

ADDIS COLLEGE

**ASSESSMENT OF CONDITIONS OF CONTRACT PROBLEMS IN ADDIS
ABABA BUILDING CONSTRUCTION PROJECTS**

By

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DECLARATION

I hereby declare that this thesis entitled “Assessment of conditions of contract problems in Addis Ababa building construction projects” 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

Construction industry is a major player in economy of any countries by generating employment and wealth to the nations through its forward and backward linkages with other sectors. However many projects in developing countries experienced extremely high cost overrun, time slippage and low quality. Problems of conditions of contract in the construction sector is one of the contributing factor among other things. In this respect, this study tries to identify shortfalls of the local construction conditions of contract in Ethiopia and to find out provisions that have negative implication for the development of the sector. The research focuses on provisions related to price adjustment; termination; claim substantiation and dispute settlement procedures; conformity of selected clauses with Ethiopian law; understandability of contract forms and the practice of construction management in general and contract administration in particular. The data collection method integrated questionnaire survey, interview and desk study. Samples for the study have been convenience method from group of public employers, domestic consultants, and domestic contractors who are actively participating on construction works. In this thesis, a descriptive analysis method has been used. Interpretation and discussions were made on the basis of results from the analysis. The study covered some selected contract provisions that have an implication to deprive the development of the construction sector. Accordingly the research comes up with the following conclusions. To begin with the price adjustment clauses are not sufficient to compensate the current soaring prices. Besides, termination is not exercised as per the contract provisions whereas claim substantiation and dispute resolution lack a balance of risk favoring the employer in most cases. In addition, another finding reveal that the civil procedure code Art. 315(2) hinders arbitration practices for administrative contracts. Some concepts such as experienced contractor need to be expressed in a more clear and concise manner to reduce subjectivity. Furthermore, local contract forms lack suitability to manage construction projects efficiently. This study further provides recommendations on how to improve the existing prevailing situations of the local construction sector in general and construction management practices in particular.

Key Words: Conditions of Contract, Construction Management, Construction Contracts, Contract Administration, Price Adjustment, Termination

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List of Acronyms

AACRA	Addis Ababa City Roads Authority
ACE	Association of Consulting Engineers
ADB	African Development Bank
ADR	Alternative Dispute Resolution
AIA	American Institute of Architects
BaTCoDA	Building and Transport Construction and Design Authority
BOQ	Bill of Quantities
CDSC	Construction Design Share Company
CPA	Conditions of Particular Applications
CSA	Central Statistics Agency
DB	Design Build
DBB	Design Bid Build
DCI	Domestic Construction Industry
ECC	Engineering and Construction Contracts
ERA	Ethiopian Roads Authority
FIDIC	Fédération Internationale des Ingénieurs-Conseils
GDP	Gross Domestic Product
GTP	Growth and Transformation Plan
ICB	International Competitive Bidding
ICE	Institution of Civil Engineers
ISIC	International Standard Industry Classification
JCT	Joint Contracts Tribunal
MDB	Multilateral Development Banks

MEDaC	Ministry of Economic Development and Cooperation
MoC	Ministry of Construction
MoI	Ministry of Infrastructure
MoTI	Ministry of Trade and Industry
MoUDC	Ministry of Urban Development and Construction
MoUDH	Ministry of Urban Development and Housing
MoWUD	Ministry of Works and Urban Development
MoFED	Ministry of Finance and Economic Development
NCB	National Competitive Bidding
NEC	New Engineering Contracts
PPA	Public Procurement Agency
SDB	Standard Bidding Document

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the study

According to Fitch Solutions (2019), the Ethiopian construction industry has shown rapid growth resulting in project success contrasting that of other developing countries. The 10-year forecast of the Ethiopian construction industry of 10.5% is the fastest growth rate in sub-Saharan Africa and the second-fastest industry growth globally. The construction sector plays an important role in short term trends, annual and more frequent development not only for the sector itself but also for other economic activities. Construction activity generally contributes much to the country's total activity, at least with the corresponding demand for materials and labor inputs. The swings in the level of construction activity tend to both amplify and to lead the movements in the economy as a whole.

According to Tadesse Ayalew (2019), Construction is widely acknowledged as the most important single constituent in a developing country's investment program with about 50% of total capital formation realized through this particular sector. It corresponds to the 60% public capital investment in Ethiopia. With such a high contribution the construction industry has a major influence on the economic growth of a country and is, conversely, dependent on the state of the economy for the realization of its potential. An inefficient and ineffective construction industry will, therefore, adversely affect all other sectors of the economy.

According to MoFED (2010), nowadays, Public construction projects consume an average annual rate of nearly 60% of the Government's capital budget. Despite the booming trend of the Ethiopian construction industry in recent years, its percentage contribution to GDP remains constant at 5.7% for the three years spanning from 2005/06 to 2007/08. However, it showed a 5.8% contribution of the total GDP in 2008/09. Selected economic activities and their percentage share of growth domestic product (GDP) for ten years covering from 1999/00 to 2008/09. The percentage contribution of construction is even higher should the renting of construction and demolishing materials with operator were considered under the industry based on the International Standard Industry Classification (ISIC) Rev.4 (2008). Public implementing offices must have the executive capacity and capability to deliver programs and projects for which they are responsible as most of these are vital to national or sectorial development, and are funded from scarce resources for which there are ever increasing and competing needs. The vital issue among other things to guide the construction industry is the provision of clear policy with general and specific targets to realize the nation's target in generating ultimate benefit.

According to MoWuD, (1994), contract" means the Conditions of Contract, Specifications, Methods of Measurement, Drawings, priced Bill of Quantities, Schedule of Rates and Prices, the Letter of Acceptance, the Contract Agreement, Addenda and other documents issued thereof. Conditions of contract are the clauses or terms in the main body of a contract, between the recitals and the appendix. They are sometimes referred to as 'operative clauses' Chapel et al., (2001). It contains general terms of the contract concerning the duties, obligations, and liabilities of both parties the employer and contractor. Besides, it describes the guidelines to be employed in contract administration.

According to Ade-Ojo, (2017), construction contract has usually been defined as "an agreement enforceable by the law between two or more parties to do or obtain from doing some act or acts of intention to create legal relations and to exchange mutual promises by having given something or having promised to give something of value as consideration for any benefit derived from the agreement". It is also defined as a legal agreement to work for or provide a service. Contract termination is a situation when a given project is supposed to be closed or finalized because there's no more need or sense for further continuation. Project termination is managed under a respective condition of contract. A valid contract can be terminated due to various reasons, which may not necessarily be on the breach. Nonetheless, the standard form of building contract contains an express clause that provides the employer and the contractor or either with the right to terminate the contract under specified circumstances.

Standard form contracts are agreements that employ standardized, non-negotiated provisions, usually in pre-printed forms. Hence, Standard forms of contract exist to identify the roles and responsibilities of the parties, and their agents; and provide rules to protect and direct the parties should things go wrong. Clients have a wide choice of standard contracts for construction work; in particular the forms used for buildings and civil engineering construction works, which cover most of the common procurement systems (PPA, 2006).

Conditions of contract could be local or international. Standard conditions in the domestic scene have been written by public implementing offices such as BaTCoDA, MoWUD and PPA. International practices show that either of the following entities can issue their own contract forms. For instance, financing institutions such as the World Bank, ADB, and European Investment Bank. Prepare contract forms according to their financing guide lines. Besides, professional associations including AIA, FIDIC, ICE and JCT have their own conditions of contract.

According to Patterson, (2010), standard-form contracts are a common feature of commercial relationships, where they offer both advantages and disadvantages. The primary advantage is a reduction of transaction costs, because the parties need not negotiate a new contract for each transaction. Standard contracts can also provide greater certainty regarding the meaning of contractual terms³ and a reduction in agency costs. The standard printed forms of contract have been developed over many years to take account of the many events which could occur during and after a construction project. Contract law will deal with many problems, but there are many matters and terms peculiar to construction which needs clarification (Brook, 2004). Once these terms have been incorporated, they reduce the likelihood of disputes which can lead to arbitration or litigation. Contract conditions are outlined by a reference being made to the standard conditions in the tender documents, with amendments through CPA to suit a particular project.

The preparation of a contract document is vital and should be done carefully to undertake a construction activity. Ambiguous and unclear clauses and wordings overlooked while drafting a contract document result in claims and disputes. According to (Kahssay, 2003) Most of the time claims are inevitable in construction projects. They may occur when the conditions of tile contract change in such a way that tile contractor is unable to recover expenses and Profits. In other cases, when the provisions of the contract documents and specifications lack clarity, a correct interpretation of tile documents may result in extra expenditure, which a contractor is forced to cover through claims. However, it is the party who draft these documents responsible while a claim arises with the Ethiopian construction industry is increasing in the last decade, there is a serious demand in handling contracts to achieve the desired result i.e. to complete the construction project within budget, time and quality.

According to Tanaka, (1988), defective contract documents are one of the main causes of claims. However, it is the party who draft these documents responsible while a claim arises with the Ethiopian construction industry is increasing in the last decade, there is a serious demand in handling contracts to achieve the desired result i.e. to complete the construction project within budget, time and quality.

This paper aims to assessment of conditions of contract problems in Addis Ababa building construction projects. Furthermore, this thesis paper was designed to address the above issues attributed to the problems, suitability, and conformity of selected clauses of conditions of contracts commonly used in the Ethiopian construction industry and domestic law.

1.2 Statement of the problem

According to Tesfaye, (2019), the construction industry is undoubtedly a national asset whose development ought to reflect the development and transformation of a wider society. It is a complex and diversified and the end product typically is nonstandard. Since operations must be performed on site of the project, it is often affected by local codes and legal regulations, which makes every project unique. Furthermore, because of its exposure to outdoors, unlike a manufacturing industry construction is affected by both daily and seasonal weather variations. It is also often influenced significantly by the availability of local construction financing, labor, materials, and equipment.

Kahssay, (2003), argues that the Ethiopian construction industry seriously lacks qualified engineering professionals appropriate level of training in construction management, international contract administration and dispute handling. As a result dispute which could have been mitigated on their early stage have gone offhand costing the country several millions. The objective of this thesis paper to assess problems and the way the local conditions of contract are used in the construction industry, examine their suitability, review their developments with time, explore selected clauses which are assumed to be unclear and trigger claims, and compare them with internationally used conditions of contract forward recommendations.

1.3. Objective of the study

1.3.1 General Objective of the study

The general objective of the thesis is to assess the current state of standard forms of contract in the domestic building construction sector i.e. conditions of contract currently employed in the country.

1.3.2 Specific Objectives of the study

The thesis paper has the following specific objectives:

- To evaluate the existing practices of construction management in general and contract administration in particular.
- To assess the 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 the conditions of contract in developing the construction industry in general and competence of construction management profession in particular.

