



ADDIS COLLEGE

**A STUDY OF CONSTRUCTION CONTRACT ADMINISTRATION
PRACTICE IN ADDIS ABABA BUILDING CONSTRUCTION PROJECT
AND RELATED CHALLENGES**

BY

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DECLARATION

I hereby declare that this thesis entitled “a study of contract administration practice in Addis Ababa building construction project” and related challenges was prepared by me, with the guidance of my advisor. The work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted, in whole or in part, for any other degree or professional qualification. Parts of this work have been published in [state previous publication].

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Abstract

Contract administration is control procurement process which is about managing procurement relationships, monitoring contract performance, and making changes and corrections to contracts as appropriate. Contract Management is understood as comprising the negotiation of the terms and conditions of contracts, ensuring compliance, documenting and agreeing to any changes that may arise during contract implementation. The aim of the thesis is to study of construction contract administration practice in Addis Ababa building construction project in case of local building contractor and related challenges. Research methodology used for this research were structured questionnaires, interviews, Likert scale and focus group discussion used as the main data collection instruments. Besides, different kinds of secondary data were also greatly used as triangulation mechanism. Consequently the data analysis and interpretation were done using descriptive analysis method. The results showed that indeed only a few construction companies use designated contract managers for the management of their contracts. Some challenges in Contract management were identified as, lack of detailed contract specific information, improper documentation of the effects of delays, variations and events/changes during contract/project implementation, lack of contract management systems such as procurement planning and poor record keeping and/or filing systems. The study surprisingly revealed that though compliance to Contract management within the building Construction sector of Addis Ababa was low, most of the construction companies appeared to be familiar with Contract Management best practice. The major deviations from best practice were with the use of specialized software and advertisement of procurement opportunities.

Keywords: Contract Administration, Building Project, Construct Management, Local Building Contractors, Delivery Methods

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List of Acronyms

AACAMPO	Addis Ababa city administration mega project office
AZZKMMP	Adwa zero-zero kilometer museum projects
Bot	Build Operate transfer
Boot	Build own operate transfer
BOQ	Bill of Quantity
CA	Contract Administrator
CM	Construction Management
DB	Design Build
DBB	Design Bid Build
EPC	Engineering, Procurement and Construction
EHSSS	Environmental, health, social, safety and security
FIDIC	Fédération Internationale des Ingénieurs-Conseils
PMBoK	Project Management Body of Knowledge
PPA	Public Procurement Authority
RFP	Request for Proposals
RFQ	Receiving request for quotation

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CHAPTER ONE

1. Introduction

1.1 Background of the study

Construction is a critical industry for all societies across the world. When the construction industry is examined from a global context, its socio-economic significance becomes obvious. Construction industry performs a prime function in improvement and success the objectives of society. Construction is one of the biggest industries and contributes to approximately ten percent of the Gross Domestic Product (GDP) in industrialized countries. Generally, the industry contributes to eleven percent of GDP in the majority of developing nations (Giang D.T and Pheng S.L., 2010). Contract Management is understood as comprising the negotiation of the terms and conditions of contracts, ensuring compliance, documenting and agreeing to any changes that may arise during contract implementation.

FIDIC (1999), states that “Contract” as the Contract Agreement Conditions, the Employers requirements, the tender, and the further documents (if any) which are listed in the Contract Agreements. The Ethiopian Civil code Article 2610 explained a construction contract as a contract of work and labour is a contract whereby one a party, the contractor, undertakes to produce a given result, under his own responsibility, in consideration of remuneration that the other party, the client, undertakes to pay him, and Article 2876 further argues that a contract whereby one of the parties undertakes to deliver to the other party a house, a flat or another building which does not yet exist, is a contract of work and labour relating to immovable.

According to FIDIC, the general conditions are the legal standards that have been established to promote fair and objective contractual stipulations between all parties involved in construction projects. A primary benefit of using standardized general conditions is that the document has been prepared with the advice of legal counsel and experienced professionals. The articles contained in the general conditions describe the legal rights, responsibilities and contractual requirements of the owner, contractor, and engineer. In order to be valid, all contracts must meet certain criteria. These criteria include an offer and acceptance, a meeting of minds, consideration, lawful subject matter, and competent parties. Most construction agreements are drawn up between two parties for their mutual benefit (Hinze, 2001).

(Kelman, 1994), defines contract administration as a set of activities performed by government officials (client's representatives) after a contract has been awarded to determine how well the government (client) and the contractor perform to meet the requirements of the contract. According to University of Texas, (2017), Contract Administration is referred as the processes that occur after a contract is signed and it includes seven general processes, planning, monitoring performance, change management, payment approval, dispute resolution, termination, and contract close-out. The primary tasks of contract administration include: Verifying contractor performance for purposes of payment; Identifying any material breaches of the contract by assessing the difference between contractor's actual performance and contract requirements; determining if corrective action is necessary and taking action, if required; and developing a completion plan for contractor exit requirements, including acceptance of the goods/services, final payment, and contract close-out.

Contract administration is concerned with the mechanics of the relationship between the customer and the provider, the implementation of procedures defining the interface between them, and the smooth operation of routine administrative and clerical functions. Building contract administration is a vital component of building and construction project management. It is important that all of the necessary administrative contractual requirements for a construction project are met, both before building commences and during the construction process (Bartsiotas, 2014).

Construction contract administration is specific to each project, but essentially will relate to the buildings to be constructed, the land and the location, the building costs and time frame for the construction, materials to be used, rights, responsibilities and duties of all parties, schedules of payments and deliverables, schedules of site and building inspections, warranties, indemnities and any other specific provisions so required. Building and construction is a team effort that includes contractors, subcontractors, architects, engineers, planners, project management teams, financiers and the owner or developer. All are working towards a common goal, but it is the building contract administrator who ensures that from a legal point of view, the building proceeds smoothly to its conclusion. Contract administration and management includes ensuring, to the extent possible, that the contract requirements are satisfied, that the goods/services are delivered in a timely manner, and that the financial interests of the Institution are protected. Contract administration and oversight includes the following four processes Planning, Monitoring Performance, Payment Approval, and Contract Close-out (Bekele, 2017).

Contract management is an issue of strategic importance both to organizations and projects. Through successful contract management, project and organizations can increase control and effectiveness and reduce cost. Institutions rely on contracts with service providers to keep them on track. Shippers, vendors, outsourced services and independent contractors all require a high level of contract management to maintain efficiency for the institutions. (Kakwezi, 2012) Defines contract management as those activities related to contract handling including invitation to and evaluation of bids; awarding and implementation of contracts; measurement, and payment calculation. This also entails monitoring contract associations, handling related issues, integrating essential contract modifications or changes.

Effectiveness of contract management is about ensuring the meetings of agreed terms of the contract. Contracts fail due to misunderstandings, misinterpretations, accountability, responsibility and failure to accurately describe the contract scope. So, effective contract administration exists when the arrangements for service delivery continue to be satisfactory to both employer and contractor, expected business benefits and value for money are being realized, the employer is cooperative and responsive, the contractor knows its obligations under the contract, disputes are rare and there are no surprises for either party (ANAO, 2007).

Some other significant challenges with the Contract Management of the local contractor were noted as, poor change management and documentation systems and poor management and administration of contracts in accordance with contract specifications and conditions of contracts. A common feature of most projects executed in Addis Ababa by local contractors is, inadequate description of the details of the project specifications and drawings for some sections of the works. Also some project consultants fail to properly review the standard forms of contracts that are used for the procurement of construction contracts to include appropriate project specific clauses and specifications, as such the Contract Management phase is encumbered with challenges usually to the detriment of the contractors during project execution (Bekele, 2017). This research attempts to study of construction contract administration practice in Addis Ababa building construction project in case of local building contractor and can serve as the way forward for future work in how to enhance local contractor's construction contract administration management and propose recommendation in setting the responsibilities of stakeholders in enhancing the construction contract administration management in the construction industry by local domestic contractors.

1.2 Statement of the problem

Contract administration is one of the most important jobs related to construction projects and involves numerous tasks occurring before and after contract execution and work order issuance. All work must be administered in accordance with the contract specifications, terms and conditions. It is the process of increasing the probability that the project will be constructed in substantial compliance with the contract documents. Local construction industry and local project performance still face several contractual problems such as, delays, litigation, and additional costs which are the consequences of disputes. Contract types and general conditions clauses have a major influence on the likelihood and degree of project success (Murtaja, 2007).

According to Germaine (2017), contract management is still a challenge in Sub Saharan Africa; contractors are not performing as per the contract. Most of them are not fully equipped in terms of personnel, equipment and financial capacity. It is partly because of poor contract management which most of times lead to cancellation and suspension of funding for a number of road projects by World Bank largely due to poor funds and contract management.

Unfortunately, it is found that a common problem in the building and construction industry is that a party believes a provision has been included in the contract; however the contract does not reflect this provision. Other problems concern construction or material delays due to inclement weather, cost escalations and disputes concerning what is and is not included in the contract. The state of the Contract Management and administrative conditions of Local Contractors is poor, emanating from some challenges identified by earlier research in the procurement process such as the lack of qualified personnel, incorrect interpretation and application of some contract provisions, lack of training, poor record management, poor procurement planning, mobilization and implementation and lack of Contract Management systems in the management of contracts by local contractors in the Construction Industry of Ethiopia. This is contributing to the reasons why our local contractors are not able to compete professionally as compared to their foreign counterpart companies in Ethiopia. Good contract administration therefore, has to ensure that all contractual obligations are met, any disputes are quickly resolved and that the building process moves swiftly to a successful conclusion. Currently, typical contract administration efforts focus on reacting to unforeseen problems after they occur because, reacting to problems is a waste of valuable human and financial resources. Hence the need for the study to investigate of construction contract administration practice in Addis Ababa building construction project in case of local building contractor.

1.3 Objective of the study

1.3.1 General Objective of the study

The general objectives of this thesis paper is to study of construction contract administration practice in Addis Ababa building construction project in case of local building contractor.

1.3.2 Specific Objectives of the study

The specific objectives of the included the following:

- To examine the current practice of contract administration in different phases of the project delivery process.
- To assess the impact of contract management on the cost, time and quality delivery including environmental, health, social, safety and security requirements on the contracts executed by local construction companies.
- To explore the factors affecting the implementation of contract administration practice in the projects.
- To identify the best practice for contract management and compare with the practice of local contractors in the construction industry of Addis Ababa.

1.4 Research Questions

This research therefore sought to investigate the following questions:

- How does the current contract Administration in the project look like?
- To what extent the does contract management impact on the delivery of contracts in terms of time, cost and quality including EHSSS requirements?
- What is the factors affecting in the implementation of contract administration practice in the projects?
- How does the practice of Contract Management by local contractors compare with the best practice in the Construction Industry?

1.5 Significance of the study

The study sought to provide insight into study of construction contract administration practice in Addis Ababa building construction project in case of local building contractor. The findings of this study fill this gap, and are aligned with the government's policy intervention towards improving the construction contract administration of construction sector. Future researchers and academicians would also get valuable information from this study. Finally, the study contributed to knowledge by underpinning its findings with the existing literature to inspire further research

into the field of Contract administration Management for the continuous development of the Construction Industry of Addis Ababa.

1.6 Scope of the Study

This study is delimited to construction contract administration practices in the building construction project in Addis Ababa only not consider other construction area like water, road etc. as well as the study limited construction contract administration and management in Addis Ababa building contractors only.

1.7 Limitations of the Study

The study met several limitations particularly in the data collection phase. The respondents were reluctant to offer some critical information that consider as an indictment to their work and fear negative reprisals by participating in the study. In addition, time constraint is another limitation of the study since a short calendar time has been set to finalize it.

1.8 Organization of the study

The thesis paper will be generally organized in five chapters and appendices:

Chapter - 1 Introduction: It contains the background of study. It also describes in detail the background of study, statement of the problem, research questions, objectives of the study, significance of the study, scope and limitations of the study and organization of the research.

Chapter - 2 Literature Review: This section covers literature review, and comprises the various related works mainly focusing and analyzing issues associated with contract administration and management related researches and needs of the industry.

Chapter - 3 Research Methodology: Here the chapter includes the research methodology such as the research approach, research design, sampling technique, data source and collection methods and method of data analysis.

Chapter - 4 Data Analysis and Discussions: This part comprises the gives an extensive account on the research findings as well as the results and discussions on the data analysis. It further reports on the interpretation and implication of the findings.

➤ Chapter - 5 Conclusions and Recommendations

The last stage of the research covered summarizes the study's findings together with recommendations which included suggestions for future research and concludes the study. Finally, the references and appendices are included in this thesis reports.

CHAPTER TWO

2. Review of Literature

2.1 Introduction

This chapter contains a review of theoretical and empirical literature on the study variable. It also contains a conceptual framework graphically showing the relationship between study variables. It is organized as follows. Contract is an agreement (including a purchase order) where a contractor provides goods/services to an institution and the institution pays for such goods/services in accordance with the established price, terms and conditions, as well as an agreement under which a contractor is given an opportunity to conduct a business enterprise on an institution's premises in exchange for compensation to the Institution (i.e., auxiliary enterprise contracts). Contract administration is a process of ensuring the proper performance of each party in meeting their stipulated contractual obligations until the contract is either closed out or terminated (Ofori, 2014). Contract management is an issue of strategic importance both to organizations and projects. Through successful contract management, project and organizations can increase control and effectiveness and reduce cost. Contract management activities primarily fitted into the responsibilities of the project manager and the whole project team. However, the best practice was to involve a full-time contract manager for larger projects where the contracts were large.

This chapter mainly discusses about theoretical, empirical literature review, and research gap. The theoretical literature review consists of construction industry, contract, and the elements of a contract, types of a contract, contract administration, contract administration principles, and effective contract administration, components of an effective contract administration, building contract administration issues, and building contracts administration process in case of design-build Projects. While the empirical literature review includes construction contract administration practices of the new head quarter design-Build Project of Commercial Bank of Ethiopia and Assessment of contract administration practices of Hydropower Projects in Ethiopian Electric Power: A case study in Gibe III Hydro power Project.

Generally, the comprehensive literature review conducted in this chapter was aimed to address the objectives of the research through a brief discussion on past findings related to Study of construction contract administration practice in Addis Ababa building construction project in case of building contractor.

2.2 Theoretical Literature Review

2.2.1 Construction industry

The term construction covers a wide variety of activities and it can be described as the sum of all economic activities related to civil and building works: their conception, planning, execution, and maintenance. Such works normally comprise capital investment in the form of roads, railways, airports, ports and maritime structures, dams, power generating stations, irrigation schemes, health centers and hospitals, educational institutions, warehouses, factories, offices and residential premises.

