. 17 Multicollinearity

|  |
| --- |
| **Coefficients** |
|  | Model | Collinearity Statistics |
|  | Tolerance | VIF |
|  | Effective claims management process | .386 | 2.083 |
|  | Effective disputes resolution mechanisms | .324 | 1.880 |
|  | Contract management | .486 | 1.570 |
|  | Dependent variable: Project performance |

**Source**: Research (2024)

Table 4.17 shows that the independent variables claim management process the tolerance value is 0.386, corresponding to a Variance Inflation Factor (VIF) OF 2.083. Similarly, for disputes resolution mechanisms, the tolerance is 0.324 with VIF 1.880, for contract management the tolerance is 0.486 with VIF 1.570. These values concluded that there is no multicollinearity between the independent variables in the regression model.

* 1. Discussion of the Findings

Based on the findings, it is evident that the main causes of claims and disputes on construction industry in Tanzania are due to change in design and specification issues, change in scope of works, inadequate of contract documents (contract correspondences, instructions issued by project manager, variation order sheets, working drawings, labor records etc), cost overruns and payment issues, poor planning and late mobilization, quality and performance issues, poor communication between parties form a contract, unauthorized variations, escalation of price due to inflation and cost related to the resolution of the disputes. This aligned with the findings of Chaitanya (2019) and Konkoon (2016) which identify the main causes and impacts of claims and disputes in construction projects including their effect on project cost, schedule, quality and overall project performance. Also, the findings revealed that contractual claims can impact public and private projects in term of cost, time and performance and also revealed that high level of professionalisms is needed in handling construction projects in order to reduce occurrences of claims and disputes.

The study revealed that the orders of effectiveness of alternative dispute resolution methods in construction industry are negotiation, mediation conciliation, arbitration, adjudication, arbitration mediation and disputes boards, it observed that alternative dispute resolution methods are very usefully and beneficial to the construction professionals than the litigation method, the study concluded that the most effective methods is negotiation and mediation. These results are supported by Callahan (2019), attorneys and Ndamugoba (2019) which emphasized the effectiveness of alternative dispute resolution method which is essential to ensure that any contractual claims arising are dealt with in the way that it fair to each part involved. The choice of the appropriate dispute resolution mechanisms depends on the nature and complexity of the dispute as well as the preferences of the parties involved.

Furthermore, the study examined procedures and contractual provisional set forth in contract documents in management of contractual claims and disputes in construction industry, the procedures revealed in this study are claim identification, claim notification, claim examination, claim documentation, claim presentation and claim negotiation, the study also identify the problems in identification of claims, problems in notification of claims, problems in examining of claims, problems in documentation of claims, problems in presentation of the claims and problem in negotiation of claims. The study revealed contractual provisional set forth in contract document such clauses are clauses on notice of intention to claims, clauses on contemporary records, clauses on claim evaluation, clauses on assessment and presentation of claims. These findings are in line with research conducted by Harris and Maccaffer (1998) highlights the procedures and contractual clauses necessary on management of claims and disputes, But through Makoba (2020) strongly argue that no specifications of the procedures were laid down for management of claim and disputes and emphasized that the question of improper methodology for management of claims and disputes can only solved by the use of the proper and appropriate ways.

The study revealed that, poor communication between parties form a contract, inadequate documentation, evidences and facts, contractual compliances, lack of management strategies to mitigates claims in building contracts, ambiguity in contract language and late submission of claims are major challenges hindering construction industry in mitigation of claims and disputes in Tanzania construction projects specific Dodoma region, the study also revealed mechanisms to overcome these challenges including studying carefully tender documents, effective communication between parties form a contract, manage changes and delays in contract which can affect the scope, schedule, budget, quality of projects and may results in claim for additional compensation and time extension, proper contract administration throughout the contract period, proper project planning and execution and resolve disputes early. However it’s worth noting that Marco (2017) found no conclusive evidence of the connection between challenges hindering construction industry in mitigating claims and projects performance. For the findings obtained from this study it is imply potential mechanisms for challenges hindering construction industry in mitigation of claims and disputes in Tanzania projects.

# CHAPTER FIVE

# SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

##  Chapter overview

This chapter presents summary of the main findings, implications of the findings, conclusions and recommendations, limitation of the study and areas recommended for further research. The general objective of this study was to examine management of claims and disputes in Tanzania construction industry with special focus to Dodoma region. This was achieved through the following specific objectives:

1. Identifying common causes of claims and disputes in Tanzania construction industry
2. Investigating the effectiveness of alternative disputes resolution methods in Tanzania construction industry from signing of contract to final account stage.
3. Examining procedures and contractual provisional set forth in contract document in management of claims and disputes in construction industry.
4. Examining challenges hindering construction industry in mitigation of claims and disputes in Tanzania projects.