1.4 Research Questions

To achieve and address the above stated objectives, the study is framed by the following research questions:

- Which types of conditions of contract are used currently in the domestic construction industry?
- How suitable are these conditions of contract for usage?
- Are the selected main clauses unclear or ambiguous in triggering claims?
- How is the conformity of selected clauses with the Ethiopian law?

1.5 Significance of the study

As globalization is a phenomenon which is here to stay, and which will deepen in extent and effect in future, it is in the interest of the developing countries that research is undertaken on how their construction industries and firms can participate fully in, and benefit from, this ‘inescapable and irreversible’ process (Ofori, 2007). The situation in the Ethiopian construction industry is following an increasing trend in recent years. However, the domestic construction industry is not benefiting much as the most key players of major construction projects in the country are foreign construction companies and consulting firms.

Depending on the research objectives the outcomes of this research is believed to mainly benefit the construction industry and any other interested stakeholders. The main merits of the Results from this study will help prioritize future research areas. The Findings of the study also will confirm whether the well-liked research topics are in fact most important to the construction industry and try to understand the needs of the industry, and increase the relevance of future research. Furthermore, the findings of this study fill this gap, and are aligned with the government’s policy intervention towards improving the construction sector.

1.6 Scope of the Study

The domestic construction industry has been using local conditions of contract since 1959. However, the research focuses on conditions of contract currently applicable in the Ethiopian construction industry. The study mainly deals with local conditions of contract whereas FIDIC contract forms are discussed for comparison and supplementary purpose since it is used widely in the domestic construction sector.

This study mainly dwells on the traditional contracting method commonly referred as DBB. Therefore the contract forms mainly covered are those suitable for DBB which involve the three main stakeholders i.e. Employer, Engineer and Contractor in construction projects. To this end, the main focus of the study include: readability and interpretation; powers, duties and responsibilities of the engineer; price adjustment; termination; claim procedures and dispute resolution clauses of contract forms commonly used in the Ethiopian construction industry.

1.7 Limitations of the Study

Due to the time and resource shortages other stakeholders of the construction industry and construction project beyond the mentioned parties are not included in this study.

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 research motivations, 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 construction and condition of contract 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 analysis, discussions and evaluation part.

- Chapter - 5 Conclusions and Recommendations

The last stage of the research covered the conclusions of the research together with recommendations.

Finally, the references and appendices are included in this thesis reports.

CHAPTER TWO

2. REVIEW OF LITERATURE

2.1 Introduction

The role the construction industry plays in socio-economic development is significant. The industry is a distinct sector of the economy, which makes its direct contributions to economic growth (MoWUD, 2006). It provides the basis upon which other sectors can grow by constructing the physical facilities required for the production and distribution of goods and services. The industry has a significant multiplier effect on the economy as a whole (MoWUD, 2006; EEA, 2008).

Contracts are fundamental to the management of almost all engineering projects. There are a number of contract models (standard forms of contract) in practice to facilitate the contractual arrangements between actors in a project. These models or standard forms of contract are readymade terms and conditions that are used when making a contract with possible modifications. Practices show that the terms of contract are seldom the last words. The fact that, the parties have agreed on common language (terms and conditions) does not guarantee an identical interpretation of every point and terms of their agreement (Tesfaye, 2004). In such cases, it is behavioral to come up with problems in many construction projects associated with the usage of contract forms. This research is, therefore, focused on problems of contract forms in Ethiopian Construction Industry giving more emphasis on provisions: Engineer's power and duty, Price Adjustment, Termination, and Claims and Dispute Resolution clauses. The literature review has been constructed to first define the basic concepts behind the research and then focus on detail thematic literature of related researches carried out around the world.

This research work is therefore focused on problems of Conditions of Contract in general covering some selected thematic issues related to provisions on Powers, Duties and Responsibilities of the Engineer, Price Adjustment, Termination, and Claim Procedures and Dispute Resolution in particular are also dealt. The new and old Red Books of FIDIC issued in 1987 and 1999 will be considered for this work wherever applicable in conjunction with the MoWUD 1994 and PPA 2006 domestic contract forms.

Generally, the comprehensive literature review conducted in this chapter is aimed to address the objectives of the research through a brief discussion on past findings related Assessment of conditions of contract problems in Addis Ababa building construction projects.

2.2 Ethiopian construction industry

According to Kuruoglu and Ergen., (2002), in national economy, various sectors provide different goods and services. As the agriculture sector provides agricultural products and the education sector provides educational services, the construction sector provides constructions in co-operation with public control and management systems, financial organizations etc. In national economy, constructions required by all kinds of investments have caused a great demand in construction sector. Furthermore, direct or indirect inputs and outputs of the construction sector affect the related sectors and sub-sectors.

According to Wubeshet Jekale, (2005), the construction industry in Ethiopia has been in the process of transformation. This transformation is based on improving the competitiveness of the construction industry and enhancing its ability to fulfill the national development demands. To reveal such transformation is vital to understand the contextual realities and the development trends of the Ethiopian construction industry. Construction project management consultancy will prevail to plan, organize, administer and monitor the overall construction process of the construction industry after analyzing the trend of industry at that time. As a result procurement of construction project management consultancy followed by sub consultancy and sub-contracting for design, contract administration service and construction works will become the next transformation stage to the construction industry in Ethiopia. This will largely reduce large fragmentation levels and enable clients to deal with one contract partner and promote private sector development. Ethiopian construction industry development stages are summarized in the following ways:-

- Pre 1968 - Foreign companies dominated
- 1968-1982 - Small scale domestic construction companies emerged
- 1982-1987 - companies domination
- 1987-1991 - Fragmentation between design services & construction works
- 1991-2001 - Re-emergence of private construction companies
- 2001-To date - Integration and capacity building.

According to GTP II, (2015), the Ethiopian industry sector largely driven by the expansion of manufacturing industries (with focus on light manufacturing), is expected to make significant contribution to growth and structural change during the period of GTP II. Construction, electricity and mining are also expected to make remarkable contribution to growth.

Thus, industrial GDP is projected to grow at annual average rate 19.8% during the period of GTP II. The manufacturing subsector GDP (both large and medium and micro and small scale) is projected to grow at an annual average rate of 23.9% during the same period. As a result, the share of industry is expected to increase from 14.6% in 2014/15 to 22.8% by the end of 2019/20 (GTP II 2015).

2.3 Contracts

There is no single definition for contract. According to (David Chappell, 2001), a contract is a binding agreement between two or more persons which creates mutual rights and duties and which are enforceable at law.

The earliest recorded reference to a building contract comes from one of the laws of Hammurabi, the Babylonian conqueror: ‘If a contractor builds a house for a man this man shall give the contractor two shekels of silver as recompense. If a contractor builds a house and does not build it strong enough and it collapses and kills the owner the contractor shall be put to death’ (Uherand Davenport, 2002). This ancient law explicitly express the rights, obligations and penalties for non-compliance of contracting parties.

A contract is a promise or multiple promises, normally between two or more people or organizations, called “contracting parties,” agreeing to undertake certain legally enforceable duties or obligations in exchange for certain legally enforceable rights or entitlements. (Bennett, 2003) Oxford English dictionary defines contract as ‘An agreement between two or more parties, to perform a specific job or work order, temporary or of fixed duration and usually governed by a written agreement.’

Article 1675 of the civil code of Ethiopia defines a contract as, “a contract is an agreement whereby two or more persons as between themselves create, vary or extinguish obligations of a proprietary nature.”

A contract is a commitment. It is an agreement between two parties which gives rise to obligations that are enforceable at law. The basic purpose of a written contract is to define exactly and explicitly the rights and obligations of each party thereof (Clough (1975) cited in (Selamawit Berhe et al, 2003).Uher and Davenport (2002) state an agreement that is legally binding is a ‘contract’. But lawyers usually use the terms ‘agreement’ and ‘contract’ interchangeably. To confuse the matter more, lawyers often call an agreement that is not a contract a ‘void contract’. A void contract is not a contract at all.

According to (Uher, Fundamentals of Building contract Management, 2002) Contracts establish rights and obligations of the parties and procedures for administration. Contract law is the name given to the sum of legal principles, established by decisions of judges, and statutes that deal with contracts. The law recognizes the bargain as being central to the contract. If two parties exchange promises in relation to a course of conduct or the transfer of property, the law will, subject to certain requirements, enforce that agreement or award damages for its breach. According to Art.1678 of the Civil Code of Ethiopia, no valid contract shall exist unless; the parties are capable of contracting and give their consent sustainable at law, the object of the contract is sufficiently defined and is possible and lawful and the contract is made in the form prescribed by law.

2.3.1 Contracts from Legal Perspective

According to (Uher, Thomas E. and Davenport, Philip, (2002), In law a ‘contract’ can be defined as follows: ‘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 agreements to come to a party, but these are not contracts.

Art. 1675 of the 1960 Ethiopian Civil Code defines a contract as an agreement whereby two or more persons as between themselves create, vary or extinguish obligations of a proprietary nature. The provision of a contract lawfully formed shall be binding on the parties as though they were law; that is, when parties make a contract agreement, a legally binding accord is concluded between them. A contract shall depend on the consent of the parties who define the object of their understanding and agree to be bounded thereby (Civil Code, Art. 1679); and the parties subject to the mandatory provisions of the law shall determine the content of the contract (Civil Code, Art. 1731). Agreement of the parties is outlined in the civil code article 1680 as:

- A contract shall be completed where the parties have expressed their agreement thereto,
- Reserves or restrictions intended by one party shall not affect his agreement as expressed where the other party was not informed of such reserves or restrictions.

That is, agreement made between parties shall be knowledgeable to the other party with all conditions of the contract they made among themselves. Any condition intended to be reserved by one party but not revealed to the other party shall not affect the contract on which they have agreed.

2.3.2 Elements of Contracts

According to Civil Code Art. 1678 the basic elements of valid contract. Thus the fundamental elements of contract include:

Capacity and Consent of the contracting parties: Capacity refers to competence to enter into a legally binding agreement. Parties entering into an agreement or contract shall, therefore, be capable of contracting.

Consent of the contract: Consent is a declared will of the individual to enter into contract.

Object of the contract; Object of contract is the very obligations of the contracting parties i.e. in the construction contract, the obligations of the employer and of the contractor.

Form of contract, Form refers to the types of contract. It may also mean the making of the contract orally or in writing.

In such cases the elements of valid contract essential to its formation include:

Offer and acceptance: In forming a contract, there must be an offer consisting of a definite promise from one party to the other of his willingness to be legally bounded on specific terms and an unconditional acceptance of those terms by the second party. An offer may be withdrawn before it has been accepted and will be valid for a “reasonable” time if no time limit is imposed

Competent parties: 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. Reasonable certainty of terms, and Object, Form, and Consideration.