The construction industry makes its direct contributions to economic growth by providing the basis upon which other sectors can grow by constructing the physical facilities required for production and distribution of other goods and services i.e. the sector indirectly stimulates other sectors through economic multiplier effects and makes a significant contribution in terms of conserving and generating foreign exchange. This latter contribution has implication for the economic development trends of most developing countries (KasiemSeid, 2008). It is not possible having extensive investment in manufacturing, agriculture or service sectors without construction of infrastructure facilities in place (MeridTaye, 2016).

According to (Chitkara, 2011) the contribution of the construction industry to the Gross Domestic Product (GDP) of many countries ranges between 6-9% and 10% respectively. In Ethiopia the contribution of construction industry as reported by Ministry of Works and Urban Development (MoWUD, 2006) is estimated to be 3%, which is much lower than sub-Saharan average of 6%.

According to Abebe (2003) cited in (MohammedGashaw, 2013) construction industry employs about 20% of the workforce and covers about 30% of the capital budget of the governments in developing countries. (WubishetJekale, 2004) In his work, however, indicated that the construction industry accounts even for more than 50% of the capital budget in developing countries. According to him, for instance, in Ethiopia (1997/98 to 2001/02), the industry accounted for 58.2% of the capital budget. In both cases it has to be noted that the construction industry covers a large portion of the government's capital expenditure.

According to (AbrahamAssefa, 2008) the construction industry is one of the major development constraints in developing countries. This is mainly because; developing countries are considerably dependent on the growth and development of their physical infrastructures.

2.2.2 Contract

According to (Thomas Eher & Philip Davenport, 2009) 'A valid contract is an agreement made between two or more parties whereby legal rights and obligations are created which the law will enforce'. Contracts have no existence outside a legal system. They are a product of the law. They are promises that the courts will enforce, usually by an award of damages for breach. There can be agreements which may be 'morally' or 'socially' binding (binding in conscience), for example an agreement to come to a party, but these are not contracts. Contracts cannot be considered in isolation. Although a contract may not create an obligation, there can still be an obligation under tort, statute or the doctrine of unjust enrichment. A contract is a legally binding agreement which recognizes and governs the rights and duties of the parties to the agreement. According to (Ryan, 2006), there can be parallel obligations owed under the areas of civil law obligations. Hence the efficient contract administrator must have knowledge of more than contract law. The efficient contract administrator must always be conscious of the law of obligations generally.

<p style="text-align: center;">Contract = Agreement + Enforceability at law</p>

2.2.3 The elements of a contract

Seven elements are generally regarded as essential to the validity of a contract: There must be an intention to create a legal relationship, there must be offer and acceptance, There must be valuable consideration, the parties must have legal capacity to contract, there must be a genuine consent by the parties, the legality of the object of the agreement must be ensured, the terms of the contract must be sufficiently certain (Ashley, 2018).

Intention: The phrase "meeting of the minds" is typically applied to mutuality or intention and simply means all the parties involved in the contract actually intended to create a valid, enforceable contract (Ashley, 2018). The first important factor in the formation of a contract is the necessity for an intention by the parties to create legally binding obligations. If the parties do not intend their agreement to constitute an agreement enforceable at law, there is no contract. The intention may be expressed or implied. Courts do not consider all agreements to be intended as legally binding. Generally, a distinction is made between commercial agreements, which are presumed to be legally binding, and domestic or social agreements, which are not so intended.

Offer and acceptance: Based on (Ashley, 2018), an offer exists when one party brings something of value that they wish to exchange for another. Offers are the terms that make up the contract. After an offer is presented, it can be accepted or rejected. Acceptance simply means that the offer presented was accepted.

Consideration: (Thomas Eher& Philip Davenport, 2009) explained that when a party gets into an agreement promises to do something with someone that someone must get “something” in return. This “something” is defined as consideration. In other words, Consideration is something of value (it need only be a promise), which is given by each party to the other at the time of making the contract. This implies that, there must be a benefit and detriment accruing to the party making the promise. Consideration is also referred as the price paid for the promise.

Capacity of parties: According to (Ashley, 2018), everyone cannot be eligible to form a contract; here the issue of capacity can be raised. Capacity means that a person has the legal ability to sign the contract. It can involve mental capacity, as in the ability to understand the contents of the document (i.e. a sound mind). Ashley also explained that capacity can include individuals with cognitive impairments, individuals who are incapacitated, and more. For example, someone can't claim they did not have the capacity to sign a contract simply because they didn't understand a word used in the document.

Consent of the contracting parties: According to (Thomas Eher& Philip Davenport, 2009), in a contract the parties have to voluntarily consent to make a legally binding agreement. An 'agreement' made at the point of gun is made under duress and is not a contract. Duress need not be physical force.

Legality of object: (Ashley, 2018), argued that, Legality is about whether the subject matter of the contract is legal or not. This element may seem do not have importance; however, it simply prevents individuals from trying to form contracts involving unlawful promises or consideration. For instance, in any countries selling foreign currencies in a black market is illegal so, an individual would likely be unable to form a contract where they pay someone' in exchange for the currencies.

Certainty: Contract cannot exist if they lack sufficient certainty and completeness. For example, a contract to build an office building for some amount of money, without any agreement on the size, location or anything else to identify better what is to be built for that amount of money, would be void.

2.2.4 Types of a contract

There are a range of contract types which may be attractive on a particular project. These are:

2.2.4.1 Fixed Price Contracts

According to (McMullan, 2019,), this kind of contracts required the contractor to tender on and make him to take the risk in relation to, the price of the works. The Contractor, irrespective of the actual cost of the works, will be entitled to be paid no more than and no less than the Contract Sum, as agreed between the parties prior to commencing the works.

2.2.4.2 Cost plus Contract

According to (McMullan, 2019,), in this type of contract there is no risk, as to cost, borne by the Contractor. Both the Contractor and the Employer agreed, at the time entering into the Contract, that the Contractor will perform the works, and that the Principal will pay for those works, on the basis of the actual cost of the Works to the Contractor, plus an agreed fee, usually an agreed percentage of that sum (or some other agreed incentive over and above the actual cost of the works).

2.2.4.3 Design and Construct Contract

This type of contract requires the Contractor to tender on the works described in the design brief (prepared by the employer), and tender not only for the construction of the works described in that design brief, but also for the completion of the detailed design, consistent with that design brief. It has the potential to reduce the overall cost of construction to the Principal (McMullan, 2019,).

2.2.4.4 Construction Management Agreement

According to (McMullan, 2019,). This type of agreement is similar in most respects to a project management agreement, except for, the services to be provided by the Construction Manager are restricted to construction activities only (rather than, for example, design activities, site acquisition, leasing activities)

2.2.4.5 Turnkey (EPC) Contracts

(Wallac, 1984) Argued that, A Turnkey contract is a contract where the essential design emanates from, the contractor and not the employer, so that the legal responsibility for the design, suitability and performance of the work after completion will be made to rest with the contractor. The word “turnkey” is often used interchangeably with “fixed price contract”, or what are in fact fixed price contracts are wrongly called “turnkey” contracts on particular projects, thereby giving rise to the confusion.

2.2.5 Contract Administration

(Arrow smith, 2000), “contract management” is similar to “contract implementation”; that it is the process that enables both parties to a contract to meet their obligations in order to deliver the objectives required by the contract. It involves creating a good relationship between the employer and the contractor. Contract administration continues throughout the life of a contract and involves managing proactively to anticipate future needs as well as reacting to situations and/or risks that may arouse in the course of executing the contract. The main target of Contract management may also involve aiming for continuous improvement in performance over the lifecycle of the contract and to obtain the services as agreed in the contract and achieve the value for the money spent. In other words it is about optimizing the efficiency which measures how productively the resources are used, effectiveness through assessing the results achieved by the service and; economy for the price paid for the resource used by service.

PMBOK (2000), contract administration is a process of ensuring that the sellers’ performance meets contractual agreement. (PMBOK, 2013), also referred it as control procurement process which is about managing procurement relationships, monitoring contract performance, and making changes and corrections to contracts as appropriate. It manages seller performance, and manages changes to seller authorized scope (Fleming, 2013). The key benefit of this process is that it ensures both the sellers and buyers performance meets procurement requirements according to the terms of the legal agreement. (Kerzner, 2009), it is a process that make sure for compliance by the seller to the buyers contractual terms and conditions to make sure that the final product is fit.

2.2.5.1 Contract Administration Principles

Bekele, (2017) states that, contracting out facilities management functions pose risks and uncertainties to an organization. But, a well-managed contract will perform equally reliable as an in-house managed function provided that appropriate contractor selection, specification setting and performance monitoring are achieved. The traditional adage “good fences make good neighbors” certainly applies in the outsource contract agreements. Indeed, any contract may have to be modified at some stage. However, by crafting a specific and detailed agreement, the agreement should avoid communication problems, failure of service, and, hopefully, litigation. According to the contract management process, it normally awards the contract to the successful tenderer. Contract management involves actively managing the relationship between the organization and the contractor over the term of the contract.

2.2.6 Effective Contract administration

Australia, (2005), defined effectiveness as the extent to which objectives have been met. It is referred as doing the right thing. Measuring effectiveness is simply to measure results based on goals. This is the degree to which objectives are achieved and the extent to which targeted problems are solved. Contract administration is concerned with the mechanics of the relationship between the customer and the provider, the implementation of procedures defining the interface between them, and the smooth operation of routine administrative and clerical functions. Effectiveness of contract management is about ensuring the meetings of agreed terms of the contract. Contracts fail due to misunderstandings, misinterpretations, accountability, responsibility and failure to accurately describe the contract scope. So, effective contract administration exists when the arrangements for service delivery continue to be satisfactory to both employer and contractor, expected business benefits and value for money are being realized, the employer is co-operative and responsive, the contractor knows its obligations under the contract, disputes are rare and there are no surprises for either party (ANAO, Developing and managing contracts: Getting the right outcome and paying, 2007).

2.2.7 Components of an Effective Contract Administration

According to (Russell W.Hinton, 2003), Employers can avoid risks which are related to the contract through, developing an effective contract administration practice. The components of an effective contract administration practice are detailed below.

Training in Contract Administration: Giving Training on contract administration increases the likelihood that individuals will monitor contracts reliably by giving them the appropriate background knowledge related to contracts.

Written Policies and Procedures: According to (Russell W.Hinton, 2003), written policies and procedures serve as a guide to agencies and their personnel in ensuring a consistent, high-quality contract monitoring process.

Communicating Clear Expectations to contractors: This is about communicating the contractors regarding what is expected from him before and after the execution of the work. By clearly stating contract requirements and performance goals, the employer reduces the potential for poor performance (Russell W.Hinton, 2003).

Contingency Plans: The effect of not having contingency plan by the employer can be visible when the contractors default on their obligations and may pay additional costs for taking back services. The following can be taken as an option for a default contingency plan: contracting with the next lowest bidder from the original solicitation; using another current vendor; delivering the service in-house; and contracting with another government entity.

Organized Contract Files: Contract files should be organized so that someone could reconstruct and understand the history of the contract in the absence of the contract administrator. Contract files should hold all the information necessary to know what was expected and received under the contract (Russell W.Hinton, 2003).

Payments Linked to Satisfactory Performance: This is concerned about submitting the required programmatic reports by the contractors before requesting a payment. The Programmatic reports should be directly related to the terms of the contract.

Regular Programmatic Reports from contractor: The contractor should submit programmatic reports on a scheduled basis which can be used for measuring performance. Programmatic reports should require information related to the performance measures (outputs and outcomes) in the contract, as well as any other deliverables.

On-Site Monitoring: Onsite inspections by the employer is necessary to check the status of the project to ensure all terms of the contract are being fulfilled. On-site monitoring visits are most effective when based on a specific methodology or a checklist of review tasks. On-site monitoring visits may not be necessary for all contracts.

Dispute Resolution Procedures: The Employers should notify the problems and has to set a timetable for resolution to the contractor in written form. If problems do not get resolved, the employer should notify the dispute resolution committee or the arbitration committee to compel the contractor to adequately comply with contract terms (i.e., financial consequences, contract cancellation).

Closeout Procedures: At the completion of the project, formal written closeout procedures are required in order to check important elements are not overlooked. The use of a checklist of closeout procedures helps to assure that all actions have been completed.

Post-Contract Review: When contract periods completed, employers should evaluate the contractor's performance and their own method of monitoring.

2.2.8 Building Contract Administration Issues

Contract administration is concerned with the mechanics of the relationship between the customer and the provider, the implementation of procedures defining the interface between them, and the smooth operation of routine administrative and clerical functions. (Contract Management Guidelines; OGC, 2002). Contract administration will require appropriate resourcing. The responsibility falls on a nominated individual; if not, the responsibility is shared across a contract management team, it is important that all members of the team deal promptly with contract administration tasks, particularly during the early stages of implementation.

Cited on (Bekele, 2017) Contract administration is one of the most important jobs related to construction projects and involves numerous tasks occurring before and after contract execution and work order issuance. All work must be administered in accordance with the contract specifications, terms and conditions. According to the contract management guideline, contract administration has the following eight elements; i.e., the procedures that combine to make up contract administration are contract maintenance and change control, charges and cost monitoring, ordering procedures, payment procedures, budget procedures, resource management and planning, management reporting and asset management.

Cited on (Bekele, 2017) the key to effective contract administration is to have a clearly defined set of contract outputs or deliverables as well as defined obligations and rights and timing of the same. A well-designed contract should encompass clear procedures for effecting these rights and obligations as well as remedies in case of non-performance of either party. Contract administration is based on the concept that the contract is a partnership with rights and obligations that must be met by both parties to achieve the intended goal. The specific nature and extent of contract administration varies from contract to contract. It can range from the minimum acceptance of a delivery and payment to the contractor to extensive involvement by program, audit and procurement officials throughout the contract term.

Factors influencing the degree of contract administration include the nature of the work, the type of contract, and the experience and commitment of the personnel involved. Contract administration starts with developing clear, concise performance based statements of work to the extent possible, and preparing a contract administration plan that cost effectively measures the contractor's performance and provides documentation to pay accordingly.

2.2.8.1 Building Contracts Administration Process in case of Design-Build Projects

On (Bekele, 2017) paper cited, Contract Agreement when signed; forms the contract document which will be the bases for Contract Administration. A Construction Contract Document includes; Signed and Sealed Form of Contract Agreement and Tender with Appendix if necessary, General and Particular Conditions of Contract, Technical Specification and Methods of Measurement, Priced Bill of Quantities, Drawings and General Notes to drawings if necessary, and Forms, Formats and Schedules. In the construction contract administration phase, the owner and the consultant respectively, shall provide those services designated in the schedule of designated services necessary for the administration of the construction contract as set forth in the General Conditions of the Contract for Construction.