## Summary of the Main Findings

The study based on examining management of claims and disputes in Tanzania construction industry. To achieve this, the study identify the main causes of claims and disputes, the effectiveness of alternative dispute resolution methods, examining procedures and contractual provisional set forth in contract document in management of claims and disputes and challenges facing construction industry in mitigation of claims and disputes.

The main causes of claims and disputes on construction projects in Tanzania are change in design and specification issues, changes in scope of works, inadequacy of contract documents (such as contract correspondences, instructions issued by project manager, variation order sheets, working drawings, labour records, plants and equipments, measurement sheets, rate breakdown and schedules of defects), Cost overruns and payment issues, poor planning and late mobilization, quality and performance issues, poor communication between parties form a contract, unauthorized variations, escalation of price due to inflation, and cost related to the resolution of the disputes. These causes of claims and disputes are consistent and it is evident that the standard form of contracts used in operation of the projects is the main key in determining the level of disputes and its causes.

The study also investigated the effectiveness of alternative disputes resolution methods in Tanzania construction industry, The effectiveness of alternative dispute resolution methods on this study is negotiation, mediation conciliation, arbitration, adjudication, arbitration mediation and dispute boards. It observed that alternative disputes resolution methods are very usefully and beneficial to the construction professionals than the litigation methods. However, the effectiveness of the methods remains lacking in context. This study found that the most effective method is the negotiation and mediation methods.

Furthermore, the study examined procedures and contractual provisional set forth in contract documents in management of contractual claims and disputes in construction industry. In order to control the claims and disputes effectively, the parties form a contract should establish good construction claim management processes in their companies. Procedures strongly agreed in this study is claim identification, claim notification, claim examination, claim documentation, claim presentation and claim negotiation. Claim identification always involved timely and accurate recognition of change, this process is very critical important and can be done by analyzing both the contract scope, contract terms, extra work description and description of extra time requested. Claim notification process provides the notify parties with the opportunity to review the condition and take action to resolve or mitigate its impact, claim notifications needed to be done in writing with crucial details as possible. Establishing legal and factual ground on which a claim is to be based is done during examination stage, in this stage, records availability is very important in analyzing and estimating the expenses of claims. The fourth stage is documentation of all supporting documents needed including working drawings, specification of building works, methodology, written instructions, rate breakdown, measurement sheets based on actual works executed on site and other records should be compiled together. The entire completed documents will be submitted and presented to the client for assessment and comments. Upon receiving the official claims, client will assess and decide on the outcome of submitted claims, the final stage is negotiation, and the process concerned the process of negotiation claims to the employer and mutual resolution of such claims. If an agreement cannot be agreed and both parties believe that they are in right position they should propose an alternative dispute resolution method.

Moreover, the study examined contractual provisions set forth in contract document in management of claims and disputes, clauses on notice of intension to claims, clauses on contemporary records (significant documents), clauses on claim evaluation, clauses on assessment and presentation of claims are strongly significant clauses found in contract documents which guided project manager and other construction stakeholder on management of claims and disputes in construction industry. Under notice of intention to claims clause the contractor should select the relevant clauses in condition of contract as the basis for his claims, a letter to project manager giving notice of the contractor’s intention to claim should state circumstances giving rise to the claims and state the clauses of the contract under which the claim is being made. The findings show that supporting information (contemporary records), facts and evidences is needed in order to prepare a sound and logical claim. The findings indicated that records and information mostly used in the formulation, assessment and settlement of claims including a master program indicating how the contractor has envisaged the sequence and timing of the various activities, a progress schedule to compare progress against master program, estimate of resources and expenditure.

The study revealed that, poor communication between parties form a contract with mean score of 4.7, inadequate documentation, evidences and facts (4.6), contractual compliances (4.5), lack of management strategies to mitigate claims in building contracts (4.1), ambiguity in contract language (3.8) and late submission of claims (3.5) as major challenges hindering construction industry in mitigation of claims and disputes in Tanzania projects specific to Dodoma region. In order to overcome these challenges measures have to be taken including studying carefully tender documents, effective communication between parties form a contract, manage changes and delays in contract which can affect the scope schedule, budget, quality of projects and may results in claim for additional compensation and time extension, proper contract administration throughout the contract period, proper project planning and executions and resolve disputes early.