2.3.3 Types of Contracts

There major types of contract are discussed in the following sub sections.

2.3.3.1 Special Contracts

There are many contract types specified in the Civil Code of Ethiopia. These special types of contracts include: contract of services, donation, loan, hiring sale, and supplies. The relevant part considered in this study is included under contract of services.

Contracts for the performance of services encompass the following forms:

- Contract for works and labor (Art. 2610-2631) which sets out for construction services.
- Hiring of intellectual work (Art. 2632-2638) for professional services such as design and engineering consulting services.
- Contract of work and labor relating to immovable (Art. 3019-3040) specifically for building contracts.

2.3.3.2 Administrative Contracts

Administrative contracts (Art. 3131-3306) are also dealt with in addition to the above contract types to carry out public projects. According to Art. 3244 (1) of the Civil Code, “A contract of public works is a contract whereby a person, the contractor, binds himself in favor of an administrative authority to construct, maintain, or repair a public work in consideration of a price”. The foregoing is not only a circuitous definition but also fails to specifically indicate what really ‘public works’ are. For a better definition, therefore, one can allude to Art. 2(c) of the Federal Public Procurement Proclamation No. 430/2005 which is repealed by Proclamation No. 649/2009. According to TekleHagos, (2009) the Civil Code of Ethiopia introduced into the Ethiopian legal system the concept of administrative contracts law. The injection of the administrative contracts provisions into the legal system empowered government departments to choose between two types of contracts: a private law contract or a public law contract (administrative contract). Thus, contracts that are concluded by Government Departments are not necessarily administrative contracts. According to Art.3132 of the Civil Code a contract shall be deemed to be an administrative contract where: It is expressly qualified as such by the law or by the parties, or, It is connected with an activity of the public services and implies a permanent participation of the party contracting with the administrative authorities in the execution of such service, and It contains one or more provisions, which could only have been inspired by urgent considerations of general interest extraneous to relations between private individuals.

Whether or not a contract that is concluded by a government department is an administrative contract, is to be determined in light of the criteria set under Art. 3132 of the Civil Code. The law categorizes some contracts as administrative contracts, *ipso jure*, as per Art. 3132(a). These are:

- Government concession contracts: Art. 3207-3243,
- Public construction contracts (Public works contracts): Art. 3244-3296, and,
- Government supplies contracts (Public supply contracts): Art. 3297-3306.

2.4 Construction Contracts

Construction contracts may be formed between a contractor and a proprietor, between a contractor and subcontractors, between a principal and a designer, and so on. The relationships, both contractual and otherwise, between the various parties in the building process have become complex and in many cases quite obscured. It is likely that some co-ordination and contractual problems are bound to occur, resulting in claims and disputes (Uher and Davenport, 2002).

Construction contracting has its own terminology, its own doctrines (legal and otherwise) and its own body of legislation. A variety of factors make a construction contract different from most other types of contracts. These include the length of the project, its complexity, its size and the fact that the price agreed and the amount of work done may change as it proceeds.

According to Uher and Davenport, (2002), because the contractual relationships between the parties to a construction contract are not likely to become less complex in the future, every effort should be made to minimize the number of claims and disputes and the impact they may have on the cost of the project. To achieve this, the parties to a contract should know the legal principles governing the formation of contracts. They should also have better appreciation of contract conditions and their interpretation and a greater awareness of the implication of inequitable allocation of risks and the need for more efficient and effective procedures for administering contracts.

According to (Nunnally, 2001) agrees and elaborates it further. According to him, construction professionals are not lawyers and therefore should not attempt to act as their own lawyers. However, construction professionals must have a thorough understanding of the customary practices and underlying legal principles involving contract construction. Virtually every action taken by a contractor, construction manager, or engineer/architect in a construction site has legal implications.

2.4.1 Types of Construction Contracts

One of the principal methods of classifying contracts is based on the method by which the contract price is established and subsequently payment is made to the contractor. (Gould & Joyce, 2003)

2.4.1.1 Re-measurement contracts

In this type of contract the contractor executes the work on an item rate basis. The amount to be received by the contractor depends upon the quantities of various items of work actually executed. It is used for works where it is impossible to calculate in advance the exact quantity of materials that will be required; hence, require sufficient design definition to estimate quantities of units. (Dinku, 2007)

In a unit price/ Re-measurement contracts, the risk of inaccurate estimation of uncertain quantities for some key tasks has been removed from the contractor. Depending on the confidence of the contractor on its own estimates and its propensity on risk, a contractor can slightly raise the unit prices on the underestimated tasks while lowering the unit prices on other tasks.

If the contractor is correct in its assessment, it can increase its profit substantially since the payment is made on the actual quantities of tasks; and if the reverse is true, it can lose on this basis. (Hendrickson, 2003)

The advantages of re-measurement contracts are that the contractor can be paid fairly for the amount of work he has to do, and the employer only has to pay for work actually required, without having to pay a premium to the contractor for the risk of undertaking, at his own cost, extra work due to quantity changes. Thus if no major unforeseen conditions are encountered and the employer orders no extra work, the cost of the job to the employer will come very near the original sum tendered. The use of bills of quantities has been the normal method of payment in standard forms of contract for many years. This method is particularly effective where the employer wishes to control the design, or has the works largely designed before going out to tender. (Twort & Rees, 2004)

Benator and Thumann (2003) stated that these require sufficient design definition or experience in order to estimate the unit/quantities for the work. Contractors then bid fixed prices for each unit of work. The advantage is that the time and cost risk is shared: the owner will be responsible for the total quantities, and the contractors will have the risk of the fixed unit price. In this form of contract, the contractor is paid based on the amount of work executed, as compared to the prices detailed in the BOQ. This is the most widely used form of contract in Ethiopia for both local and international contracts.

2.4.1.2 Lump sum contracts

According to (Dinku, 2007), in this type of contract, a single lump sum price is quoted for the completion of the specified work to the satisfaction of the employer within certain duration. The contractor offers to do the whole work as shown in drawings and described by specifications, for a total stipulated sum of money.

According to Hendrickson, (2003), in a lump sum contract, the owner has essentially assigned all the risk to the contractor, who in turn can be expected to ask for a higher markup in order to take care of unforeseen contingencies. Beside the fixed lump sum price, other commitments are often made by the contractor in the form of submittals such as a specific schedule, the management reporting system or a quality control program. If the actual cost of the project is underestimated, the underestimated cost will reduce the contractor's profit by that amount.

According to (Joyce, 2003), defines lump sum contract as, a contract where a party undertakes to complete the whole of the work for a stated and fixed amount of money payable by the other. This is so even though it may contain express stipulations permitting adjustment of the contract sum for eventualities such as variations, payment for extended preliminaries, etc. What is important is that at the time of contracting, both parties must have agreed upon a lump sum price to be payable for a defined scope or quantity of work to be undertaken.

According to (Rees, Civil Engineering project management, 4th Edition, 2004), stated that a lump sum price may be best suited to easily defined, relatively simple constructions, involving little below-ground work. Payments under lump sum contracts are usually made in installments as set out in the contract according to stipulated stages of completion, or linked to a program or activity schedule. A disadvantage is that an employer may have to pay a high price for any alteration or addition he wants to the project, because the contractor is only committed to undertaking a fixed amount of work for the fixed payment.

According to Rees, (2004) added that in this type of contract, the contractor is generally free to employ whatever methods and resources it chooses in order to complete the work. The work to be performed must be closely defined. Since the contractor will not carry out any work not contained in the specification without requiring additional payment, a fully developed specification is vitally important. The work has to be performed within a specified period of time, and status/progress can be monitored by the owner to ensure that completion meets the contractual requirements.

2.4.1.3 Cost reimbursement contracts

According to Dinku (2007), cost reimbursable contracts are used in situations that are difficult or impossible for either the owner or the contractor to predict their costs during the negotiation, bid, and award process. The contractor agrees to furnish to the client services and material at actual cost, plus an agreed-upon fee for these services. Actual cost plus a negotiated reimbursement to cover overheads and profit can be done with different methods of reimbursement: Cost plus fixed fee, Cost plus fixed percentage, Cost plus variable percentage and Target cost/estimate.

According to Twort and Rees, (2004), In a reimbursable contract the contractor is usually reimbursed his expenditure monthly on submission of his accounts, which must include evidence of payments made to suppliers of materials, gross wages paid to employees, and hours operated by plant. Where a fixed fee has been agreed for his overheads and profit, this is usually paid in stages as the contract sets out.

2.4.2 Components of Construction Contracts/Contract documents

According to FIDIC 1987 and MoWUD 1994, “contract” means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, Conditions of contract(General and Specific), the Specification, the Drawings, the Schedules, and further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance. In construction contracts, express terms take the following forms:

- The agreement: This is the written details of the project and the agreed sum payable for its completion.
- The conditions of contract: These are the detailed provisions governing the execution and Administration of the project.
- Drawings: This is a document delineating the plan shape of the project as well as its design details.
- Specification or bill of quantities: A document describing the quality of the materials/workmanship as well as the quantity of works required.

2.4.3 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.

2.4.3.1 The employer

The **employer**: The “employer” as defined in the public procurement agency (PPA) condition of contract, is the party who employs the contractor to carry out the works and means “procuring entity”. According to Twort and Rees, (2004) 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.

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."

2.4.3.2 The contractor

According to Twort and 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.'

According to Chappell, Marshall and Cavender, (2001) states that 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.

According to (Nael G. Bunni, 2003) states that 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.

2.4.3.3 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.

According to Twort and 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.

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.’ According to (Hughes, Construction contracts law and management, 3rd edition, 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.

2.4.4 Challenges of Construction Contracts

Provisions provided in the contract well drafted and written may not be a problem on paper. The problem arises when these provisions are set to apply directly which breed conflict of interest among contracting parties. One of the major problems encountered in many cases is the interpretation of construction contract provisions.

The interpretation of contract clauses is the obvious cause of dispute between contracting parties. The interpretation of contracts has its own rules. Art. 1732-1739 of the Civil Code provide interpretation rules. These rules include among other things: interpretation in accordance with good faith and context; positive interpretation; limit of interpretation and general terms.

According to (Horgan, 2005), when two parties have made a reference to the courts for a legal interpretation of a point in their contract, the courts resort to a number of rules by which their decision is determined. Some of the most important of these rules include the following:

- Words are given their ordinary, every-day meaning and not esoteric or abstruse one.
- Odd phrases by traditional usage can be supported.
- Obvious errors or absurdities in a document must be corrected before a judgment is made.
- A special clause, written by the parties, takes preference over a 'standard' model clause with which it is not consistent; it is at least 'thought out'.
- If the meaning of a word is doubtful, it may be assumed to belong to the same class as an associated word in the phrase.