Project consultants and project managers, who have a larger range of responsibility and authority, are encouraged to consider the outcomes involved with on-the-spot decisions. The Standard Condition of Contract represents general office policy; they are, in fact, compliant to the owner/contractor agreement and general, supplementary, and special conditions of each individual project. The project contract administrator (CA) should attempt to include the standards and procedures established in the contract documents for a specific project. The administrator shall thoroughly review the complete set of documents, collectively referred to as the Contract Documents, and modify the construction administration procedures for each project accordingly.

The Administrator is also responsible for the comprehensive and timely administration of all project related documentation and information. The primary role of the Administrator is to represent the Owner and/or Consultant in all project meetings and other field matters relating to the construction of the project. The Administrator will make periodic site visits to the project, record observations and report all observations related to status of completion, quality of workmanship and compliance with the Contract Documents.

The Administrator's responsibilities include the transmission of large quantities of paper work and project documentation, particularly standardized documents. The Administrator is encouraged to take advantage of the time savings involved in producing computerized master forms for each individual document for the project. Proposal requests, variation orders, transmittal letters should be prepared in advance with all consistent project information included and ready for specific information to be inserted.

The traditional construction triangle often places the Owner, the Consultant and the Contractor in adversarial relationships. The Administrator must defend the rights of the Contractor as well as those of the Owner. The Administrator is charged with the impartial administration of the contract documents. Since a good deal of the Administrator's time is spent reviewing, and then evaluating the contractor's work, it is wise to remember to complement the Contractor on work well done as quickly as one points out his errors. The Administrator should take every opportunity to cultivate a "partnering" style relationship between the Consultant and the Contractor. The Contractor, Owner and Consultant must remember that they share a common goal which is the successful completion of the project.

Design-Build (DB) requires the design-builder to commit to a firm fixed price for a project whose scope is defined by a set of performance criteria within a specified period of time (Gransberg, 2004) Therefore, the variable side of DB triangle is the details of design (the quality of final constructed product). "This puts the design builder in a position where the details of design, and hence the resultant level of quality, are constrained by both the budget and the schedule". In other words, the design-builder must design cost and schedule.

2.8.8.2 Building Construction Contracts Follow up and controlling in terms of Time, Cost, Quality and Variation of work

The concept of managing construction projects is deeply embedded in the building procurement system. (Ireland, 1983) Argues that; time, cost and quality are the principal feasible objectives of the client in any construction project. Although it is claimed that time, cost and quality are incorporated in the management of construction projects; research has shown that in fact a time-cost bias exists.

Time: Timely completion of a construction project is frequently seen as a major criterion of project success by clients, contractors and consultants alike. (Newcombe, 1990) Has noted that there has been universal criticism of the failure of the construction industry to deliver projects in a timely way. NEDO (1983) states that a disciplined management effort is needed to complete a construction project on time, and that this concerted management effort will help to control both costs and quality. This is tantamount to saying that the client's objectives can be achieved through a management effort that recognizes the interdependence of time, cost and quality.

Cost: Clients have been increasingly concerned with the overall profitability of projects and the accountability of projects generally. Cost overruns, in association with project delays, are frequently identified as one of the principal factors leading to the high cost of construction (Charles and Andrew, 1990). Research to date has tended to focus on the technical aspects of managing costs on construction projects in the attainment of client objectives. There is little evidence in the published literature of a concern for the organizational, social and political problems that are inherent in the management of construction costs and the ability of the project team to meet the client's needs in terms of cost.

Quality: To the client, quality may be defined as one of the components that contributes to "value for money" (Flanagan, 1997). Vincent and Joel (1995) (Vincent, 1995) define total quality management as: "...the integration of all functions and processes within an organization in order to achieve drivers to quality management must be managed, namely:

- i.) Integration of the project team so as to have a single objective and a common culture.
- ii.) A customer focuses for the team thereby facilitating the provision of products and services that will meet the client's needs.
- iii.) A process of continuous improvement in the management of the construction project.

When these three components are successfully integrated, the project will begin to realize significant, measurable and observable improvements in the attainment of the clients' objectives. On average, managers of design-build projects surveyed in their study estimated that design build project delivery reduced the overall duration of their projects by 14 percent, reduced the continuous improvement of the quality of goods and services. The goal is customer satisfaction." Furthermore, in order to achieve successful project quality management three separate total cost of the projects by 3 percent, and maintained the same level of quality as compared to design-bid-build project delivery.

On the other hand, other project survey results revealed that design-build project delivery, in comparison to design bid-build, had a mixed impact on project cost depending on the project type, complexity, and size. The surveyed design-build project managers further indicated that project delivery approach (i.e., design-build versus design-bid-build) can be a contributing factor in controlling and potentially reducing project costs. However, project delivery approach was perceived to be less of a factor in affecting project cost than other characteristics of the project or its participants.

2.8.9 Contracting Parties in Construction Contracts

(Dinku, 2007) The formal contracting parties to the construction contract are basically the Contractor and the Employer. However, because there is a need for day-to-day supervision of civil engineering construction works, the two parties may agree that a third person should carry out such duties; the Engineer.

2.8.9.1 The employer

The “employer” as defined in the public procurement agency (PPA) condition of contract, is the party who procures employs the contractor to carry out the works and Employer is the party who initiates the process of acquiring the works. He sets down what he requires and specifies this in the tender documents, which he issues to firms of contractors to seek their offers to carry out the works. His obligations include ensuring that the works are legally acceptable and practical, and that the site for them is freely available. Having set up these basic elements he must, above all, ensure that he can meet his obligation to pay the contractor in accordance with the contract (Rees, 2004).

((FIDIC), 2006) states that the Employer shall submit, before the Commencement Date and thereafter within 28 days after receiving any request from the Contractor, reasonable evidence that financial arrangements have been made and are being maintained which will enable the Employer to pay the Contract Price punctually (as estimated at that time) in accordance with Clause 14 [Contract Price and Payment].

The event of the employer’s failure to make payments is stated in the PPA condition of contract sub clause 43.1 as “...the employer shall pay the contractor the amounts certified by the engineer within 30 days of the date of each certificate. If the employer makes a late payment, the contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.”

The primary obligation upon the employer is to give the contractor the sum of money which forms the consideration for the contract. Money must be paid promptly and fully unless there are specific reasons for withholding it (Hughes, 2000).

2.8.9.2 The contractor

(Rees, 2004) Stated that this is the party that takes on the obligation to construct the works. In his offer to the employer he puts himself forward as being able to build the works to the requirements set out in the tender documents. In order to do this he will have studied the documents and any geotechnical or other information provided or otherwise available, visited the site and checked the availability of such labor, plant and materials as may be needed.

Under clause 60(2) of the MoWUD condition of contract it is stated that ‘the Contractor will be paid monthly, within 30 days of the presentation of the Engineer’s Interim Payment Certificate to the Employer, 100% of the estimated value of the work executed up to the end of the previous month, together with the value of materials on Site intended to form part of the permanent work as and from such time as they are reasonably, properly and not prematurely brought upon the Site but only if adequately stored and/or protected against weather or damage.’

In the construction industry, a contractor is invariably the person, partnership or company which carries out construction work. All the standard forms of contract refer to the contractor in this sense (Chappell, Marshall and Cavender, 2001).

Most if not all, construction contracts include an express or an implied undertaking by the contractor that, except in certain specified circumstances, he must complete the works and the project as a whole. With the exception of contracts of professional services, all other construction-related contracts are based on the premise that liability for non-performance of contractual obligations is a strict one. Failure to perform the required duties under such a contract would give rise to a claim for damages (Bunni, 2005).

2.8.9.3 The Engineer

The “engineer” under the PPA condition of contract, is the person named in the special conditions of contract (or any other competent person appointed by the employer and notified to the contractor, to act in replacement of the engineer) who is responsible for supervising the execution of the works and administering the contract.

(Rees, 2004) Justified that the engineer is not a party to the contract; but he is named in it with duties determined by the parties. Although he is appointed and paid by the employer, he has to supervise the construction of the works as an independent person, making sure they accord with the specified requirements. He also acts as an independent inspector of what should be paid to the contractor, and as a decider of issues arising in the course of construction.

Under clause 60(5) of the MoWUD condition of contract it is stated that ‘the engineer shall have power to withhold any certificate if the works or any part thereof are not being carried out to his satisfaction or to deduct the value of damaged materials, plant or equipment supplied by the employer to the contractor or the purposes of the works in the event of such damage being caused by the contractor's negligence or mishandling.’

But, the problem comes where money is clearly due to the contractor under the terms of the contract and an engineer wrongfully withholds a certificate of payment.

(Hughes, 2000) Justify that if the contract administrator refuses to certify at the appropriate time, or negligently under-certifies, this may well constitute a breach of contract on the employer’s part. It certainly will do so if the contract administrator’s conduct is due to positive interference by the employer. Such events will undoubtedly enable the contractor to claim damages, or possibly to recover what is due without the necessity of a certificate. Whether they will justify termination of the contract will once again depend on whether the breach is sufficiently serious to be regarded as repudiator.

2.8.10 Contract Management in construction

(Stoemmer, 2014) Stated that, Contract management occurs after a contract has been executed and taken effect. Thus, this entails working to ensure that the terms and conditions contained within the contract are adhered to and that all of a party’s contractual obligations are met satisfactorily.

During the contract management phase, it is always possible that circumstances will change, necessitating modifications to the contract agreement. Of course, the contract management team tends to work closely with the other party to the agreement, so they are in a good position to know whether the relationship is working or if it is necessary to pursue opportunities elsewhere. As a result, it makes sense for the contract administrators and managers to remain in close communication, in the event that they are in fact separate teams within a company.

(Commerce, 2002) Defines contract management as: “Contract management is the process that enables both parties to a contract to meet their obligations in order to deliver the objectives required from the contract. It also involves building a good working relationship between customer and provider. It continues throughout the life of a contract and involves managing proactively to anticipate future needs as well as reacting to situations that arise.”

“Contract management is the complete and exact understanding of contract clauses, and is execution of them during the construction in order to minimize possible disputes between the parties. In other words it is the process of generating solutions for disputes that may arise during the execution (Fisk, 2000).”

(Elsley, 2007) notices that, successful contract management, is most effective if upstream or pre-award activities are properly carried out and time and effort must be spent on determining how the contract will work once it has been awarded, however there are a number of definitions of contract management, the majority of which refer to post-award activities. (Elsley, 2007) Defines contract management as: “Contract life cycle management is the process of systematically and efficiently managing contract creation, execution and analysis for maximizing operational and financial performance and minimizing risk” In addition to the definitions, (Yurt, 2005) gives two approaches to the goal of the contract management as: “The goal is to ensure execution of any construction contract as it was signed by the parties “The main goal is, within the policies and strategies adopted initially, effectively ensuring the contract to achieve its targets without exceeding the defined time and cost and without having conflicts.”

“Contract management activities can be broadly grouped into three areas.

- Service delivery management ensures that the service is being delivered as agreed, to the required level of performance and quality.
- Relationship management keeps the relationship between the two parties open and constructive aiming to resolve or ease tensions and identify problems early.
- Contract administration handles the formal governance of the contract and changes to the contract documentation.

Contract management starts with the contract formation negotiations, lasts until the end of the contract, and is the process that covers three fundamental functions required to compensate the goals of the contracted project.

Relationship Management: To provide an agreement between the parties in sharing and fulfilling the obligations and to adjust the relationship in between.

Project Delivery: To ensure that the maintenance of the obligations and the completion of project targets are as in the contract.

Administration of the contract: To perform contractual bureaucratic procedure. (Recording, preparation of forms, communication, etc.).

2.8.10.1 Stages of Contract Management

Knowing what to expect at each of the seven essential stages of the contract management process will increase your ability to meet contract requirements and deliver optimal results.

Planning stage: During the planning stage, you should outline the specifics of your team's most pressing contract management pain points, needs, and goals, then determine what kind of approach or system would best enable you to address those areas. You'll also want to consider the resources you have available to allocate to the contract management process.

Implementation stage: After you know what your contract management process should look like, you can begin to implement the tools and systems needed to support those efforts. If you only have a handful of contracts to manage, you can likely track your deadlines, deliverables, and other obligations with manual solutions like shared drives, calendars, and spreadsheets. If you have more complex contract management needs, consider implementing dedicated contract management software to help you keep track of your agreements and important deadlines. This is also the time when everyone involved with your contract management process should be on boarded and trained on your contract management solution so they're completely comfortable using the software.

Pre-contract stage: During the pre-contract stage, you should work closely with the contract administration to start understanding the important details of the new agreement. This will help you prepare for the contract management process and incorporate any specific guidelines that will help you manage the contract and deliverables effectively.

Handover stage: If the individuals who negotiated an agreement are not the same people who will be executing and delivering against the terms of the contract, it's imperative to have a thorough handover process, often involving dedicated meetings to ensure alignment and common understanding of roles, responsibilities, and key deliverables.

Contract stage: The contract stage is when the work defined in the agreement is executed and deliverables are completed, hopefully according to the agreed upon timeline and budget. This is also one of the areas where contract management software can help you stay on track and give you the foundation needed to measure performance along the way. Features like automated alerts and notifications and custom reports will let you know of any upcoming deadlines related to deliverables, termination windows, and any other dates you determine are worth tracking.

Pre-renewal stage: Typically, as a contract winds down, you must determine if you want to renew, renegotiate, or terminate it completely. More often than not, there are strict timelines that determine when these actions can occur without penalty, so it's in your best interest to start thinking about these scenarios well before the contract's end date.

Post-contract stage: Once a contract has ended and the dust has settled, there are a couple of post-contract tasks to complete. Before archiving your contract, review the contract terms in detail to confirm that all conditions have been met and invoices have been settled. Finally, conducting a post-mortem will give you an opportunity to uncover valuable information about the contract and your contract management process - including both successes and shortcomings - that can help you improve your future agreements.

2.8.10.2 Contract Management Best Practices

There are many different ways to approach contract management, and a plethora of solutions and methods for accomplishing your contracting goals. Here are seven contract management best practices that apply to just about every situation, regardless of the size and complexity of your contract portfolio.

Keep all of your contracts in one place: To manage your contracts effectively, you have to know where they are. By keeping all of your organization's contracts in one location, you'll know exactly where to go to find an agreement or track down dates, terms, and other specific contract details.

Set and measure contract management KPIs: Setting and measuring contract management KPIs is the best way to determine how your contracts are performing and gives you a way to share that information with internal stakeholders. These KPIs also enable you to identify any ineffective parts of your contract management process and develop strategies to improve by reducing risks, eliminating unnecessary costs, or finding missed opportunities in your agreements.