For the effectiveness of these findings, professionals from various streams such as project managers, engineers, architects and quantity surveyors, government and private policy makers, stakeholders and funding organizations should own the findings of this research and endeavor for their implementation.

## Implications of the Findings

This study provides valuable insights for policy makers, government and private sectors. Firstly, it underscores the importance of reinforcing policies and contract administration programs that promote transparent and efficient management of claims and disputes. The findings emphasize that by binding an environment where professionalism and integrity in contract management and claim management procedures that can enhance project performance also contribute the growth of economic of Tanzania.

By implementing the recommendations drawn from this research construction companies can further optimize their execution of awarded projects, maintain their competition and quality of the final products and build trust among stakeholders. Additionally, the implications of this study extend to the dominion of academic and future research. Researcher can utilize the findings obtained as a catalyst for investigation into claims and disputes management procedures and their effects across different region. Furthermore academicians have an opportunity to incorporate these findings into curriculum development for claims management procedures and dispute resolution mechanisms programs, ensuring that students are equipped with best practices on management system in construction aspects.

## Conclusions

This study examining management of claims and disputes in Tanzania construction industry with a special focus in Dodoma region, Based on the findings of the study, the study concluded that a successful and efficient management of construction claims can be achieved by studying carefully tender documents, proper filling of tender documents, effective communication between parties form a contracts, proper contract administration throughout the contract period, managing changes and delays in contract, select the most suitable contractual and procurement model, proper planning and executions and resolve dispute early.

Moreover, it has been revealed that, poor communication between parties, inadequate documentation, evidences and facts, contractual compliance, lack of management strategies to mitigate claims in building contracts, ambiguity in contract language and late submission of claims are strongly challenges hindering construction industry in mitigation of claims and disputes in Tanzania projects.

During project management phases (i.e. initiation, planning, execution, monitoring and control and project closure) establishing good communication channels between the parties form a contract is always a considerable crucial approach because communication the matter arise provides an effective and easily solution to the crucial matter arise during project management phases.

Claims and disputes in construction projects have high cost and time impact on project achievements, therefore, the employer, consultants, contractors and other stakeholders should establish a clear and powerful claim management mechanism in their organizations. It is very potential to be aware of the causes of claims in order to complete the construction project on time by meeting the quality of projects and budget requirements.

A proper administration of contract throughout the contract period will facilitate project run up smoothly within the targeted budget. A need for claims avoidance strategy is important in construction project than letting claims to disputes between the parties, which end to bad relationship of people in the same field.

## Recommendations

Based on the findings and conclusions of this study, several recommendations were made regarding to the overall research objectives:

An effective claim management process is essential to ensure that any contractual claims and disputes arising are dealt with in a way that is fair to each parties involved.

It recommended that effective and successful ways for management of claims and disputes should consider studying carefully tender documents, effective communication between parties form a contracts, proper contract administration throughout the contract period, manage changes and delays in contract, select the most suitable contractual and procurement model, proper planning and executions and resolve disputes early.

Better training in the area of contract management to professionals can be great help for better understanding of the contracts; this training should apply to contracts managers, project managers, and consultants and generally everyone involved in claims management process.

Additionally, it recommended that continuous development seminars in effective disputes resolution for all professionals in Tanzania and especially those in construction projects and procurement departments of both private and government sectors.

Also, qualified project managers who either are Architect technologist, quantity surveyors and engineers should be included in all construction contract projects in initiation stage to project final stage. These project managers should be included in top level decision making meetings to advice on construction issues.

Government should put in place strategies that are aimed at mitigating claims and disputes on construction industry.

## Limitations of the Study

Limitation of this study was encountered on two parts. Firstly, there were instance in which respondents did not provide accuracy information concerning the management of claims and disputes in construction sector especially when weakness in one part is observed. Secondly, the time frame allocated to executing and completing this study is very insufficiently and limited to management of claims and disputes in construction industry case study limited to Dodoma region only for obtained the data easy, its practical applicability and problems encountered in its practice. However, to ensure the study completed on time, the researcher effectively utilized weekends, days and nights and additional available time for conducting research. In doing so the researcher maximized their available resources and met the study deadline on time.

## Areas Recommended for Further studies

The study employed mixed research design approach and a case study design that covers only one region. Similar studies should be conducted in other region in Tanzania either with similar approach or different approach for the purpose of making comparison of the findings. In addition, most of construction experts has not appreciated the effectiveness of alternative dispute resolution methods, mainly due to lack of awareness of the advantages they offer, more research is therefore required to justify the extent of applicability of these methods as they seem to be new in dispute resolutions.