According to (Dessa, 2003), the rules for contract interpretation can be split in to two major divisions: procedural and operational. Procedural rules are the rules within which the court must operate. Operational rules are applied to assist in the interpretation of the facts in the case. Procedural rules establish the objective of interpretation, measures for the admissibility of evidence, controls on what interpretation can be adopted, and standards for evaluating interpretations. The objective of interpretation focuses on determining the intent of the parties and the true meaning of words or phrases in the contract. Operational interpretation rules are primarily those applied to ascertain the meaning of the contract. The "plain meaning rule" establishes the meaning of words or phrases that appear to have on an ambiguous or unclear meaning.

The other function of interpretation control is to incorporate existing law. Generally, the laws where the contract was made will govern the contract. However, in the construction business the performance of the contact is governed by the law where the contracted work is performed.

2.4.5 Conditions of Contract/Forms of Contract

According to (KasiemSeid, 2008) states that in construction contracts, where the obligations and responsibilities of the contracting parties can be extremely complex but to a large extent remain unchanged from one project to another, the Standard Form was developed by the relevant professional institutions in order to help make the contracts fair and equitable. This development was extremely suitable for the tendering system usually adopted in construction contracts as it ensured a common basis for the comparison and evaluation of tenders quoted in Rameezdeen and Rajapakse (2007) noted the perceived benefit of working to standard forms of contract is that they represent a degree of fairness in contracting between the two parties, the conditions having been drafted by experts beforehand and away from the heat of the particular project, with the balanced representation of all relevant industry participants, and representing a fair allocation of risk between the contractor and the employer.

According to Perry (1995) cited in Rameezdeen and Rajapakse (2007), the use of standard forms of contract also helps to manage and mitigate project risks, as risks which may be overlooked under the pressure of tight project deadlines are likely to have been addressed during the multitude of document reviews by industry experts. Such standard forms of contract are intended to reduce the inefficiencies associated with the repeated drafting and reviewing of contracts, and to facilitate a greater sense of partnership between contractors and employers. In theory, cost and time are saved because it should no longer be necessary for parties to carry out a full contractual review on each and every tender (Atkinson, 1992; Murdoch and Hughes, 2000; Rameezdeen and Rajapakse, 2007).

2.4.6 International Contract Forms

In order to streamline the diverse activities in the construction sector there have been a number of attempts to produce a standard form of contract for civil engineering works. These standard forms of contract were initially drawn up by independent professional organizations (Bunni; 1991, 2003, 2005; Glover, 2007). In Europe, and more particularly in the United Kingdom and in Ireland such forms were produced as early as the nineteenth century. A standard form for building contracts was used under the aegis of RIBA, sometime towards the end of the nineteenth century. This led to what became known as the 'RIBA Form', which was published in successive editions between 1909 and 1957. It later developed into what became known as the JCT form (Bunni; 1991, 2003, 2005; Girmay, 2003).

2.4.6.1 ICE Contract Form

In civil engineering contracts, various forms which were used by different employers prior to the Second World War were combined by ICE and the Federation of Civil Engineering Contractors in the United Kingdom into an agreed standard document. This was published in December 1945, and the document was thereafter known as the General Conditions of Contract and Forms of Tender, Agreement and Bond for Use in Connection with Works of Civil Engineering Construction, in short the ICE Form. In January 1950 it was revised and issued with the added agreement of the Association of Consulting Engineers, London. Subsequent revisions followed in March. (Eggleston, 2001; Bunni, 2005).

It is applicable to all civil engineering construction works. It is particularly suitable for general civil engineering work which is predominantly either in the grounds or in, or adjacent to, water,

and caters for the attendant risks and claim situations. These include a wide range of works, such as navigable canals, irrigation schemes, roads, railways, docks, harbors, dams, bridges and tunnels. The seventh edition of the ICE conditions of contract is published in September 1999. Like all previous editions of the ICE conditions of contract, the seventh edition is based on the traditional pattern of Engineer-designed, Contractor-built Works. The conditions create are-measurement' contract, formerly known as 'ad-measurement' or 'measure and value'. This means that the contractor is paid at the contract rates (which may be subject to variation) for the actual quantities of work carried out. The traditional role of the engineer in advising his client, designing the works, supervising construction, certifying payment and deciding matters of dissatisfaction is maintained (Murdoch and Hughes, 2000; Eggleston, 2001).

2.4.6.2 ACE Contract Form

According to (Bunni; 2003, 2005), states that To the credit of those responsible for drafting the ICE Form, many professional institutions all over the world modeled their own conditions of contract on its text, making only minor amendments to accommodate differences in local matters of law and nomenclature. The ICE Form was, however, drawn up mainly for the domestic scene in the United Kingdom. The obvious need for a similar form in the international construction field prompted ACE in the UK, jointly with the Export Group for the Construction Industries in the United Kingdom, and with the approval of the ICE, to prepare a document for use in other parts of the world. It was published in August 1956 and became commonly known as the Overseas (Civil) Conditions of Contract (the ACE Form).

2.4.6.3 FIDIC Contract Forms

The FIDIC organization was founded in 1913 by France, Belgium and Switzerland, now with membership from over 60 countries. The first edition of the Conditions of Contract (International) for Works of Civil Engineering Construction was published in August 1957 having been prepared on behalf of FIDIC and the Fédération Internationale des Bâtiment et des Travaux Publics, FIBTP (the International Federation of Building and Public Works, now known as the International European Construction Federation, FIEC) (Bunni, 2005; Glover, 2007).

Gradually further sponsors were added including the International Federation of Asian and West Pacific Contractors Associations, the Associated General Contractors of America, and the Inter-American Federation of the construction industry (Glover, 2007; Rameezdeen and Rajapakse, 2007).

The Conditions of Contract (International) for Works of Civil Engineering Construction was based on the ACE Form, described above, and was also published in two parts. Perhaps because of its long title, in a very short time it became popularly known as the 'Red Book' as its cover was printed in red. This form of the early FIDIC contracts followed closely the fourth edition of the ICE Conditions of contract (Bunni, 2005; Glover, 2007).

The Second edition of the Red Book was published in 1969, while it was in March 1977 that the Third Edition of the Red Book was published, incorporating some significant changes. The Second and Third Editions of the Red Book proved to be successful in many projects throughout the world. The Third Edition in particular coincided with the major economic growth which took place in developing countries towards the end of the 1970s and the major part of the 1980s and, particularly, in the Middle East and the Far East (Bunni, 2005; Glover, 2007; Rameezdeen and Rajapakse, 2007).

It is intended to provide the user with alternative arrangements in three controversial areas of the Red Book, thus giving him a choice in the method to be used for: settlement of disputes; payment; and preventing delay in certification for the purpose of payments (Bunni, 2005; Glover, 2007).

Although the 1992 Fourth Edition of the Red Book with the 1996 Supplement formed an excellent combination in providing a standard form of contract that answered most of the criticisms at the time, and although its good and bad points were understood by its users, (FIDIC, Conditions of Contract for Construction: For Building and Engineering Works designed by the Employer, 1sted, 1999) decided in 1999 to replace it with a different form rather than introduce a fifth edition that could have simply tackled some of the issues that had developed in the meantime (Bunni; 1991, 2005).

In a way to accommodate developments through time, the different forms of contract within the FIDIC suite are organized around the extent of design and other responsibilities assumed by the Employer and the Contractor. The suite is therefore now aligned with common procurement strategies rather than the nature of the construction works. According to Bunni (2005), Glover (2007) and Rameezdeen and Rajapakse (2007), FIDIC produced a totally new set of standard forms of contract in October 1999 alongside those that were in use at that time to incorporate these dynamic changes. The new set comprises the following four suites of contract forms:

- **The Construction Contract** (Conditions of Contract for Building and Engineering Works, Designed by the Employer) – General Conditions, Guidance for the Preparation of the Particular Conditions, Forms of Tender, Contract Agreement, and Dispute Adjudication Agreement, ‘FIDIC 1999 Red Book’;
- **The Plant and Design-Build Contract** (Conditions of Contract for Electrical and Mechanical Plant, and for Building and Engineering Works, Designed by the Contractor) – General Conditions, Guidance for the Preparation of the Particular Conditions, Forms of Tender, Contract Agreement and Dispute Adjudication Agreement, ‘FIDIC 1999 Yellow Book’;
- **The EPC and Turnkey Contract** (Conditions of Contract for EPC Turnkey Projects) – General Conditions, Guidance for the Preparation of the Particular Conditions, Forms of Tender, Contract Agreement and Dispute Adjudication Agreement, ‘FIDIC 1999 Silver Book’; and
- **The Short Form of Contract** – Agreement, General Conditions, Rules for Adjudication and Notes for Guidance, ‘FIDIC 1999 Green Book’.

Where works are predominantly designed by the Employer, then the Red Book is the appropriate form of contract. Where works are predominantly designed by the Contractor the Yellow Book is appropriate regardless of whether the works were heavy civil or electrical and mechanical plant. The Silver Book is clearly intended for use on Turnkey projects.

Amendments to the standard published FIDIC contracts are incorporated by the inclusion of Particular Conditions and guidance on how to prepare the Particular Conditions is published by FIDIC. Where Particular Conditions are incorporated into the contract care must be taken to ensure that no ambiguity is created, either with the General Conditions or between the clauses in the Particular Conditions.

2.4.6.4 NEC Contract Forms

The NEC was developed by the ICE in 1991 with the aim of introducing a non-adversarial form of contract strategy, which would contribute towards an effective and smoother management of projects. The NEC originated under this name in 1991 and changed to its current name, the Engineering and Construction Contract (ECC) with the publication of the second edition in 1995. According to Murdoch and Hughes (2000) and Gerrard (2005) the most popular form of the NEC contract used is the NEC ECC, which is the contract between the Employer and Contractor.

The ECC has been developed to meet the current and future needs for a form of contract to be used in all types of construction, which improves upon the existing standard contracts in a number of ways. As a result, this new style of contract is developed to meet the following three key objectives: clarity and simplicity; flexibility of use; and stimulus to good management.

Eggleston (1996) quoted in Rameezdeen and Rajapakse (2007) and Gerrard (2005), believe that the ECC has much more recent origins and probably reflects more closely current procurement routes and needs. The contract is not only for civil engineering construction, but is intended to be used for any construction work. There is a range of payment options within the contract, which deal with the level of physical uncertainty often found in many construction projects. Since the original launch of the main engineering and construction contract and subcontract, the NEC has been extended to include a professional services contract (NEC PSC), an adjudicator's contract and a short contract (NEC ECSC). All contracts under NEC are revised and launched as 'NEC3' in June 2005.

Partnering in construction contracting started getting earnest attention in the UK through the Latham report "Constructing the Team" of 1994. This report also recommended the use of NEC which was released that same year, and proposed improvements to it. This gave rise to more research into partnering in construction on the one hand, and the updated NEC 2nd edition (1995) on the other.