Balance storage security and access: Legal departments and contract managers must find the right balance between contract security and access. Those who use contract management software have a secure online repository to house all of their sensitive contracts, and can easily assign varying levels of access so only specific users and groups can view certain files and folders. This allows legal teams to share some of the contract management responsibilities without losing control of your repository.

Track contract approval time: The quicker you can move a contract through the approval process, the less time it takes to start seeing the value from that agreement. But, in order to optimize that process for greater efficiency, you first must have a system in place for monitoring it. Tracking contract approval time will help you understand your contract cycle and determine whether improvements are needed.

Automate contract communications: Today's contract management technology allows legal teams to automate many aspects of the contracting process, especially around communications. For example, cloud-based repositories allow users to schedule and send specific individuals automated contract alerts and notifications, removing the need for manual reminders and unnecessary emails. And with the modern solutions available, many businesses have eliminated the process of physically sending documents back and forth for wet signatures, instead turning to electronic signature options for immediate action.

Conduct regular compliance reviews: One benefit of having a structured contract management process is the ability to improve your organization's compliance with industry regulations. By regularly monitoring federal, state, and other legal regulations and ensuring your contracts adhere to those laws, you can protect your business from avoidable penalties and fines. Make it a point to regularly check for updates to the regulations that pertain to your company, and review active contracts to determine if action is needed to remain compliant.

Anticipate evolving business needs: Most businesses and their needs evolve over time, so it's important to anticipate those changes and adjust your contracts accordingly. If your business is growing quickly and you know your needs will be changing in short order, rather than simply renewing contracts for existing services, consider reviewing them closely to determine if it makes more sense to adjust or renegotiate based on your evolving needs.

If your contract management process is in need of improvement, these three steps can put you on the fast track to contract management success.

Conduct an audit of all things contract related: Before you can start taking steps to solve your biggest contract management problems, you have to understand what those problems are. Conduct a contract management audit that includes all of the stakeholders, resources, and processes across your organization that impact how your contracts are handled from negotiation and creation to execution and management.

Develop a formal contract management framework: Using the findings from your audit, you can now put into place a structured approach to managing your contract portfolio. This framework should address every element of the contract management process and clearly define what should be happening at each stage. The plan should also include things like roles and departments responsible for various contract-related tasks and processes, how contract management performance is measured, and any tools and systems that should be used during the contract management process.

Use technology to make it easier: Implementing dedicated contract management software can vastly improve your ability to manage your contract portfolio and all of your organization's contract-related deadlines and deliverables. Once your portfolio reaches a certain size or level of complexity, it becomes next to impossible to effectively track and act on every aspect of your contract management process using only manual tools and systems. With the right contract management software, your organization can regain control of your contract portfolio.

Kakwezi.P, (2012), defines contract management as those activities related to contract handling including invitation to and evaluation of bids; awarding and implementation of contracts; measurement, and payment calculation. This also entails monitoring contract associations, handling related issues, integrating essential contract modifications or changes. This is meant to ensure that all contract parties exceed or meet each other's expectations and interact with contractor to attain the objectives of the contract.

Contract life cycle management is the process of efficiently and systematically managing contract creation, analysis and execution for maximizing financial and operational performance and minimizing risk. The foundations for effective and successful post-award contract management rely upon careful, comprehensive and thorough implementation of the upstream or pre-award activities. At the pre-award stages, the emphasis should be concentrated on why the contract is being developed and on whether the supplier is capable to deliver in service and technical terms. However, cautious consideration must be given to how the contract will work once awarded (Sekaran, 2013). A sound contract management of a project revolves around control of cost, time, quality and resources. Cost control means the execution and completion of the project within the agreed time schedule; quality control means execution of the project in conformance with technical requirement and specification; resource control refers to the management resources personnel, equipment, and supplies.

2.8.11 Contract Evaluation

Contract evaluation encompasses the overall performance of the contract and of the acquiring entity's management of the contract. The evaluation of the operation of the contract and of contract outcomes is very useful in understanding and improving overall contract management, improving contractor performance and also assists in future stakeholder decision-making (Venkatraman, 2010). An evaluation should be undertaken at the end of all contracts and should be planned for in advance. When a transition from one contract to another is to occur, it is better practice for an evaluation to be undertaken before the contract ends so that any problems that have occurred with aspects of the contractual arrangement are identified and, where appropriate, improvements made in the future contractual arrangements (Prosiadian, 2014).

Evaluations can be conducted in-house by the acquiring entity or a third party can be contracted to undertake the evaluation (Smith J., 2014). This latter approach has advantages in providing an independent view of the contracting arrangement. The organization should have the following for evaluation to be successful; an evaluation plan that sets out clear terms of reference, methods and sources of data collection and analysis, budget, clear timeframes and reporting arrangements; relevant skills to manage and conduct the evaluation (either in-house or through contracted personnel); senior management support; an evaluation report in which conclusions are supported by the data; and recommendations that provide an indication of their likely benefits (Robson, 2013). For contracts, the evaluation should be a thorough and independent review that is informed by those involved in establishing and managing the contract. The evaluation will need to be tailored to the particular circumstances but should consider both the effectiveness and efficiency of the arrangement. To get the best out of the evaluation, entities should: review all aspects of contract performance and its management; provide feedback to the contractor; this should not be done as part of another procurement process; report to stakeholders; and identify lessons learned (Bartsiotas, 2014). Contract document is the means by which a designer's intentions are conveyed to the client, the statutory authorities, the quantity surveyor, the contractor and the sub-contractors. It is important, because it describes and records all aspects of the project. The contractor's basic responsibility is to carry out the works in accordance with these contract documents. The conditions also provide administrative mechanisms for ensuring that the correct procedures are observed. Effective contract clauses of this kind deal efficiently with what would otherwise be breaches of contract, and therefore ensure that the contract is kept 'alive'.

2.3 Empirical Literature Review

2.3.1 Construction Contract Administration Practices of the New Head Quarter Design-Build Project of Commercial Bank of Ethiopia

(Bekele, 2017) The total project cost of this design build project is USD.298.5 million and the project's total time duration is 1824 days plus 365 days given for defects liability period. The expected completion date as per the contractual agreement is July 27, 2019 and till April 30, 2017, 643 days have been already elapsed from the total time duration of the project; i.e., the time elapsed Vs. project period is 35.25%. The financial plan vs. actual expenditure also shows that 33.9% of the total contract payment has been paid to the contractor by CBE. The mode of the contract payment is 35% in local currency and the rest 65% in foreign currency (in USD).

The main tower is a 4B+G+48, the Commercial Center is a 4B+G+8 and the conference hall is a 4B+G+6. The 4B basement area is commonly built for all these three buildings. From the total of the four parking basement floors, one floor is totally going to be a mechanical parking. The building's total height upon completion will make it one of the highest tower buildings in Africa. The building, in addition to its height, will also have many building support systems such as Heat Ventilation and Air conditioner (HVAC), pressurized firefighting, Security Camera Television (CCTV), etc. that make the construction process quite complex. The project building is warranted by the contractor for ten years' time after the completion date. So far, the building has been completed 22% from the total construction work as per the to-date progress report of CPO of CBE in April, 2017. The structure work of the 4B plus additional 4 floors of all the three buildings have been completed as of April 30, 2017.

From the five major project delivery methods in public and private construction projects, the contract type used for the CBE HQ project is the Design-Build (DB) delivery method. The reasons for selecting this delivery method were; the Design Build or sometimes-called package deal or turnkey contract is an innovative method where the contractor takes full responsibility for the design and construction. The DB is suitable for large and complex projects like the CBE HQ building project; where early completion is a requirement. The total number of staff of CPO of CBE reported is 16 including the non-professionals whereas, on the contractor's side, 88 Chinese employees both from the professional and skilled; and there are also about 50 key professionals from the consultant side engaged in this specific project.

2.3.2 Assessment of contract administration practices of Hydropower Projects in Ethiopian Electric Power: A case study in Gibe III Hydro power Project

Based on the contract agreement no 1, the contract was originally signed in July, 2006, between the earlier employer EEPCO and the contractor Salini SPA, the Italian private industrial company. The contract is a Turnkey or EPC contract, in which the employer and the contractor agreed on a fixed contract sum to be paid upon completion of the works to a particular standard and/or performance criteria. The construction of the plant includes the construction of the hydro mechanical steel structure and the electromechanical equipment. Finally the employer's personnel training and factory inspection includes a 20 individual two months training in the main equipment assemblies and factory and shop assembling testing for 5 individuals.

In July, 2010 another tripartite agreement was signed between EEPCO, Salini and the new Chinese Dong Feng electric company for the construction of the electromechanical and hydromechanics steel structure work, which was initially EEPCO got into a contract with Salini to accomplish these tasks with a budget of EURO 244,111,449.00 EURO and 7,404,221.00 with a total of EURO 311,515,670.00, but in 2010 this task was forwarded to the new contractor.

On the contract it is clearly stated that payment for the contract will be made through EURO and Ethiopian birr. FIDIC Sub-Clause 14.5, states that the contract price shall be paid in the currency or currencies named in the Contract Agreement. Unless otherwise stated in the Particular Condition. So, based on this the project effected payment to the contractor EURO 1,291,053,978.67 and ETB 6,362,798,234.41 and with a plan to pay an estimated amount of ETB 40,000,000.00. The contract was initially signed in July, 2006, between the employer EEPCO and the contractor Salini SPA. The purpose of the contract was building a dam with a generation capacity of 1,870 MW within 60 month or 1,812 days and with a budget of EURO 1,396,262,043.00. The contract mainly includes General condition of a contract (FIDIC condition of contract), particular conditions of a contract, price breakdown, and project implementation plan and project basic design. But in the case of EEP Gibe III project the deduction of retention has been overlooked. This may be a danger for the EEP if any material defects can occur after the completion of the project and the contractor refused to maintain, There were reworks due to errors during construction, There was poor schedule management of the project, There was poor feasibility study before the start of the project, There was delay in payment to contractors of completed activities.

2.4 Summary of Literature Gap

A wide variety of empirical studies have been undertaken and different thesis paper have been used to examine construction contract administration mainly focusing on all construction project in general especially within Ethiopia which are both building and Hydropower Projects. This research therefore (filling the gap) focuses on a study of construction contract administration practice in Addis Ababa building construction project. This will contribute to the understanding of contract administration attributes, the performance of contract management and also suggest measures on how to regulate the problem under study.

Table main identified in literature in the contract administration

Title	Specific objectives and parameters included in this study	Authors and region of application
Construction Contract Administration Practices of the New Head Quarter Design-Build Project of Commercial Bank of Ethiopia	<ul style="list-style-type: none"> - current practice of contract administration - contract management assist to achieve cost, time, quality of work - variation of work acceptance by the owner - DB contract allow transferring technology and giving training for local contractors and consultants 	Hirut Bekele and Addis Ababa
Assessment of contract administration practices of Hydropower Projects in Ethiopian Electric Power: A case study in Gibe III Hydro power Project.	<ul style="list-style-type: none"> - effectiveness of contract administration practice in EPP - factors affecting in the implementation of contract administration practice - contract administration practices in different stages and Milestones of the project 	Abinet Lulseged and Ethiopia

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the definition of research design. Methods of sampling size and techniques, the identification of the target population, sampling frame, sampling technique, data collection procedure and data processing and analysis.

3.2 Research Design

C.R.Kothari, (1994), stated that, 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 economy in procedure. It is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. The study adopted a descriptive research design. Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual or of a group. The major purpose of descriptive research is description of the state of affairs as it exists at present. In this research an extensive literature review is done following which interviews and questionnaires are used to conduct a survey to collect data from selected contractors in the construction industry. The approach of using a structured questionnaire to collect data is the most widely used data collection technique for conducting surveys to find out facts, opinions and views. Interviews are also classified according to how they are structured. Besides to this, Likert scale analysis also used for analysis purpose.

3.3 Methods of sampling size and techniques

The objective of sampling is to provide a practical means of enabling the data collection and processing components of research to be carried out whilst ensuring that the sample provides a good representation of the population; i.e. the sample is representative.

3.3.1 Population of the Study

This study focused on construction contract administration in case of building contract in Addis Ababa. As a result, the population of the study was registered contracting companies who are working in Addis Ababa. According to the list which was collected from the Addis Ababa construction bureau, there are a total of around 1720 building contracting companies who are registered from level one to level six (2019 G.C).

From the general population of the study, as a sampling frame, building contractor one (BC1), building contractor two (BC2), and building contractor three (BC3) were selected as a sampling frame for the study. Based on the obtained list of registered contracting companies from the Addis Ababa Construction Bureau, the total number of registered contracting companies as building contractors one, two and three are 149. That is BC1= 65, BC2= 37 and BC3= 47 of building construction companies.

3.3.2 Sampling and Sample Size

The study applied probability sampling. The sampling type applied in the study was random sampling. It is the process of sampling which assures that any subject in the population has an equal probability of being in the sample.

Therefore, the sampling frame (size) was contracting companies of BC1, BC2 and BC3 who are registered by the Addis Ababa construction bureau were selected for this study. So the targeted respondents of the questionnaire were construction professionals who are working on these construction companies includes project, site, and office engineers. This equation is applicable to calculate a sample size with a known sampling frame. The sample size was calculated as follows:

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

Where, n = sample size; N = population size;

e = level of precession (in this case it is 10% error with a confidential interval of 90%)

For Building Contractor 1 (BC1): Total Number of BC1= 65

$$n = \frac{65}{1 + 65(0.10)^2} = 39$$

For Building Contractor 2 (BC2): Total Number of BC2= 37

$$n = \frac{37}{1 + 37(0.10)^2} = 27$$

For Building Contractor 3 (BC3): Total Number of BC3 = 47

$$n = \frac{47}{1 + 47(0.10)^2} = 32$$

Therefore, total sample size of the study was 98 from the three building contractors. As a result, to give the targeted population an equal probability of getting into the sample, its high accuracy of representation and the availability of the lists of contracting companies, simple random sampling was used to select the sample for this study.

3.4 Methods of Data Collection

The study used both primary and secondary data sources to obtain sufficient and relevant data that was used to answer the research questions. The primary sources were gathered through questionnaires and semi-structured interview which includes a discussion made with the construction professionals. Whereas the secondary data sources were collected from different book, article journal, Addis Ababa construction bureau document, previously done research paper and reports.