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# APPENDICES

**APPENDIX A: INTERVIEW QUESTIONS**

**A STUDY ON MANAGEMENT OF CLAIMS AND DISPUTES IN CONSTRUCTION INDUSTRY**

The interview questions are designed for the following professionals: Quantity surveyors, Architects, Engineers and Project manager. The information that you will provide in this interview will remain confidentially as it required only for the purpose of statistical analysis and generally for academic purposes.

**GENERAL INFORMATION**

Name of organization: …………………………………………..……………..

Name of Respondent: …………………………………………………………..

Title/Designation of Respondent: ……………………………………………….

INTRODUCTION

The main aim of these interviews is to obtain information regarding the above topic; the study is expected to give necessary requirement for management of claims and disputes in construction industry and proper practice of preparation, assessment of claim in order to secure a smooth progression of works.

**Research questions**

1. What are common causes of claims and disputes that arise in construction projects and what are their underlying triggers?
2. What contractual and legal frameworks are typically employed in the construction industry to address and manage claims and disputes?
3. What are claim management processes in your organization?
4. What negotiation and alternative dispute resolution (ADR) techniques are effective in resolving construction related conflicts and preventing them from escalating into formal legal proceedings?
5. What are the management strategies adopted to mitigate claims and disputes in construction industry?
6. What are the challenges facing building team on management of claims and disputes in construction projects?

THANK YOU FOR YOUR TIME

END

**APPENDIX B: QUESTIONNAIRE FOR CONSTRUCTION EXPERTS**

**SECTION A: PERSONAL INFORMATION**

1. Name of the organization ………...................................................................................
2. Designation of Respondent……………………………………………………………..
3. Please indicate your Gender a) Male( ) b) Female( )
4. What is your age? (Please tick the appropriate ):-
5. 18 – 35 ( )
6. 36 – 44 ( )
7. 45 – 55 ( )
8. Above 55 ( )
9. Please indicate the duration in years that you have worked in construction industry:-
10. 1 – 5 ( )
11. 6 – 10 ( )
12. 11 – 20 ( )
13. 21 – 30 ( )
14. Above 30 ( )
15. What is your education level? (Please tick the appropriate ):-
16. Advance Diploma ( )
17. Bachelor ( )
18. Masters ( )
19. PhD ( )
20. Others (Specify)………………………………………………………

**SECTION B: ACADEMIC RESEARCH QUESTIONS (**Tick the appropriate answer)

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

|  |  |  |
| --- | --- | --- |
| **Qn. 1** | **Common causes of claims and disputes in Tanzania construction projects** | **Options** |
|  |  | 1 | 2 | 3 | 4 | 5 |
| a | Design and specification issues |  |  |  |  |  |
| b | Change in scope of the works |  |  |  |  |  |
| c | Cost overruns and payment issues |  |  |  |  |  |
| d | Quality and performance issues |  |  |  |  |  |
| e | Failures to comply with plans |  |  |  |  |  |
| f | Unauthorized variations |  |  |  |  |  |
| g | Cost related to the resolution of disputes |  |  |  |  |  |
| h | Escalation of price due to inflation |  |  |  |  |  |
| j | Lack of documentation |  |  |  |  |  |
|  |
| **Qn. 02 With respect to construction contracts, to what extent are the following measures used to settle disputes in your organization, How you would rate the following on a scale of 1-5, with 1 being very high extent, 2 being high extent, 3 uncertainty, 4 low extent, 5 being very low extent** |
|  |  | 1 | 2 | 3 | 4 | 5 |
|  | Negotiation |  |  |  |  |  |
|  | Mediation and conciliation |  |  |  |  |  |
|  | Adjudication |  |  |  |  |  |
|  | Expert determination |  |  |  |  |  |
|  | Dispute board |  |  |  |  |  |
|  | Arbitration |  |  |  |  |  |
|  | Arbitration and Mediation |  |  |  |  |  |
|  | Other (Please specify |  |

**SECTION C: OPEN QUESTIONS**

Qn. 03.What challenges hindering construction industry in mitigating of claims and disputes in construction contracts? ..................................................................................................................................

…………………………………………………………………………………………

Qn. 04 Please mention procedures and contractual provision set forth in contract document in management of claims and disputes in Tanzania construction industry………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

Qn. 05 In your opinion, how can construction contract disputes mitigated before project implementation?.

………………………………………………………………………………………………………………………………………………..…..……………………………….

Qn. 06 In your opinion, what improvements can be made to dispute resolution methods to tailor them to Tanzania contracts?...............................................................................................................................................................................................................................................................

**END**