According to (Bauwmans, 2009), states that the characteristics of NEC support the principles of long term strategic partnering that would herald a new beginning in construction contracting. NEC is also a more flexible form of contract and is suitable for international use through its many combinations of options and "Contract Data" that allow customization of the document for engineering and construction related projects in all industries, across most legislatures around the globe.

2.4.7 Local Conditions of Contract

Standard forms of contract developed for construction activities have mostly been drawn up by independent professional organizations, rather than by one of the parties to the contract, in order to establish or to consolidate a fair and just contract as cited above. However, there are cases where financial institutions, commercial organizations and public agencies issue standard forms of contract suitable for their own terms.

For instance, the World Bank and other financing institutions used to have their own standard forms until they issued the MDB harmonized standard forms jointly with FIDIC in 2006.

The evolution of conditions of contract in Ethiopia dates back to 1959. The first ever conditions of contract prepared by MoUDH in July 1959 was entitled ‘General conditions of Construction Contracts’. The Standard Conditions of Contract for Construction of Civil Works Projects was endorsed by BaTCoDA in December 1987 after three decades since the first one comes into effect. The Standard Conditions of Contract for Construction of Civil Works Projects by MoWUD enacted in December 1994. There was another condition of contract with a title ‘General conditions of Contract and Tender Procedure document’ drafted by MoWUD in 1995 which was not put into effect. The PPA General Conditions of Contract for the procurement of works is the recent contract form issued in January 2006 as part of SDB for international and national competitive bidding.

According to (AberaBekele, 2005) In Ethiopia the condition of contract used are fair to both parties if properly administered. In fact some irregularities happen sometimes due to human factor, which is common all over the world. Significant changes have been taken place in developing and using contract conditions. For instance, standard conditions of contract of MoWUD in 1994 have been in use for more than a decade until it is replaced in 2006 by the PPA conditions of contract.

The choice of contract condition depends on owner and international agencies involved in the work. FIDIC is widely used in construction works funded by international agencies more significantly for public projects such as roads and hydroelectric power. MoWUD 1994 is mostly employed for domestic building projects especially sponsored by private owners. PPA 2006 is employed for public building projects as the provisions fairly satisfy for the nature of building works compared to large infrastructure projects. The problem in most cases is not contracting document but the understanding and interpretation, which require trained personnel in contract administration. Domestic contract forms published by different public agencies in time are discussed below.

2.4.7.1 MoUDH 1959 Contract Form

Historical back ground of standard conditions in Ethiopia tells us the first standard conditions was published by MoUDH in 1959 with a title “General Conditions of Construction Contract”. The contract form has 54 clauses which tried to fill the gap in the country as the major players of the construction industry were foreigners as discussed in sub heading 2.3.1 under the genesis of the local construction industry. Some of reflections in this contract form are dealt herein under.

The (MoUDH, 1959) contract form expressly states in clause 1(c) as the Employer is the Government through the Ministry of Public Works represented by the Contracting Officer. According to this contract form the contracting officer representing the employer also bears the duty of the Engineer which is a dual and mixed responsibility.

According to clause 1(h) Substantial Completion is best described under this contract form in a better way (at least in a quantified amount) than subsequent editions of local contract forms. It is cited as 98% completion of the works where the latter forms fail to set a threshold. Girmay (2003) also suggested the need to address substantial completion in FIDIC contract forms to clear its varying interpretation among the industry professionals currently.

The contract form allows modifying the contract in writing based on changes and changed conditions stated in clauses 3 and 4. This may result in the change of scope in the contract while varying it may trigger claims which may end up in disputes. Instead of modifying the contract itself the later contract forms entertain these changes in using additional cost and time extension clauses.

2.4.7.2 BaTCoDA 1987 Contract Form

According to (BaTCoDA, 1987) states that issued the second version of local contract form “Standard Conditions of Contract for Construction of Civil Work Projects” in December 1987. It has 74 clauses and forms of Agreement, Performance Bond and Bank guarantee for Advance Payment. This contract form is much similar to the FIDIC 1987 4th edition Red Book except some slight modifications to suit the domestic practices. For instance, those clauses entitle the contractor additional payment and time extension are modified omitting the payment component and allowing extension of time only which is not fair from the balance of risk point of view.

2.4.7.3 MoWUD 1994 Contract Form

According to (MoWUD, 1994) issue in December 1994 the third generation of local contract forms, “Standard Conditions of Contract for Construction of Civil Work Projects”. It has 75 clauses and forms of Agreement and Performance Bond. It is almost a reprint of the preceding BaTCoDA 1987 contract form, with two major changes regarding Advance Payment and Price Escalation which are deleted from this contract form. Another major addition to this contract form which was not addressed in the BaTCoDA 1987 contract form is the provision of Warranty in respect of the defects of construction (Clause 71).

According to experts of MoWUD, the omission of advance payment in this contract form is attributed to misuse in siphoning the advance payment other than the specific work it is meant for by contractors which is resulted from government change at the time. MoWUD assumed that the market is stabilized at the time to disregard price escalation from the contract form; however, it used to amend and ratifies price rise/falls from time to time to address adjustments attributed to price escalation. However, these provisions were later put in to effect through ‘Construction Conditions Amendment 001/1996 E.C’ by MoI in March 2004. The directive comprises nine amendment clauses where provisions on advance payment and price escalation are dealt with among others.

2.4.7.4 PPA 2006 Contract Form

The latest contract form put in place is released by PPA in January 2006. PPA issued two sets of SBD for the Procurement of Works for NCB and ICB. The General Conditions of Contract is covered under section 7 which has 62 clauses with five parts: general, time control, quality control, cost control, and finishing the contract. This contract form is similar to the World Bank short contract forms which is unsuitable for large and complex projects. The contract form has no provision in respect of suspension which is one of the remedial rights of the parties in a contract. According to (PPA, 2006) states that conditions of contract is the first ever undertaking done by the Ethiopian government to systematically regulate the construction industry. The issuing authority is a special public institution legally (first by Pro. No. 430/2005(known as PPA) and later on by Proc. No. 649/2009 (now known as, Public Property Procurement and Administration Agency (PPPAA)) established for this purpose. Proc. No 430/2005 has been now repealed after the enactment of the latter proclamation.

The PPA 2006 conditions of contract have also been issued not only for works but also for consultancy services, for goods and for non-consultancy services. Unlike the MoWUD 1994 conditions of contract, the PPA 2006 conditions of contract for works are also accompanied by other supportive documents including User’s Guide. These are important developments in the history of local conditions of contract.

Employers may also use FIDIC conditions where the local standard conditions of contract are not suited to the procurement route and where there is a need to avoid the risks and expense of preparing a bespoke contract. The PPA 2006 user’s guide expressly states the SBD (ICB) for the procurement of works is not suitable for the following situations:

- Complex works under US\$10 million, such as large water treatment plants;
- Works over US\$10 million;
- Works designed by the contractor, including turnkey contracts.

2.4.8 Price Adjustment

Price escalation is not mentioned in MoUDH 1959 contract form. In case of BaTCoDA 1987, Price escalation is entertained. The only adjustments to be allowed are on the difference between the basic prices and market prices of the materials and goods listed in the appendix to the bill of quantities after the bid pricing date. These provisions try to address the inconsistency of the market prices and are relatively better (Sub-clause 70-1(e, f)).

MoWUD 1994 conditions assume the market to be a stable one. In the absence of such an adjustment, contractors are obliged to cover the incurred extra expenses offsetting the balance from their profit margin. These conditions do not explicitly address an increase or decrease in cost of labor or materials with respect to the country's market but rather dealt with only increase or decrease of rates of wages and other emoluments and expenses subsequent to change in legislation. Most local contractors have been discouraged because of this wrong assumption. According to the amendment (2004) the price adjustment is based on correctly recorded price rise/falls against the basic material price indices stated in the contract i.e. appendix to the BOQ. PPA 2006 allows price escalation adjustments through the provision of price adjustment formula using price indices (clause 47). However, since there is no any established local price indices, the contracts use foreign indices for imported goods and materials.

2.4.9 Termination

According to MoUDH 1959, the Government may terminate the contract on the following grounds: if the contractor fails to execute the work or any separable part thereof (clause 5(a)); if the contractor fails to replace rejected materials and/or the correction of defective workmanship (clause 10(a)); and if the Government finds wages paid to laborers and mechanic working directly on site employed by the prime contractor or sub-contractor are below the wages agreed by the contract (clause 39(b)). However, this contract form failed to cite the grounds on which the contractor may terminate the works. Sub-clause 63.1 of BaTCoDA 1987 and MoWUD 1994 state the right of the employer to expel the contractor after giving fourteen days' notice on account of default. On the other hand sub-clause 69.1(d) of BaTCoDA 1987 and MoWUD 1994 provide the contractor to terminate the contract on the employer's default after giving thirty days' notice.

Termination provisions are given under clause 59 of PPA 2006 for both parties on account of fundamental breach of contract. Reasons which qualify as a default by one of the contracting parties are listed under sub-clause 59.2. In addition the Employer is enshrined a right to terminate the contract for convenience according to sub-clause 59.3.

2.4.10 Claim Procedures and Dispute Resolution

All domestic contract forms considered for comparison do not have clearly defined claim procedures unlike clause 53 of (FIDIC, Conditions of Contract for Works of Civil Engineering Construction, 4th ed, 1987). The provision with regard to dispute resolution in MoUDH 1959 state the decision of the Ministry of Public Works or his duly authorized representative is final and conclusive, unless determined by a court of competent jurisdiction to have been fraudulent or capricious or arbitrary or so grossly erroneous as necessarily to imply bad faith or not supported by substantial evidence (clause 51(a)).

MoWUD 1994 requires the Engineer to have the specific approval of MoWUD for the execution of his duties in connection with:- Sub-clause 2-1(d) Variations exceeding 10% under clause 52(3); Sub-clause 2-1 (I) Time Extension under clause 44 where the cumulative Time Extension granted under the clause 44 exceeds 25% of the Contract Time. It is evident that the clause numbers and wording are similar to BaTCoDA 1987 except their difference in percentage limits.

Clause 67 of BaTCoDA 1987 state, if the decision of the Engineer is not final and referred to BaTCoDA, the decision given by BaTCoDA or his representative is final and binding. Likewise, MoWUD 1994 expressly state under clause 67 that the decision by MoWUD or his representative is final and binding, which contravenes the fundamental right of a claimant to appeal against the decision. On the other hand, clause 25 of PPA 2006 provides a better platform compared to its previous contract forms in allowing adjudication and arbitration as a means of dispute resolution.