3.4.1 Data collection tools

3.4.1.1 Questionnaires

The questionnaire was undertaken as a data collection tool to identify the major causes of rework and the measures taken to minimize it. The questions were prepared to be filled with construction professionals who are directly involved in the construction phase. Based on the objective of the study the questions were classified into five sections. All of the questions are closed-ended. For the purpose of the study, the questions are grouped under five parts, as follows:

Part 1: Profile and background of Respondents

Part 2: current Contract administration in the Construction Industry of Addis Ababa

Part 3: Challenges in the Practice of Contract Management

Part 4: Contract Management impact on Time, Cost and Quality Delivery

Part 5: Best practice in Contract Management

3.4.1.2 Measurement of scales

According to the author, the Likert scale, an assumption that shows each item on the scale has equal attitudinal value. In this research, a five-level Likert scale was used depending on the questions. Likert Scales are a type of scale that asks respondents to indicate the level that they agree or disagree (generally, from ‘strongly agree’ to ‘strongly disagree’) about a statement. It offers a range of answer options from one opposing perspective to another. The qualitative questionnaires were analyzed based on Likert scale of five ordinal measures regarding determinant factors affecting the contract administration in building construction projects and best practice in contract management. The respondents are therefore asked to score each measure according to the level of practice in their organization on a scale of 1 to 5 where 1= “strongly Disagree”, 2= “Disagree”, 3= “Neutral”, 4=”agree” and 5= “strongly agree”. The full details of the questionnaire are attached as an appendix to this document.

3.4.1.3 Interview

Interview is a qualitative data collection tool in which the interviewer does not strictly stick to formal questions rather has a list of a generally listed theme and a list of some key questions. The interview undertaken for this thesis was based on semi structured style. This type of interview has a predetermined set of questions with a flexible order depending on what the interviewer perceives the subject matter by looking at the respondent capability and exposure or experience. Some basic interview questionnaires were distributed to building contractors, project and site engineers

3.4.1.4 Document review

Besides secondary data, data's are collected from the contract documents which may help to strengthen the responses given through interview and Focus group discussion. Document analysis is a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning around an assessment topic. The researcher narrowed down the scope to the specific case of AZZKMM design build project of ACAMPO which is now under construction of the project contract administration assessment.

3.5 Method of Data Analysis

Data analysis was done with descriptive data analysis method. Descriptive data analyses are selected to transform raw data into a form that will make it easy to use or understand, plan and interpret. After completion of data collection, collected data was analyzed according to their order of significance. Then the analysis was made using appropriate tabulation, percentages share, frequency, graphs and other diagrams present the analysis of the finding. A Likert scale was used to analyze the mean score and standard deviation.

3.6 Ethical Practices

The researcher assure the ethical undertaking of the research by adhering to the following ethical standards of doing research. Informed consent, Voluntary participation, Confidentiality and anonymity of respondents. Prior to data collection, letter issued from concerned administrative bodies of Addis College to different Government and private organizations from where valuable information has been obtained for the research. The public clients and Contractors under the study was also informed about the study and a formal letter was obtained. During data collection, each respondent was informed about the purpose, scope and expected outcome of the research, and appropriate written consents was taken from the respondents. Anyone who was not willing to participate was excluded from the study.

CHAPTER FOUR

4. DATA ANALYSIS AND DISCUSSIONS

4.1 Introduction

Building contract administration is a vital component of building and construction project management. It is important that all of the necessary administrative contractual requirements for a construction project are met, both before building commences and during the construction process. Contract administration is concerned with the mechanics of the relationship between the customer and the provider, the implementation of procedures defining the interface between them, and the smooth operation of routine administrative and clerical functions. Construction contract administration is specific to each project, but essentially will relate to the buildings to be constructed, the land and the location, the building costs and time frame for the construction, materials to be used, rights, responsibilities and duties of all parties, schedules of payments and deliverables, schedules of site and building inspections, warranties, indemnities and any other specific provisions so required. Building and construction is a team effort that includes contractors, subcontractors, architects, engineers, planners, project management teams, financiers and the owner or developer. Contract management involves negotiating the conditions in contracts and terms and ensuring obedience with the terms and conditions, as well as documenting and harmonizing on any changes or adjustments that may come up during its execution or implementation. It can therefore be summed up as the process of efficiently and systematically, execution and managing contract creation, and analysis for the purpose of maximizing operational performance together with financial and minimizing risk.

This chapter deals with the results and discussion of the data gathered from questionnaire survey, interview and case study concerning about the current state of standard forms of contract in the domestic building construction sector i.e. conditions of contract currently employed in the country. In this part of the research the result of the data gathered is presented, interpreted and analyzed in detail to identify the existing practices of construction management in general and contract administration in particular., to justify suitability of available conditions of contract in the building projects , to identify clauses which are unclear and ambiguous in respect of the current practices and the Ethiopian law , to assess contribution of these conditions of contract in developing the construction industry in general and competence of construction management profession in particular in building construction projects.

4.2 Background of Respondents

The target population of this study included ninety- eight (98) companies within building contractors of Addis Ababa from BC-1 to Bc-3. Questionnaires were sent to the offices of these companies. Interviews were also conducted for some of the respondents using the questionnaire. From total distributed questionnaires to BC1 was 39, BC2 was 27 and BC2 was 32. Out of this number 30 from BC1, 22 from BC2 and 25 from BC3 respectively, of them were able to complete the questionnaires representing a total of 78.6%.

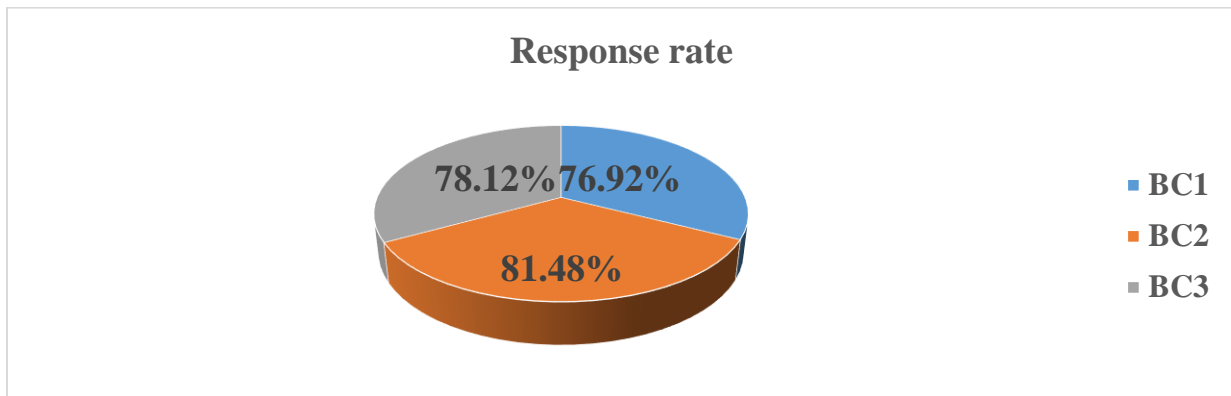


Figure -4. 1 respondents of firm level response rate

Table - 4. 1 Profile and Background of Respondents

Characteristics of sample	Frequency	Percentage
A. Sex		
Male	65	84.42%
Female	12	15.58%
B. Educational level		
Up to diploma	15	19.48%
Master's degree	35	45.45%
BA/BSc Degree	25	32.47%
Above Master's degree	2	2.60%
C. Practicing experience		
Below 5 years	20	25.97%
5 -15 years	33	42.86%
15 – 25 years	19	24.67%
Above 25 years	5	6.50%

As revealed in the above table that 84.42% of respondents were male respondents and 1.58% of respondents were female respondents.

The researcher was interested in knowing the profession of the respondents and also to identify how many years the respondents have been practicing. The above table depicts that 19.48% of respondents holds up to diploma, 45.45% of them holds master's degree, 32.47% holds BA/BSc degree and the remaining 2.60% holds above master's degree.

25.97% of the respondents have below 5 years of practicing experience, 42.86% of the respondents have 5 -15 years of practicing experience, 24.67% of the respondents have 15-25 years of practicing experience and 6.50% of the respondents have more than 25 years of practicing experience.

4.3 Current practice of contract administration in the project delivery process

Contract administration starts with developing clear, concise performance based statements of work. The statement of work should be the roadmap for contract administration. Therefore, planning for contract administration occurs prior to issuance of the solicitation. The goal of contract administration is to ensure the contract is satisfactorily performed and the responsibilities of both parties are properly discharged. This procedure involves maintaining an updated form of the contract; controlling and managing contract variations; paying the contractor; managing assets; drafting reports; and terminating the contract.

Effective contract administration minimizes or eliminates problems and potential claims and disputes. A key factor in successful contract administration is communication. It is essential for contract administrators to understand the provisions of the purchase document, have the ability to communicate contract obligations to all parties involved, and maintain control over the contract performance. A good contract manager ensures that the contract requirements are satisfied, that the goods and services are delivered in a timely manner, and that the financial interests of the agency are protected.

Contract managers must have sufficient knowledge of contracting principles as it relates to their responsibilities in administering the contract. It is the contractor's responsibility to perform and meet the requirements of the contract. To do so, contractors sometimes need technical direction and approval from agency personnel. Agency personnel must provide this technical direction and approval in a timely and effective manner. All guidance provided to a contractor must be within the scope of the contract.

With respect to the current practice of contract administration of building project in your company, 33 of building contractors company's respondents were very good in the current practice of contract administration, 28 of building contractors companies respondents were good, 1 of building contractors companies respondents were fair and 5 of building contractors companies respondents were poor in the current practice of contract administration.



Figure - 4. 2 current practice of contract administration of respondents

Construction contract types have direct impact on the cost estimation of construction projects. There are many types of construction contracts, which are applicable based on the prevailing specific project conditions and largely the interest of the owner. The selection of contract type to be used for a construction project is made by the owner, acting upon the advice of his Engineer and his legal advisor. The selection must meet the owner Objectives and takes into account the constraints that might relate to the project. The scope and the nature of the project will primarily affect the selection of type of contract.

Table -4. 2 construction contract types used by building contractors companies

Construction contract types	Frequency	Percentage
Lump sum contract	28	36.36%
Turnkey contract	35	45.45%
Negotiated contract	5	6.49%
Cost plus percentage contract	9	11.70%
Total	77	100%

As depicted in the above table the frequently they face types of construction in the building projects, 28 (36.36%) of the respondents most of time faced lump sum contract, 35 (45.45%) of the respondents most of time faced Turnkey contract, 5 (45.45%) of the respondents most of time faced Negotiated contract, and the remaining 9 (11.70%) of the respondents most of time faced Cost plus percentage contract.

There are three major parties in the construction project's setting; the Contractor, Employer and the Consultant; the Employer is the Client or Owner of the project and is the one who pays for the work. The role of the Employer is to express its project requirement (Employer's Requirement), launch the project, to conclude contracts with the Contractor and Consultant, supervise the performance, make major decisions (like variations, extension of time, etc.), make payment and to accept the to be completed project.

With respect to the relationship between the client, the consultant and the contractors overall looks like, the majority respondents, on average 55% of them have good relationship among the three construction stakeholders, and 45% of the respondents said that fair relationship among the three construction stakeholders.

The goal of the procurement of any good or service is successful contract completion. Successful contract completion is defined as successful procurement of the right item, in the right quantity, for the right price, at the right time, with the right quality, from the right source Contract administration, the formal governance of the contract, is concerned with the mechanics of the relationship between the parties, the implementation of procedures defining the interface between them, and the smooth operation of routine administrative and clerical functions; and contract administration includes such tasks as contract maintenance and change control, charges and cost monitoring, ordering and payment procedures, and management reporting. The most common types Contract Administration Problems are delay, change order, personality conflict, and definition of acceptance, poor performance, sub-contractors, increase cost and Risk of failure.

With respect to the Perceived occurrence of contract administration problems over all types of contracts, 26 of building contractors company's respondents encountered were delays in the Contract administration problem, 31 of building contractors companies respondents encountered were change order, 12 of building contractors companies respondents encountered were poor performance and 8 of building contractors companies respondents encountered were poor in the Contract administration problem.

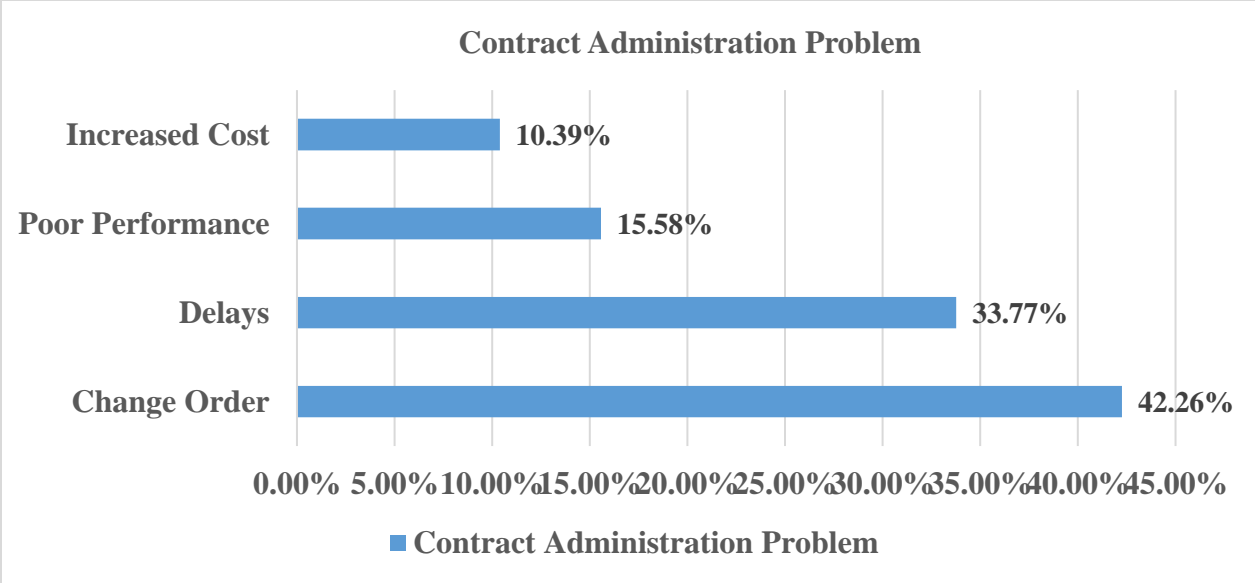


Figure -4. 3 Perceived occurrence of contract administration problems over all types of contracts
 Contract administration as a set of activities performed by government officials (client’s representatives) after a contract has been awarded to determine how well the government (client) and the contractor perform to meet the requirements of the contract. Contract administration is concerned with the mechanics of the relationship between the customer and the provider, the implementation of procedures defining the interface between them, and the smooth operation of routine administrative and clerical functions. Effectiveness of contract management is about ensuring the meetings of agreed terms of the contract.

Table - 4. 3 standard requirement of the current contract administration

Standard of the current contract administration	Frequency	Percentage
Strongly Agree	31	40.26%
Agree	38	49.35%
Disagree	6	7.79%
Strongly Disagree	2	2.60%
Total	77	100%

As depicted in the above table the frequently they met Standard of the current contract administration in the building projects, 31 (40.26%) of the respondents most of time met standard contract, 38 (49.35%) of the respondents most of time met standard of current contract administration, 6 (7.79%) of the respondents most of time met standard contract, and the remaining 2 (2.60%) of the respondents most of met standard of the current contract administration.

4.4 Contract management impact contract management on time, cost and quality delivery including EHSSS

Contract Management as the management of contracts between buyers, employers or clients and their customers, vendors, partners, or employees that involved negotiating terms and conditions of contracts, ensuring compliance with terms and conditions, as well as documenting and agreeing on any changes or amendments that may arise during the implementation or execution of the contracts. Contract Management and for that matter the management of the cost of a contract can also be related to the quantum of risk envisaged in that contract. The difference between a contract producing positive results and one that does not, can often be due to the way risks associated with the contract are managed. Efficient Contract Management can therefore mean significant time savings or compensation of time to both the contractor and the client.

With respect to research question the researcher sought to know the opinion of the respondents as to the level of impact Contract Management has on time, cost and quality delivery including Environmental, Health, Security, Social and Safety (EHSSS). Regarding to the delivery time of their firms previously executed projects; 20 of the respondents noted that Contract Management had a very high impact on the delivery time, 31 of the respondents noted that Contract Management had a high Impact on the delivery time of the project, 16 of the respondents noted that Contract Management had average Impact on the delivery time of the project, 8 of the respondents noted that Contract Management had a low Impact on the delivery time of the project, and 2 of the respondents noted that Contract Management had no Impact on the delivery time of the project.

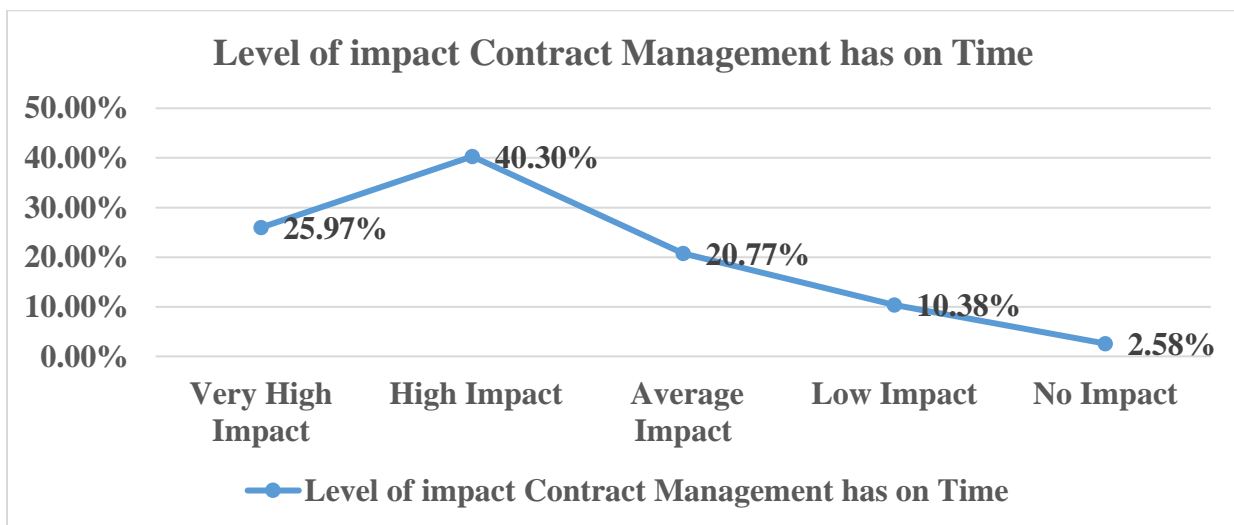


Figure -4. 4 Level of impact Contract Management has on Time

Contract Management as a continuous process, starting with analysis and evaluation of the client/customer’s inquiry, and carrying on until contract closure, upon fulfillment of all contractual obligations. The difference between a contract producing positive results and one that does not, can often be due to the way risks associated with the contract are managed. The researcher also sought the opinions of the respondents as to the level of impact Contract Management has on the cost of projects. Hundred percent 100% was of the notion that Contract Management had at least an average impact on the Cost of the Project.

Measuring quality is perhaps the most difficult aspect of Contract Management. We can however make it easier by defining quality as ‘conformance to requirements.’ A service or contract either meets its requirement or it does not. However, quality can only be met when the requirements are accurately specified and communicated by the contract manager to all parties. Contract Management is a life cycle management process that called for systematic and efficient administration of contract creation, execution, and analysis for the purpose of maximizing financial and operational performance and minimizing risk. In terms of the quality delivery of the projects, respondents opinion on the Level of impact Contract Management has on Quality delivery of your previously executed projects are summarized in the following table.

Table - 4. 4 Level of impact Contract Management has on Quality delivery of projects

Level of impact Contract Management has on Quality	Frequency	Percentage
Very High Impact	14	18.18%
High Impact	40	51.95%
Average Impact	16	20.78%
Low Impact	7	9.09%
No Impact	0	0%
Total	77	100%

As shown in the above table, 18.18 % respondents perceived that Contract Management has in the very high impact on the quality delivery of projects, 51.95% thought Contract Management had a High impact on the quality delivery of projects, 20.78 % thought Contract Management had an average impact on the quality delivery of projects and only 9.09 % thought Contract Management had a low impact on the quality delivery of projects.

In terms of the quality delivery of the projects, respondent's opinion on the table Level of impact Contract Management has on Environmental, Health, Security, Social and Safety (EHSSS) Requirements delivery of your previously executed projects are discussed in the following ways. Regarding to the delivery time of their firms previously executed projects; 14 of the respondents noted that Contract Management had a very high impact on the Environmental, Health, Security, Social and Safety of the building project, 26 of the respondents noted that Contract Management had a high Impact on the Environmental, Health, Security, Social and Safety the project, 27 of the respondents noted that Contract Management had average Impact on the Environmental, Health, Security, Social and Safety of the project, 8 of the respondents noted that Contract Management had a low Impact on the delivery time of the project, and 2 of the respondents noted that Contract Management had no Impact on the Environmental, Health, Security, Social and Safety of the project.

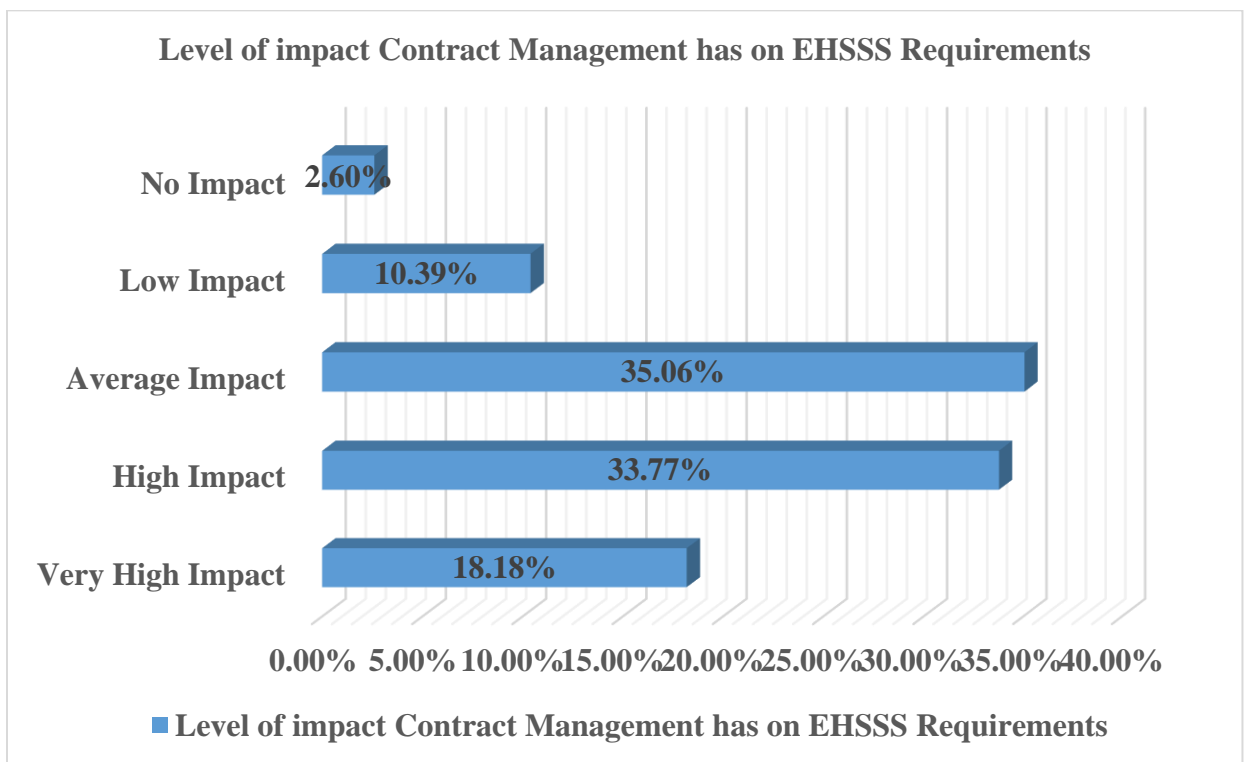


Figure -4. 5 Level of impact Contract Management has on EHSSS Requirements

In summary, the researcher can deduce that Contract Management has a significant impact on the time, cost and quality delivery including EHSSS of projects. Managers in the Construction industry should therefore pay attention to the management of contracts in order to achieve the best in terms of time, cost and quality delivery.

4.5 Factors Affecting contract administration in building construction projects

With regarding to, Factors Affecting contract administration in building construction projects respondents' firms compares with activities identified below. The scale was from 1-5 where; 1= "strongly disagree," 2= "Disagree," 3= "Neutral," 4= "Agree," 5= "Strongly Disagree."

Table - 4. 5 Affection to contract administration in building construction projects with quality

Factors affecting in contract administration in building project projects with quality			
	Frequency	Percentage	Cumulative Percentage
Quality			
Roles and duties of the stakeholders			
1. Strongly Disagree	4	5.19%	5.19%
2. Disagree	10	12.99%	18.18%
3. Neutral	2	2.60%	20.78%
4. Agree	23	29.87%	50.65%
5. Strongly Agree	38	49.35%	100%
Preparation of the technical requirements of the materials			
1. Strongly Disagree	2	2.60%	2.60%
2. Disagree	11	14.28%	16.88%
3. Neutral	1	1.30%	18.18%
4. Agree	28	36.36%	54.54%
5. Strongly Agree	35	45.46%	100%
Clear scopes and objectives of constructions			
1. Strongly Disagree	3	3.90%	3.90%
2. Disagree	7	9.09%	12.99%
3. Neutral	0	0%	12.99%
4. Agree	43	55.84%	68.83%
5. Strongly Agree	24	31.17%	100%
Construction techniques			
1. Strongly Disagree	2	2.60%	2.60%
2. Disagree	13	16.88%	19.48%
3. Neutral	0	0%	19.48%
4. Agree	40	51.95%	71.43%
5. Strongly Agree	22	28.57%	100%
Construction selection			
1. Strongly Disagree	3	3.90%	3.90%
2. Disagree	5	6.49%	10.39%
3. Neutral	1	1.30%	11.69%
4. Agree	47	61.04%	72.73%
5. Strongly Agree	21	27.27%	100%

As depicted in the above table, cumulatively all respondents, thus hundred percent (100%) indicated that all Factors affecting in contract admin Preparation of the technical requirements of the materials in building project projects with quality. But, Roles and duties of the stakeholders, Clear scopes and objectives of constructions major factor affecting quality.

Table - 4. 6 Affection to contract administration in building construction projects with time

Factors affecting in contract administration in building project projects with time			
	Frequency	Percentage	Cumulative Percentage
Time			
Lack of workers			
1. Strongly Disagree	2	2.60%	2.60%
2. Disagree	5	6.49%	9.09%
3. Neutral	3	3.90%	12.99%
4. Agree	29	37.66%	50.65%
5. Strongly Agree	38	49.35%	100%
Slow decision making			
1. Strongly Disagree	0	0%	0%
2. Disagree	4	5.19%	5.19%
3. Neutral	2	2.60%	7.79%
4. Agree	29	37.66%	45.45%
5. Strongly Agree	42	54.55%	100%
Defects caused by the contractors			
1. Strongly Disagree	2	2.60%	2.60%
2. Disagree	8	10.39%	12.99%
3. Neutral	2	2.60%	15.59%
4. Agree	27	35.06%	50.65%
5. Strongly Agree	38	49.35%	100%
Construction planning			
1. Strongly Disagree	2	2.60%	2.60%
2. Disagree	7	9.09%	11.69%
3. Neutral	0	0%	11.69%
4. Agree	39	50.65%	62.34%
5. Strongly Agree	29	37.66%	100%
Construction changes			
1. Strongly Disagree	3	3.90%	3.90%
2. Disagree	5	6.49%	10.39%
3. Neutral	0	0%	10.39%
4. Agree	41	53.25%	63.64%
5. Strongly Agree	28	36.36%	100%

As shown in the above table, Lack of workers, Slow decision making, Defects caused by the contractors, Construction planning and Construction changes were the major Factors affecting in contract administration in building project projects with time.