2.5 Research Gap

A wide variety of empirical studies have been undertaken and different thesis paper have been used to assess condition of contract problems mainly focusing on all construction project in general especially within Addis Ababa which are building construction Projects. This research therefore (filling the gap) focuses on a study of condition of contract problems in Addis Ababa building construction project. This will contribute to the understanding of existing practice of construction management, suitability of available condition of contract identifying unclear and ambiguous articles and also suggest measures on how to regulate the problem under study.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 Introduction

This thesis part mainly focused on the Research Design, Method of Data Collection, questionnaires, interview, Methods of sampling size and techniques and Data Analysis method.

3.2 Research Design

According to KOTHARI, (1990), research design is needed because it facilitates the smooth sailing of the various research operations, thereby making research as efficient as possible yielding maximal information with minimal expenditure of effort, time and money.

The research started as two staged study. Problem identification has been done through a preliminary unstructured literature review and informal discussion with colleagues and professionals in the sector. As an output of this initial phase Assessment of conditions of contract problems in Ethiopian construction industry was identified as a proposed problem to be studied where research questions were developed in lieu of investigating this problem.

There are several research designs in use based on the nature and type of the research being done. In this study, Descriptive design with and quantitative approach was used in order to ascertain and be able to describe the characteristics of variables of interest in situation. The main strategy followed is to formulate research design. Then after data and information sources was obtained up on the formulated research design. Based on the data and information sources, the research instruments were decided.

Thus, the required data was collected and analyzed. Finally, available primary and secondary sources of data from local and international reviewed journal for cross-checking the validity and conformity of the information obtained through the overall research work. It was try to collect data from Employers, consultants, contractors and senior Ethiopian engineers working in international financiers such as the World Bank and ADB regional offices in Addis Ababa.

3.3 Methods of sampling size and techniques

3.3.1 Study Population

Building construction projects was selected for the study of which Addis Ababa was used in carrying out the research. The total population of sample selected for this thesis paper were Employers, consultants, and building contractors in Addis Ababa.

3.3.2 Sampling size

Total population of sample selected for this thesis paper was 55 sample size. In other words, for this thesis study was used 55 population of the sample size of respondents. Out of the 55 questionnaires: 18 was prepare for Employers, 20 for consultants, 17 for building contractors in Addis Ababa.

3.3.3 Sampling techniques

Convenience sampling technique was used for selecting total population. Quota sampling technique (convenience sampling technique) was used by selecting particular parameters to make it sure that the parameters have certain characteristics as applied for this study. The survey was include convenience selected organizations from the cluster category where the questionnaire was distributed to professionals directly involved in contract administration.

3.4 Method of Data Collection

Nurul (2000) and Brukley et al. (1976) both quoted in Tadesse (2009) grouped the methodology of data collections under four headings, namely opinion research, empirical research, archival research and analytical research. The data collection approach adopted for conducting this research includes both primary and secondary sources. Questionnaire, interview and desk study provide the primary data for this thesis while the secondary data sources include renowned civil engineering journals those especially in project and construction management, internet sources, as well as reviewing related archival documents (such as termination issues) on contractual issues of various construction works. These different methods of data collection have been used in order that the data or information obtained from one can be supplemented by the others whereby the collected data will give multiple evidences.

3.4.1 Questionnaire survey

Questionnaire provides firsthand information for the subject matter of a research as it is focused on issues which further serves as a survey to understand the main concerns and attitudes of respondents towards the problems (Kasiem, 2008). In this thesis, questionnaire were administered to some randomly selected stakeholders of the construction industry such as public employers, domestic contractors, and domestic consultants. For the questionnaire survey respondents were randomly selected from employer's organization, contractors and consultants who have been involved in the domestic construction sector. The questionnaire which consists of both open and close ended question were distributed among these professionals.

3.4.2 Interview

Interview is one of the primary data collection methods which is flexible and adaptive way of investigating underlying motives of a subject in a way that self-administered questionnaires cannot. The interview undertaken for this thesis was based on semi structured style. This type of interview has a predetermined set of questions (generalized form of questionnaire) with a flexible order depending on what the interviewer perceives the subject matter by looking at the respondent capability and exposure or experience. The interview for this thesis was made with seven reputed professionals of the sector. From these interviewed professionals, three of them are from contractor side, the three others are from consultant sides and the remaining one is a construction lawyer well versed with conditions of contract to cover the legal aspect of contract forms.

3.4.3 Desk Study

Desk studies on termination were used in this research to support or supplement responses and arguments found by questionnaire and interview through in-depth analysis of some cases of a project. Of course, as the nature of the cases focuses on one aspect of a problem or practice, the conclusion drawn may not be generalized, but rather related to one particular event (Naoum (1998) cited in Kasiem (2008)). For this reason, desk studies under this research are used to supplement the findings obtained through questionnaire and interview in a way to bridge the gulf, hence termination cases of two road projects and one building project is covered.

3.4.4 Secondary Data collection

Besides to different books, journals and internet sources, archival document, and correspondences have been reviewed to understand the background of contract provisions, problems and practices in the construction sector. These secondary sources provide a general understanding of the subject area by presenting a wide range of ideas in the field which help to supplement other specific information obtained from the primary data sources.

3.5 Method of Data Analysis

In this research both descriptive and quantitative method was used for analysis of data collected from various sources. For summarizing of the collected data and to determine the number of responses belonging to each category, frequency tables by SPSS 22 have been used together with Excel frequency analysis for a cross check for the reliability of analysis output. In addition, SPSS 17 was also used to investigate the level of association (agreement) in response among any pairs of respondent groups by cross-tabulation of their responses.

CHAPTER FOUR

4. RESULTS AND DISCUSSIONS

4.1 Introduction

In the construction industry, trade usages and standard forms of contracts are pervasively in use. Their use saves time and energy. The contracting parties can also avoid complications in drafting the contracts as it naturally consists of various bulky documents and multiple contracting parties. These standard forms of contracts are drawn up by professional organizations, financial organizations, and governmental organizations.

Standard Forms (Conditions) of Contract are issued by certain private or public organizations so as to follow them in similar contractual relationships. The Standard Forms of contracts are may not be relied upon as evidence of custom; subject to frequent revision, and open to severe criticism on grounds of policy and obscurity. Standard forms of contract developed for construction activities however, have mostly been drawn up by independent professional organizations, rather than by one or other of the parties to the contract, in order to establish or to consolidate a fair and just contract. Standard-form contracts are a common feature of commercial relationships, where they offer both advantages and disadvantages. The primary advantage is a reduction of transaction costs, because the parties need not negotiate a new contract for each transaction. Standard contracts can also provide greater certainty regarding the meaning of contractual terms and a reduction in agency costs. Despite these benefits, courts and especially commentators also express concerns regarding standard contracts.

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 Response rate and Characteristics of Respondents

4.2.1 Questionnaire Response rate

The study has focused on the major construction stakeholders participating in the local construction industry. Organizations were selected on a cluster basis on their category i.e. Consulting firms of category III and above; domestic contractors who are of class II and above where their list is obtained from MoUDC a public regulatory body in charge of registering and licensing construction companies and consulting firms; and major public employers such as private owners. Out of the distributed 55 questionnaire, 45 (81.82%) completed questionnaires were returned and used for this study

Table - 4. 1 Questionnaire survey response rates

Respondents Category	Questionnaires survey		
	Distributed	Returned	Percentages
Employers	18	14	77.78%
Consultants	17	15	88.23%
Contractors	20	16	80%
Total	55	45	81.82%

As depicted in the above table, the fifty five questionnaires distributed forty five responses were received, consisting of 31.11% from the employers, 33.33% from consultants, and 35.36% from the contractors. The overall response rate was 81.82% as shown in the above table.

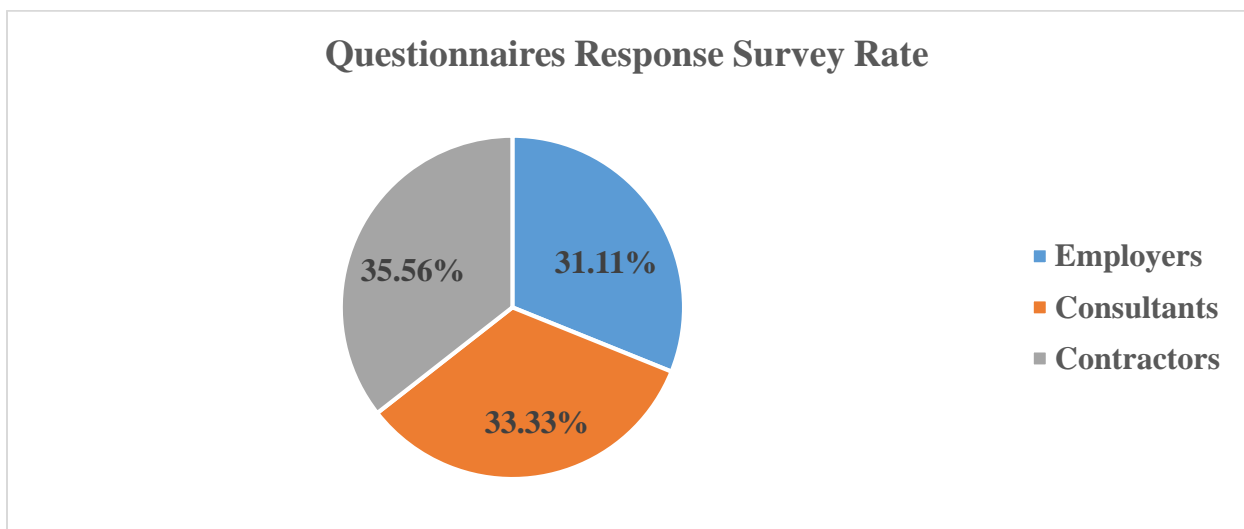


Figure - 4. 1 Returned questionnaire response

The assessment of the general background information of respondents and their organizations were summarized in the following tables.

Table - 4. 2 General Background information of respondents and their organizations

Establishment (yrs.)	Employers	Consultants	Contractors	Percentages
<5	5	4	5	31.11%
5-10	6	7	8	46.67%
>10	3	5	2	22.22%
Total	45			100%
Experience (yrs.) as construction projects and contract administration	Employers	Consultants	Contractors	Percentages
<5	9	6	5	44.44%
5-10	5	5	8	40%
>10	2	3	2	15.56%
Total	45			100%

As it can be observed in the above table, on average, 31.11% of the employers, consultants and contractors together contributed on Organization's Experience and year of establishment less than five years. On average, 40% of the employers, consultants and contractors together contributed on Organization's Experience and year of establishment within five to ten years. 15.56% of the three stakeholders together contributed on Organization's Experience for more than ten years.

Even though the majority of Employers organization have more than 20 years of establishment, a higher percentage (20%) of professionals directly involved in contract management have less than five years of experience compared to contractors (13.33%) and consulting (11.11%) firms. However, 55.56 % of professionals over all have more than five years' experience in contract administration and construction supervision.