Table -4. 7 Affection to contract administration in building construction projects with cost

Factors affecting in contract administration in building project projects with cost			
	Frequency	Percentage	Cumulative Percentage
Cost			
Design problems			
1. Strongly Disagree	0	0%	0%
2. Disagree	4	5.19%	5.19%
3. Neutral	0	0%	0%
4. Agree	32	41.56%	46.75%
5. Strongly Agree	41	53.25%	100%
Construction Changes			
1. Strongly Disagree	2	2.60%	2.60%
2. Disagree	5	6.49%	9.09%
3. Neutral	0	0%	9.09%
4. Agree	33	42.86%	51.95%
5. Strongly Agree	37	48.05%	100%
Contractors faults			
1. Strongly Disagree	0	0%	0%
2. Disagree	2	2.60%	2.60%
3. Neutral	1	1.30%	3.90%
4. Agree	43	55.84%	59.74%
5. Strongly Agree	31	40.26%	100%
Lack of workers			
1. Strongly Disagree	1	1.30%	1.30%
2. Disagree	4	5.19%	6.49%
3. Neutral	1	1.30%	7.79%
4. Agree	42	54.55%	62.34%
5. Strongly Agree	29	37.66%	100%
Additional tasks not state in the contracts			
1. Strongly Disagree	1	1.30%	1.30%
2. Disagree	5	6.49%	7.79%
3. Neutral	2	2.60%	10.39%
4. Agree	41	53.25%	63.64%
5. Strongly Agree	28	36.36%	100%

4.6 Best practice in contract management in building construction projects

With regards to, the researcher sought to determine how the Contract Management practices of the respondents' firms compares with activities identified as best practices in Contract Management. From the data that the researcher gathered from the respondents, it was realized that most of the best practices were being practiced by the respondents companies. The following practices recorded high frequencies of it being practiced;

Under Project Inception/ Procurement Planning Phase:

Table -4. 8 best practice in contract management of Project inception/Procurement planning

BEST PRACTICE IN CONTRACT MANAGEMENT			
Project inception/Procurement planning	Frequency	Percentage	Cumulative Percentage
Stakeholder Role and Resource Identification Plan			
1. Not Practiced at All	0	0%	0%
2. Not Practiced	12	15.58%	15.58%
3. Practiced	41	53.25%	68.83%
4. Frequently Practiced	16	20.78%	89.61%
5. Most Frequently Practiced	8	10.39%	100%
Specific Contract Management Approach			
1. Not Practiced at All	0	0%	0%
2. Not Practiced	4	5.19%	5.19%
3. Practiced	44	57.14%	62.33%
4. Frequently Practiced	13	16.88%	79.21%
5. Most Frequently Practiced	16	20.79%	100%
Risk Identification and Management Plan			
1. Not Practiced at All	0	0%	0%
2. Not Practiced	15	19.48%	19.48%
3. Practiced	32	41.56%	61.04%
4. Frequently Practiced	10	12.99%	74.03%
5. Most Frequently Practiced	20	25.97%	100%

As depicted in the above table, cumulatively, 84.42% of the respondents the practice Stakeholder Role and Resource Identification Plan. Whilst 94.81% of the respondents the practice Specific Contract Management Approach/ Strategy and Hundred percentages practice (100.00%) of the respondents the Risk Identification and Management Plan.

Under the Procurement Process -1/ Solicitation Planning Phase:

Solicitation is the process of requesting responses from sellers eventually resulting in procurement. solicitation planning uses project procurement planning as an input and use standard forms and expert judgment as tools and techniques to produce evaluation criteria and procurement documents such as Invitation for Bid (IFB), Request for Proposal (RFP) and Request for Quotations (RFQ).

Table -4. 9 best practice in contract management of Procurement process

BEST PRACTICE IN CONTRACT MANAGEMENT			
Procurement process- 1/ solicitation planning	Frequency	Percentage	Cumulative Percentage
Templates for Contracts and Supplier Orders			
1. Not Practiced at All	0	0%	0%
2. Not Practiced	7	9.09%	9.09%
3. Practiced	36	46.75%	55.84%
4. Frequently Practiced	16	20.78%	76.62%
5. Most Frequently Practiced	18	23.38%	100%
Standard Procedures for Procurement Methods			
1. Not Practiced at All	0	0%	0%
2. Not Practiced	3	3.90%	3.90%
3. Practiced	44	57.14%	61.04%
4. Frequently Practiced	18	23.38%	84.42%
5. Most Frequently Practiced	12	15.58%	100%
Standard Procedures for Evaluation Criteria and Award Strategy			
1. Not Practiced at All	0	0%	0%
2. Not Practiced	10	12.99%	12.99%
3. Practiced	31	40.26%	53.25%
4. Frequently Practiced	22	28.57%	81.82%
5. Most Frequently Practiced	14	18.18%	100%

In the above table shown, cumulatively all respondents, thus hundred percent (100%) indicated that they practiced using templates for contracts and supplier orders, standard procedures for procurement methods and standard procedures for evaluation criteria and award strategy.

Under Procurement Process -2/Solicitation Phase:

Solicitation is the process of requesting responses from sellers eventually resulting in procurement. According to PMBOK (2000), Solicitation involves obtaining responses from prospective sellers on how project needs can be met. It is also a process of sending out a document with the desired requirements for potential suppliers.

Table - 4. 10 best practice in contract management of the Procurement process

BEST PRACTICE IN CONTRACT MANAGEMENT			
Procurement process- 2/ solicitation	Frequency	Percentage	Cumulative Percentage
Advertising of Procurement Opportunities			
1. Not Practiced at All	20	25.97%	25.97%
2. Not Practiced	42	54.55%	80.52%
3. Practiced	8	10.39%	90.91%
4. Frequently Practiced	4	5.19%	96.10%
5. Most Frequently Practiced	3	3.90%	100%
Use of Well-Developed and Maintained list of Qualified bidders			
1. Not Practiced at All	3	3.90%	3.90%
2. Not Practiced	8	10.39%	14.29%
3. Practiced	38	49.35%	63.64%
4. Frequently Practiced	20	25.97%	89.61%
5. Most Frequently Practiced	8	10.39%	100%
Use of Emails for Delivering and Receiving RFQ and RFP			
1. Not Practiced at All	14	18.18%	18.18%
2. Not Practiced	6	7.79%	25.97%
3. Practiced	5	6.49%	32.46%
4. Frequently Practiced	38	49.35%	81.81%
5. Most Frequently Practiced	14	18.19%	100%

As shown in the table, 85.71% used a well-developed and maintained list of qualified bidders. Whilst 74.03% also use emails for delivering and receiving request for quotation (RFQ) and Request for Proposals (RFP). On the other hand there were two (2) best practices that were not popular with the respondents. 80.52% of the respondents respond that did not practice advertising of procurement opportunities.

Procurement Process -3/Source Selection Phase:

Source selection process evaluates seller proposals, and ends with the issuance of a contract award to a seller. According to PMBOK (2000), the process involves the receipt of bids or proposals and the application of the evaluation criteria to select a provider.

Table - 4. 11best practice in contract management of the Procurement planning

BEST PRACTICE IN CONTRACT MANAGEMENT			
Project inception/Procurement planning	Frequency	Percentage	Cumulative Percentage
Use Standardized evaluation criteria for Contractor Selection			
1. Not Practiced at All	5	6.49%	6.49%
2. Not Practiced	30	38.96%	45.45%
3. Practiced	22	28.57%	74.02%
4. Frequently Practiced	12	15.58%	89.60%
5. Most Frequently Practiced	8	10.40%	100%
Use Experienced Cross Functional Evaluation Teams for Contractor Selection			
1. Not Practiced at All	12	15.58%	15.58%
2. Not Practiced	23	29.87%	45.45%
3. Practiced	36	46.75%	92.20%
4. Frequently Practiced	6	7.80%	100%
5. Most Frequently Practiced	0	0%	0.00%
Use Independent Cost Estimate to evaluate Proposals during Contractor Selection			
1. Not Practiced at All	14	18.18%	18.18%
2. Not Practiced	6	7.79%	25.97%
3. Practiced	39	50.65%	76.62%
4. Frequently Practiced	15	19.48%	96.10%
5. Most Frequently Practiced	3	3.90%	100%

As depicted in the above table, 54.55 % of the respondents use standardized evaluation criteria and experienced cross functional evaluation teams for contractor selection. Whilst 74.03% of the respondents also use independent cost estimates to evaluate proposals during contractor selection. Whilst 54.55% of the respondents use Standardized evaluation criteria for Contractor Selection during contractor selection.

4.7 Interview conducted with the Project Manager of the building contractor

There are three major parties in the construction project's setting; the Contractor, Employer and the Consultant; the Employer is the Client or Owner of the project & is the one who pays for the work. The role of the Employer is to express its project requirement (Employer's Requirement), launch the project, to conclude contracts with the Contractor and Consultant, supervise the performance, make major decisions (like variations, extension of time, etc.), make payment and to accept the to be completed project.

The responsibility of the contract administration activity of the project is the CPO with the collaboration of the consultant is done for several reasons as; in the Traditional approach to contract administration, there are three parties; Contractor, Employer and Consultant Engineer. The FIDIC Conditions of Contract cannot apply without an Engineer being appointed by the Employer to administer the Contract. The Engineer is not a party to the Contract, but it plays an important role in the development process of the Works. The duties that the Engineer has to perform are defined under the Contract and it must have the necessary delegated authority from the Employer if it is to be able to perform them. The delegation of this authority is usually to be found in the agreement between the Employer and the Consulting Engineer. In addition, the Contract Administration work is outsourced to the project's Consultant as per duties under the FIDIC Conditions which are allocated to the Engineer which include; the issue of information and instructions to the Contractor as the work proceeds, commenting on the Contractor's proposals for carrying out the work, ensuring that materials and workmanship are as specified, agreeing measurements of work done and checking and issuing to the Employer interim and final payment certificates.

In administration of the Contract, all communications with the Contractor pass through the Engineer/Employer's Representative, and the contract administration department .thus to avoid possible confusion and misunderstanding; meetings among the Employer, the Contractor and the Engineer is held regularly. The Engineer's duties normally include instructions relating to management of the changes in the nature and extent of the work, the cost there of and the time for completion. For example, the issue of instructions to proceed with or to suspend the progress of the works is a matter of the CPO management. The degree to which the Employer leaves the consultant to determine matters affecting the extent and cost of the works and the time for their completion will depend to a large extent on the in-house capability of the Employer.

Based on the interview conducted, most respondents' firms often negotiate contract terms, thus many of interview of the project manager, site manager and employer are negotiate contract frequently before / during project execution.

With concerned to Who ensures the negotiation, compliance with documentation and agreement on changes or amendments to terms and conditions of contracts, most interview respondents said that negotiations are mostly done by the Company's Directors represented and sometimes Project Managers represented and Contract Managers, all the above Professionals and Company Directors are altogether involved in the negotiation process.

With regard to how often the firm use laid down procedures to ensure compliance, most interview respondents said that alluded to their firms' usage of laid down procedures in monitoring compliance to contract.

With concerned to how often the firm document changes and amendments that arise during contract execution/implementation, most interview respondents said that also indicated that their firms document changes and amendments in contract very often. The above means that all respondents undertake contract management activities but this assignment is not limited to designated contract managers of the respondent's firms.

With regard to the relationship between the client, the consultants and the contractor, The interests of the main stakeholders (Employer, Contractor, and Consultant) are generally in line and the teams work together to achieve the project objectives. In some cases, the Contractor focuses in the schedule performance of the project, while supervisor team of the project focus on quality of works in addition to the schedule and cost requirements. Contractually, main contractors are responsible for the construction of projects, but they rely on subcontractors and/or specialist contractors and suppliers to execute the works.

To sum up, a good working relationship allows an engineer to demonstrate their credibility, professionalism and other non-technical qualities. Engineers offer intangible services, the quality of which cannot be judged by prospective clients. A positive contractor/client relationship is one where communication remains consistent and organization and planning are a top priority. In addition to making for a more fluid design and build process, your client relationships are also integral to your company's brand. The most important part of successfully completing a project is communication between client and contractor.

4.8 Analysis on the Focus Group Discussion Results

This focus group discussion took place among the researcher and six out of the total sixteen mega project office CPO engineer staff who are actively engaged in the AZZKMM building project. The discussion was made at their office and took one afternoon. Among these professionals, one is an Architect, another one a Construction Management Engineer and the remaining are Civil Engineers who are participated in the group discussion. They are working on the project after repossessed of the project from the AACB to ACAMPO and all of them have sufficient knowledge and experience in their respective field of study.

The group discussion was aimed to share their experiences of the case study project with regards to the administration of the contract. Thus, the following key discussion points were raised and discussed by the focus group participants: It was agreed up on by all participants that, both parties (i.e. the client and the contractor) treat the details of the contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable laws. The contractor couldn't publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous agreement with the client. This confidentiality and legality aspect was noted as a very crucial factor for successful project contracting.

The contractor has been given all the notices, pay all taxes, duties and fees, and obtained all permits, licenses and approvals, as required by the laws in relation to the design, execution and completion of the works and the remedying of any defects. The contractor kept on the site, a copy of the contract, publications named in the client's requirements, the contractor's documents, and variations and other communications given under the contract. The client's Personnel have also the right of access to all these documents at all reasonable times. All the participants are eligible by the client to go through the contract document. Thus, this is believed by all participants as greatly facilitating the contract administration, especially since it makes them read from the same page. As per the discussion, having this exclusive right to these documents made the participants more accountable to the contract administration follow ups.

Even though the design review and Supervision is outsourced to the consultant Ethiopian construction design and supervision work corporation all the participants regularly follow up and administer each and every phases of the project as per the terms and conditions set in the contract in collaboration with the Ethiopian construction design and supervision work corporation.

The architect of the CPO works in each design review process with the consultant before it is approved. The civil engineers supervise the quality of the construction materials by making it a sample test at technology faculty department. Generally they make in depth supervision on the materials. This mega project is being intensively constructed 12 hrs. A day and the participants also work on the project site even during night hours in a shift basis.

The Contractor's work quality and technical ability is inspected by the Employer and Employer's Representative (Consultant) through Design Review, Material testing at site laboratory & third party Laboratory (AAiT Lab., at Ethiopian Conformity Assessment Agency (ECAA) and inspection by teams.

If any of the parties become aware of an error or defect of a technical nature in a document which was prepared for use in executing the works, the party promptly will notice to the other party of such error or defect. Then accordingly things are settled in harmony.

The client issues to the contractor instructions which are necessary to perform the obligations under the contract. Each instruction is given in written form with respect to the contracting terms, in which the obligations are specified. In the cases of variation, adjustments are made. The participants here again agree that the written form of communication facilitates the administration of the contract which also leads to its success eventually.

The contractor is doing the design, execution and completing of the works in accordance with the contract, and made remedies on any defects in the works. When completed, the works are to be fitted for the purposes for which the works are intended as defined in the DB contract. The contractor is responsible for the adequacy, stability and safety of all site operations.

It was mentioned up on the discussion that, what other thing seems to be missing in Ethiopian project undertakings is namely the care and concern towards safety. This could be from human, natural or material aspect. But in this project, the contractor has taken responsibilities to comply with all applicable safety regulations, take care for the safety of all persons entitled to be on the site, where nothing severe has happened so far, use reasonable efforts to keep the site and works clear of unnecessary obstruction so as to avoid danger to these persons, provide fencing, lighting, guarding and watching of the works until completion and taking over and provide temporary works (including roadways, footways, guards and fences) which were necessary, because of the execution of the works, for the use and protection of the public.