The research questions on problems of conditions of contract in Ethiopian construction industry raised in the thesis were investigated through questionnaire survey supported by interview and desk study and analyzed as appropriate. From the result obtained and researcher's perception: construction management practices in Ethiopia; suitability of available local conditions of contract; conformity of some clauses with Ethiopian law; contribution of conditions of contract for

construction management profession; and interaction of construction industry and academic institution in the local context are discussed below.

4.3 The practices of construction management and contract administration in Ethiopia

In addition, the performance of the domestic construction sector can be weighed in terms of satisfaction as a base parameter. It is apparent that both the employer and contractor are not satisfied. The employer complains mostly on cost increments, delays and low quality issues, contractor competency problem. On the other hand, the contractor complains on regulatory environment, market environment (supply chain), untimely responses from the employer and consultant, late payment, additional costs etc. The paradox here is too much resource especially cost is spent mostly for reworks to rectify quality problems associated with the dissatisfaction of both parties. Domestic contractors further complain with the different method of treatment.

4.3.1 The practices of construction management in Ethiopia

However, it can be seen from the famous cost, time and quality parameters point of view. It is a common understanding that the domestic construction sector is characterized by excessive cost overrun, time slippage (delay) and quality problems. Many reasons can be listed as contributing factors for such poor performances such as: lack of competent professionals, weak construction and consulting firms, lack of state of the art practices, shortage of materials and equipment and absence of adequate hire lease companies.

Table - 4. 3 respondent’s response of performance of the Ethiopian construction industry

Performance of construction industry	Respondents			
	Employers	Consultants	Contractors	Percentages
Very Good	1	2	3	13.33%
Good	8	10	12	66.67%
Bad	4	2	1	15.56%
Very bad	1	1	-	4.44%
Total	45			100%

As can be depicted in the above table, the majority of employers, consultants and contractors together with 66.67%, respectively, believe performance of the domestic construction industry were good. Surprisingly, about on average, 15.56% the performance of the domestic construction industry were bad as to employers, consultants and contractors responses, respectively.

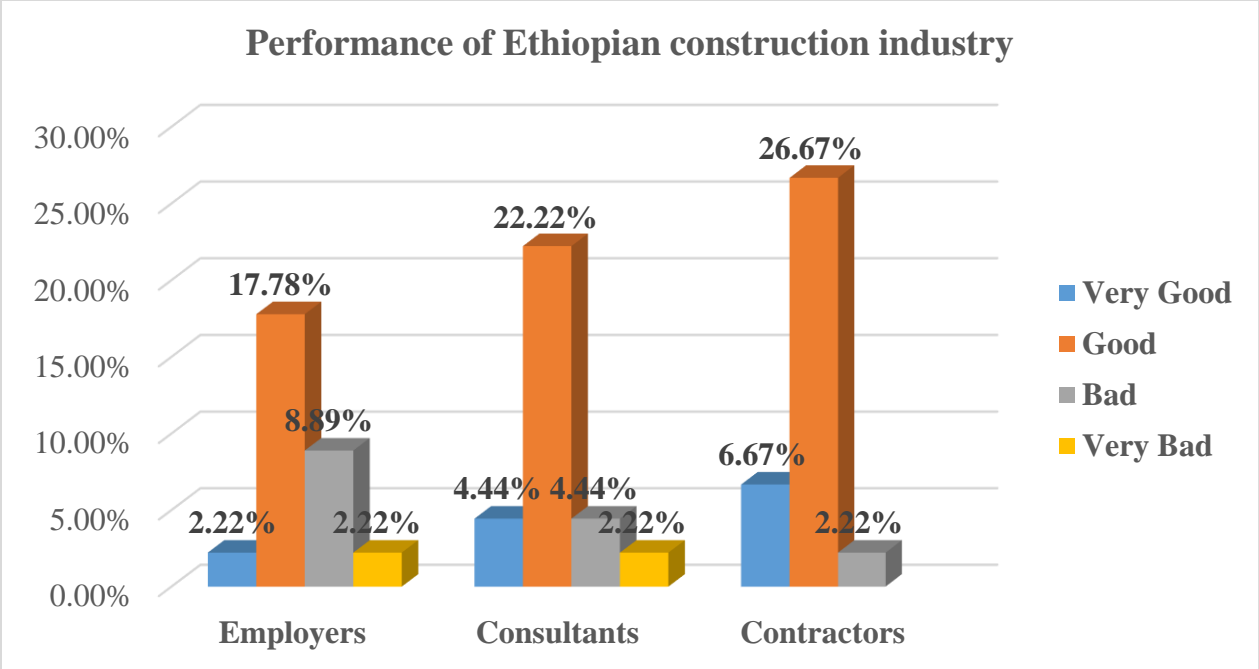


Figure - 4. 2 respondent’s response of performance of the Ethiopian construction industry

The major factor contribute for poor competences were forwarded for respondents as possible reasons for the domestic construction sector. The majority of respondents (37.78% Employers, 33.33% consultants and 28.89% contractors) believe that the scarcity of resources including capital, material and equipment as a major contributing factors. Lack of competent and experienced professionals in the field is considered a second factor by respondents (35.56% Employers, 33.33% consultants and 31.11% contractors). Inappropriate and malpractices in the industry (fraud, corruption etc.) is also revealed by considerable respondents (40% Employers, 33.33% consultants and 26.67% contractors) behind the reason for the bad performance. Even though there are regulations to guide the domestic construction sector, absence of clear policy and regulations to properly guide the industry is critical compared to the above two reasons. However, only few respondents (33.33% Employers, 37.78% consultants and 28.89% contractors) consider it as a possible reason.

The majority of professionals interviewed agree on the associated problems that hinder the performance of local construction sector such as: continuous price escalation of materials, labor and equipment which is shared by one respondent from employers. All interviewee and one respondent from contractors suggest problems attributed to the prevailing major stakeholders’ adversarial relation and mistrust also contribute a great deal to the bad performance.

As a profession, construction management is at its infant stage in Ethiopia. Proper administration of construction contracts is vital to optimize cost, time and quality of a construction project. Competencies include all the related knowledge, skills, abilities, and attributes that form a person’s job. Performance management and performance assessment can help government agencies develop a continuous system of improvement. Consistent performance measures can help reveal when a program or service is not being delivered properly or effectively, which can result in insufficient services to the public.

Table -4. 4 respondent’s response of Evaluation of construction management practice in Ethiopia

Evaluation of construction management practice	Respondents			
	Employers	Consultants	Contractors	Percentages
Competent	1	2	1	8.89%
Fairly Competent	2	3	4	20%
Incompetent	7	10	15	71.11%
Total	45			100%

As can be shown in the above table, the majority respondents respond they rate that the construction management practices were incompetent, on average 71.11%, the three stakeholders that is employers, consultants and contractors together responds in order to achieve the desired goals of cost, time and quality parameters.

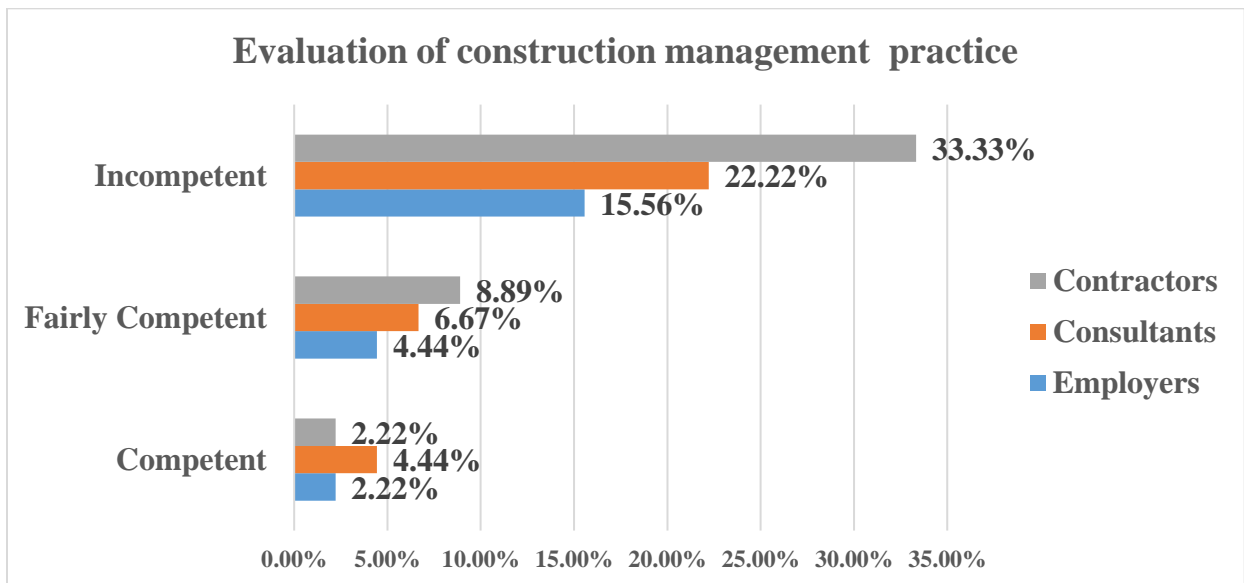


Figure - 4. 3 respondent’s response of Evaluation of construction management practice in Ethiopia

All interviewee professionals are in agreement as the profession is fairly competent owing to its infant stage of perceptions in the field.

The majority of contractor and consultant respondents were, on average, 40% contractor, and 33.33% consultant, respectively and 26.67% of employers stressed lack of professional, technical and managerial skill was the main reason for the incompetence of construction management practices. Limited professionals/firms for too many construction projects and negligence to provide the service as per the specified conditions are also equally agreed by respondents (43% contractors, 36% consultants and 31% Employers) for the incompetency of such practices. It has to be noted that all interviewee also acknowledge these factors that hinder the profession.

Some contractor respondent suggested that lack of adequate resource, long chain for decisions on matters and design revision as a major drawback of the profession. On the other hand, some consultant respondents stressed that lack of staged career development; lack of qualitative educational requirements; low budget allocated for the service; and theoretical knowledge of professionals whereby they do not have hands-on experience in most cases as the root cause for incompatibility of construction management to meet acceptable standard at the international level.

4.3.2 The Local Contract Administration Practices in Ethiopia

According to (Hughes, 2000) has pointed out that, Contract Administration is the maintenance and oversight of a project to ensure that all provisions of the contract are met. Contract Administrator fulfills two very different roles. First, there are those duties which are carried out as agent of the employer. Second, there are certain decision making functions (such as the certification of work properly carried out) in which the contract administrator is required to act fairly between the parties and exercise independent judgment.