All the participants mentioned how they tried to institute a quality assurance system to demonstrate compliance with the requirements of the contract. The system is in accordance with the details stated in the contract. The client is entitled to audit any aspect of the system through the supervisors and project managers. Details of all procedures and compliance documents are submitted to the client for information before each design and execution stage is commenced.

Besides, in addition to the progress review meetings used to be held every month; the consultant reports the daily and weekly status of the project to the client. The participants in the monthly progress review meeting could be from any concerned offices other than the usual client, contractor, supervisor and project manager's presence. Visual aids (such as, picture figures) and other elaborative materials are used while presenting the progress, strategically perspectives, total payment and financial monthly figures used to be presented in the meeting. These meetings grant the follow up of not just the quality but also the time and cost variables of the project. Thus, challenges could be fixed at grass root level. The participants have mentioned as a challenge that, attending each and every one of these meetings is not becoming manageable by all participants.

Reporting also continues until the contractor completes all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the works. Each report includes charts and detailed descriptions of progress, including each stage of design, contractor's documents, construction, testing; Photographs showing the status of progress on site, percentage progress and the actual or expected dates of the rest of the project tasks, records of contractor's personnel and equipment and comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the execution of the project in accordance with the contract, and the measures being adopted to overcome delays.

When errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the contractor's documents, the works are corrected at the contractor's cost, notwithstanding any consent or approval. Though this costs were very minimal that it doesn't raise complications or serious disputes.

All the participants then concluded that, till now, the project undertaking is successful as neither of the parties is liable to the other party for loss of use of any works, loss of any contract or for any indirect or consequential loss or damage which may have been suffered by the other party in regards with the contract.

The participants are working in harmony with other stakeholders like the Municipality office, Ethio-Telecom Company, Water and sewerage Authority, electric utility office and others. Each and every professional engaged in the project is responsible and accountable for his/her respective work. They follow the directives of the bank. Even if the contract signed is based on the FIDIC manual, they also go in line with the construction law of the country.

The other point discussed by the participants was; the contractor imports almost all the construction materials from abroad, mainly from China except few, like cement, sand and gravel because, it doesn't believe that other local construction materials have high quality even though these local materials can be further attested by Quality Standards Authority; then local material suppliers could get additional market by supplying to this project.

The contractor has also employed professionals for the project from China up to the skilled laborers. Only the unskilled laborers are hired from local people. i.e., key professional works are owned by the Chinese.

In addition, the contract payment is local currency. On the other hand, the participants have raised one positive point on this issue that, the contractor came to this project with its own money; i.e., it doesn't need local bank finance to undertake the project and this is an advantage for the country; whereas; if local contractors own this project, they must need huge amount of bank finance.

The researcher has also made site observation to raise questions in verbal form which may be omitted in the interview questions. The contractor has built a suitable G+1 temporary office in the main gate of the site for office work of the project which will be demolished after the project is completed. On the contractor side, there are project managers, design engineers who make the on-going design of the project which is to be presented for the employer for approval and a contract manager who regularly follow-up the terms and conditions of contract signed and request claims if any; upon the implementation of the project. The contractor employees are intensively working 12 hours a day in the project in a shift basis.

To sum up, Adwa zero zero museum projects the building contractors building the project in the project schedule ways and the client, the consultants and contractor's good relationship contributed the project to reach in good performance of the project.

CHAPTER FIVE

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

This research aimed at a study of construction contract administration practice in Addis Ababa building construction project. Data obtained from analysis and major findings of the research are concluded here below.

With respect to the perceived occurrence of contract administration problems over all types of contracts, 26 of building contractors company's respondents encountered were delays in the contract administration problem, 31 of building contractors companies respondents encountered were change order, 12 of building contractors companies respondents encountered were poor performance and 8 of building contractors companies respondents encountered were poor in the contract administration problem.

With respect to research question the researcher sought to know the opinion of the respondents as to the level of impact Contract management has on time, cost and quality delivery including Environmental, Health, Security, Social and Safety (EHSSS). Regarding to the delivery time of their firms previously executed projects; 20 of the respondents noted that contract management had a very high impact on the delivery time, 31 of the respondents noted that contract management had a high Impact on the delivery time of the project, 16 of the respondents noted that contract management had average Impact on the delivery time of the project, 8 of the respondents noted that contract management had a low Impact on the delivery time of the project, and 2 of the respondents noted that contract management had no Impact on the delivery time of the project.

Cumulatively all respondents, thus hundred percent (100%) indicated that all Factors affecting in contract admin Preparation of the technical requirements of the materials in building project projects with quality. But, Roles and duties of the stakeholders, clear scopes and objectives of constructions major factor affecting quality. Lack of workers, slow decision making, defects caused by the contractors, construction planning and construction changes were the major factors affecting in contract administration in building project projects with time. Cumulatively, 84.42% of the respondents the practice stakeholder role and resource identification plan. Whilst 94.81% of the respondents the practice specific contract management approach/ strategy and hundred percentages practice (100.00%) of the respondents the risk identification and management plan.

5.2 RECOMMENDATIONS

Thus, the researcher provides the following recommendations pinpointing focal points that would be helpful to the company project procurement management in fruitful directions.

With respect contract administration, “Good Fences make good neighbors”. Thus, having a well-established contract is as good as having a good fence which leads to a smooth relationship with the stakeholders. It is hence recommended to have a clear contract first which later on leads to success with a proper follow up and monitoring of a project.

Contract Management should be given the needed attention by the managers and owners of building construction companies in Addis Ababa. It is necessary for Contract Managers to be actively engaged to manage contracts throughout their lifecycle to help ensure the contractor’s performance is satisfactory, stakeholders are well informed and all contract requirements are met. Contractors are advised to improve on the documentation on the Effects of Delays, Variations and events/changes during contract/project implementation and also generally improve on their record keeping and/or Filing systems to ensure a more efficient project change management system and pursue a more professional outlook.

Though an emerging profession in the building Construction sector of Addis Ababa, this studies have shown the benefits of an effective Contract Management to include standardization of processes and procedures, preventing legal and financial risk, saving time, providing a tool for performance management, providing up-to-date information on the contract and improving contract compliance. It has also elicited the impact on the cost, time, and quality including Environmental, Health, Security, Social and Safety expectations of our construction projects.

Furthermore, the outcome of this study calls for local building contractors in Addis Ababa to be more efficient in their operations and pursue a more professional outlook by implementing effective contract administration and management systems that will propel the construction sector of Addis Ababa and inure in local building contractors building their capacities to execute bigger and more lucrative contracts.

5.3 RECOMMENDATIONS FOR FUTURE STUDIES

Finally, it is strongly recommended that further studies in this area of Contract administration and Management in the building Construction sector of Addis Ababa should be conducted to increase and deepen the knowledge base in this discipline to build the capacity of stakeholders through Continuous Professional Development (CPD) programs.

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Appendix



Addis College

Department of Construction Technology and Management
POSTGRADUATE PROGRAM

Questionnaire and interview Survey

On

A study of construction contract administration practice in Addis Ababa building construction project

Dear Sir/Madam,

This research survey is an individual research designed to fulfill an academic requirement for M.Sc. program in Construction Technology and Management at Addis College.

This questionnaire is prepared to study of construction contract administration practice in Addis Ababa building construction project and recommend possible remedial measures that will assess construction contract administration practice in Addis Ababa construction sector.

Your response, in this regard, is highly valuable and contributory to the outcome of the research. I can assure you that your response will be kept strictly confidential, where only my academic advisor and I will have access to the information you provided and it will be exclusively used for the research. You may kindly aware of time constraints in such academic requirement researches; hence, I sincerely request you to complete and return the questionnaire in a week time to enable me finalize the research on time to meet the deadline.

Thank you for your invaluable time and cooperation!

Submitted by: Sofonias Mamo

Supervised by: Dr. Beharu Bewektu

Address: Tel. 0920224055

Please give your response for the questions here under by putting a “√” mark at your appropriate choice and/or idea by putting your answers in the space provided. You can use the back side of the paper if the space provided is not sufficient.

Part One: General / Personal and Organization Information

1. Sex

Male

Female

2. Education level

Up to diploma

BA/BSC degree

Master's degree

above master's degree

3. How long has your company been into construction?

Below 5 years

5 – 15 years

15 – 25 year

Above 25 years

4. Name of company: _____

5. Your position in the organization _____

Part Two. To examine the current practice of contract administration in different phases of the project delivery process.

1. How is the current practice of contract administration of building project in your company?

Very good	<input type="checkbox"/>	Fair	<input type="checkbox"/>
Good	<input type="checkbox"/>	Poor	<input type="checkbox"/>

2. Most of time, which types of construction contract types encountered in your building project?

Lump sum contract	<input type="checkbox"/>	Negotiated contract	<input type="checkbox"/>
Turnkey contract	<input type="checkbox"/>	Cost plus percentage contract	<input type="checkbox"/>

3. How does the relationship between the Client, the Consultant and the Contractor look like?

Very good	<input type="checkbox"/>	Fair	<input type="checkbox"/>
Good	<input type="checkbox"/>	Poor	<input type="checkbox"/>

4. What is the perceived occurrence of contract administration problems over all types of contracts?

Delays	<input type="checkbox"/>	Change Order	<input type="checkbox"/>
Poor Performance	<input type="checkbox"/>	Increased cost	<input type="checkbox"/>

5. Contract administration is critical for smooth progress to execute the project according to the planned schedule. Do you feel the current contract administration meet the acceptable standard?

Strongly Agree	<input type="checkbox"/>	Disagree	<input type="checkbox"/>
Agree	<input type="checkbox"/>	Strongly Disagree	<input type="checkbox"/>

Part Three: Contract management impact contract management on time, cost and quality delivery including EHSSS

6. What is your opinion is the impact contract management has on the delivery time of your previously executed projects?

Very High Impact	<input type="checkbox"/>	Average Impact	<input type="checkbox"/>	No Impact	<input type="checkbox"/>
High Impact	<input type="checkbox"/>	Low Impact	<input type="checkbox"/>		

7. What in your opinion is the level of impact Contract Management has on the cost of your previously executed projects?

Very High Impact	<input type="checkbox"/>	Average Impact	<input type="checkbox"/>	No Impact	<input type="checkbox"/>
High Impact	<input type="checkbox"/>	Low Impact	<input type="checkbox"/>		

8. What in your opinion is the level of impact Contract Management has on the Quality delivery of your previously executed projects?

Very High Impact	<input type="checkbox"/>	Average Impact	<input type="checkbox"/>	No Impact	<input type="checkbox"/>
High Impact	<input type="checkbox"/>	Low Impact	<input type="checkbox"/>		

9. What in your opinion is the level of impact Contract Management has on the Environmental, Health, Security, Social and Safety (EHSSS) requirements of your previously executed projects?

Very High Impact	<input type="checkbox"/>
High Impact	<input type="checkbox"/>
Average Impact	<input type="checkbox"/>
Low Impact	<input type="checkbox"/>
No Impact	<input type="checkbox"/>

Part Four; Direction: Please indicate your degree of agreement/disagreement with the following statements related to your perception about Factors affecting Contract Administration in building Construction Projects in Addis Ababa by encircling the appropriate number.

(1= strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = strongly agree)

Affectation to Contract Administration in building Construction Projects

Factors affecting in Contract Administration	1	2	3	4	5
Quality					
Roles and duties of the stakeholders.					
Preparation of the technical requirements of the materials.					
Clear scopes and objectives of constructions.					
Construction techniques.					
Constructor selection.					
Time					
Lack of workers					
Slow decision making					
Defects caused by the contractors					
Construction planning					
Construction changes					
Cost					
Design problems					
Construction changes					
Constructors' faults					
Lack of workers					
Additional tasks not stated in the contracts					

If other list here _____

Part Five: Best practice in Contract Management

Using the list scale below, which of the following Contract Management practices is undertaken by your company and to what extent is it being practiced. Please score each item according to the level of practice in your organization on a scale of 1 to 5 where 1= “Not practiced at all”, 2= “Not practiced”, 3= “Practiced”, 4=”Frequently practiced” and 5= “Most frequently practiced”.

Best practice in Contract Management	1	2	3	4	5
Project Inception/Procurement Planning					
Stakeholder Role and Resource Identification Plan					
Specific Contract Management Approach/strategy					
Risk Identification and Management Plan					
Construction techniques.					
Constructor selection.					
Procurement Process -1/Solicitation Planning	1	2	3	4	5
Templates for contracts and supplier orders					
Standard Procedures for procurement methods					
Standard Procedures for evaluation criteria and award strategy					
Procurement Process -2/Solicitation	1	2	3	4	5
Advertising of procurement opportunities					
Use of a well-developed and maintained list of qualified bidders					
Use of emails for delivering and receiving RFQ and RFP					
Procurement Process -3/Source Selection	1	2	3	4	5
Use standardized evaluation criteria for contractor selection					
Use experienced cross functional evaluation teams for contractor selection					
Additional tasks not stated in the contracts					
Use independent cost estimate to evaluate proposals during contractor selection					

Interview Questions

1. What roles do you play as an employer in the project undertaking?
2. How was the specific project contract processed or procured?
3. How often does your firm negotiate contract terms of a project before/during project execution?
4. Who ensures the negotiation, compliance with documentation and agreement on changes or amendments to the terms and conditions of the contracts on your construction projects?
5. How often does your company use laid-down procedures for ensuring/monitoring your company's compliance as well as that of the client's to conditions of contract?
6. How often do you document changes and amendments that arise during contract execution/implementation?
7. How does the relationship between the Client, the Consultant and the Contractor look like?

Thank you in advance for your cooperation!!!

For Focus Group Discussion with the mega project CPO Professional staffs

“Construction Contract Administration Practices in the case of the Adwa zero-zero kilometer Design-Build (DB) Project of Addis Ababa city administration mega project office” as a partial fulfilment of senior essay required for MA degree.

Therefore, I would like to express my deepest gratitude for your cooperation in answering for the following discussion points. The very purpose of this research is to assess the practices of DB contract administration and its successfulness on the project undertaking; level of implementation and importance of project contract administration. This being said, it should be noted that, the research mainly depends on the accuracy of your answer. Lastly, I would like to assure you that, the data being collected from you will be presented anonymously and kept under strict confidentiality.

The check List for the focus group discussion is as follows though it is more of an open discussion so that there could be a free flow of ideas and brain storming.

- ❖ Contracting terms of the case study project
- ❖ How the contract is managed
- ❖ The role of each participants in the project
- ❖ The actual practices of the project regarding the specifications of the contract
- ❖ Human relation issues
- ❖ Working in harmony with other stakeholders
- ❖ Project review mechanisms.
- ❖ Accountability and responsibilities
- ❖ Practices of laws, procedures and directives

Thank you in advance for your cooperation!!!