Table - 4. 5 respondent's response of contract administration meet the acceptable standard

contract administration meet the acceptable standard	Respondents			
	Employers	Consultants	Contractors	Percentages
Strongly Agree	1	1	-	4.44%
Agree	1	2	1	8.89%
Disagree	8	11	15	75.56%
Strongly Disagree	1	2	2	11.11%
Total	45			100%

As shown in the above table, the majority respondent of employers, contractors and consultants together respond on average, 75.56%, showed their disagreement to the point that ‘local contract administration meets the acceptable standard.

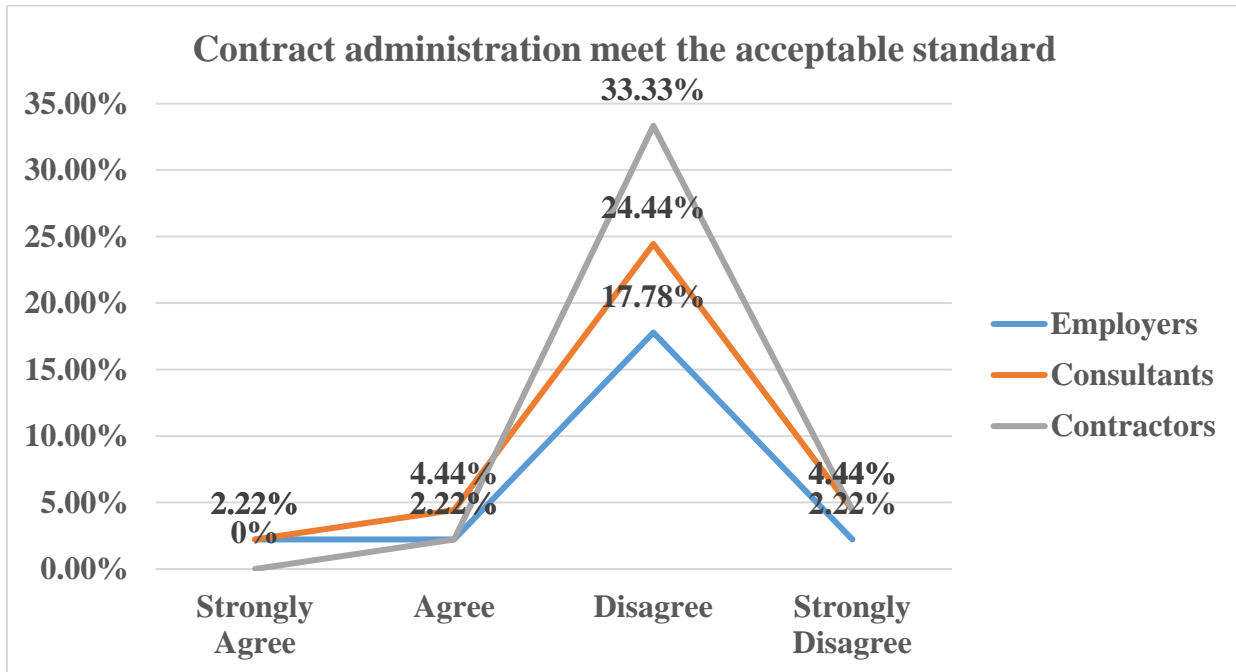


Figure - 4. 4 contract administration meet the acceptable standard

Some reasons were indicated from the hypothesized factors forwarded for respondents. Accordingly, problems attributed to the contractor are agreed by the majority of contractors (67%), 38% and 29% of employers and consultants respectively. According to all interviewee professionals, contractors do not even look in to contract documents let alone to understand them except the BOQ. Besides, the bidding documents offered by contractors are done by par timer professionals who are not available to execute the works accordingly once the contractor is awarded the contract. This situation is showed to have been also a problem of consultants. Half of contractors, with 36% consultants and 31% employers feel the problem of contract administration is attributed to the employer and consultants. Lack of timely response for contractors request, lack of execution within the contract provisions, too much influence on contractors etc. among other things were singled out by the majority of interviewee. Few respondents (21% consultants, 17% contractors and 8% Employers) believe the contract itself and the contract forms used are also hindering contract administration practices locally. All the three consultants and one contractor interviewee believe contract documents are not clear. In addition, mostly designs are incomplete which calls for latter design revision and changes.

4.3.3 Conditions of Contract used in the Domestic Construction Industry

A contract is a promise or multiple promises, normally between two or more people or organizations, called “contracting parties,” agreeing to undertake certain legally enforceable duties or obligations in exchange for certain legally enforceable rights or entitlements. Contract of public works is defined as “A contract of public works is a contract where by a person, the contractor, binds himself in favor of an administrative authority to construct, maintain or repair a public work in consideration of a price. A construction contract is an agreement between two parties which they intend it to be legally binding with respect to the obligations of each party to the other and their liabilities. The contract thus binds the contractor to construct the works as defined, and the employer to pay for them in the manner and timing set out.

When it comes to the local contract forms, the majority of respondents of the consultants and contractors (64% and 58% respectively) and 46% of employers use MoWUD 1994. PPA 2006 is used by the vast majority of contractors (92%) and few consultants and employers (21% and 15% respectively). The result showed that the use of MoWUD 1994 is limited to private employers in recent years due to the introduction of PPA contract form in 2006. The limited use of FIDIC contract forms by domestic contractors depicts their limited capacity to take part and compete in international projects undertaken by the government. However, 92% usage of PPA 2006 contract form by contractors also proves that the government is still the major source of construction works. Besides, one consultant respondent suggested in consideration of exaggerated shortfalls of local contract forms, indicating to look into introducing tripartite responsibility for construction contracts.

According to the survey result, 69% of employers, around a third portion of consultants and contractors (36% and 33% respectively) use FIDIC 1987 (4th edition). The same percentage of employers and few contractors and consultants (17% and 14% respectively) use FIDIC 2006 MDB harmonized edition. FIDIC 1999 a.k.a 20 clauses is employed by 38%, 29% and 8% of employers, consultants and contractors respectively. The highest preference of employers towards FIDIC 1987 is its wide acceptance worldwide. FIDIC 2006 MDB harmonized edition is used especially in public projects mainly compared to FIDIC 1999 as many international donors, financial institutions and banks have ratified jointly to use it for projects financed by them contrary to their previous stringent requirements to use their individual guidelines and conditions of contract.

Table - 4. 6 respondent's response of level of awareness of parties to use contract forms

contract administration meet the acceptable standard	Respondents			
	Employers	Consultants	Contractors	Percentages
Very Good	1	1	-	4.44%
Good	1	2	1	8.89%
Fair	8	11	15	75.56%
Poor	1	2	2	11.11%
Total	45			100%

The employers' level of awareness and understanding of using contract forms is rated as very good by 23% of employer and 15% of consultants. Besides, it is rated good by 54% employers, 21% consultants and 42% contractors. It is rated fair by 15%, 43% and 42% of employers, consultants and contractors respectively. However, 8%, 21% and 16% of employers, consultants and contractors respectively believe the employers' understanding to use contract forms is poor.

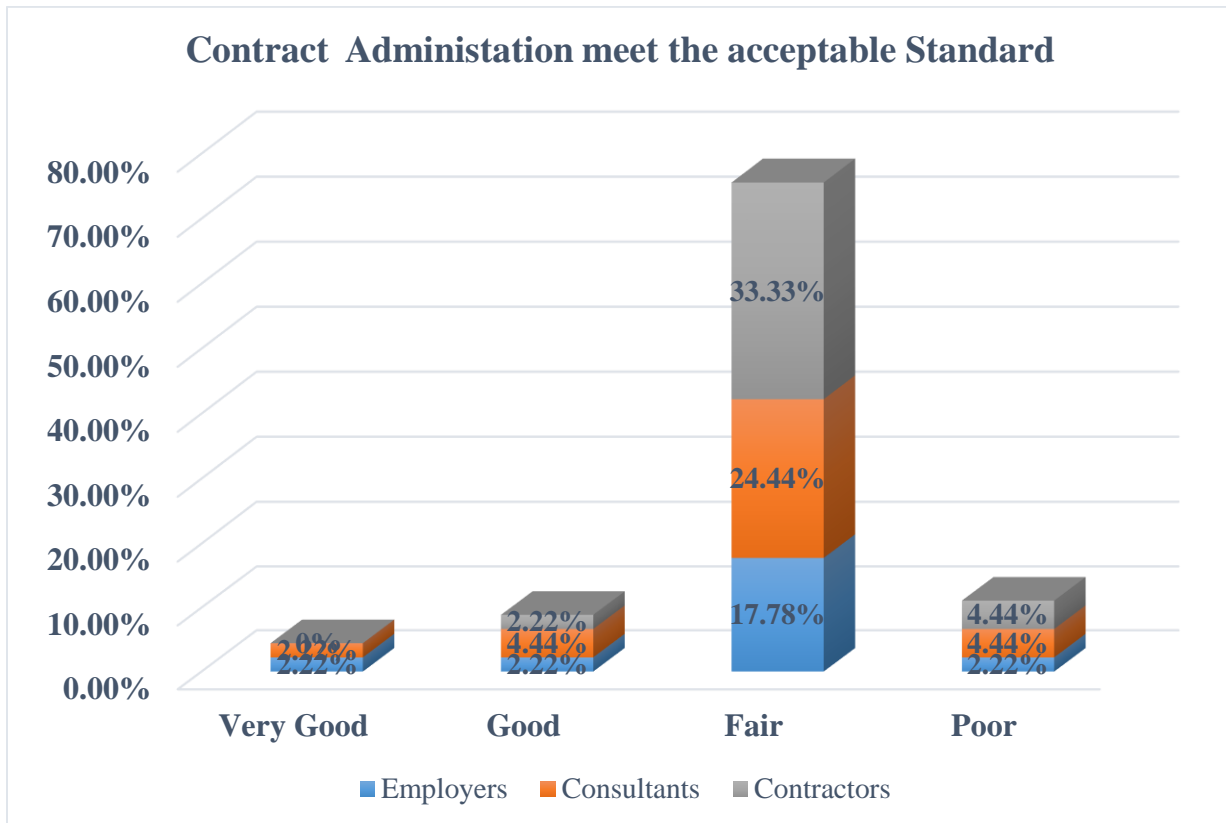


Figure - 4. 5 respondent's response of level of awareness of parties to use contract forms

4.4 Suitability of Available Local Conditions of Contract in the building projects

The Contract Documents consist of the Agreement between Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, addenda issued prior to execution of the Contract, advertisement or invitation to bid, Instructions to Bidders, other documents listed in the Agreement and Modifications issued after execution of the Contract. In the event of conflicts among the contract documents, the Specifications shall take precedence over the Drawings, and the Supplementary Conditions shall take precedence over the General Conditions. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Owner and a Subcontractor or Sub-subcontractor.

As described in the analysis part of this thesis, domestic contract forms have been used in various degrees. The current available and applicable local contract forms in use are MoWUD 1994 and PPA 2006.

4.4.1. The 1994 MoWUD Standard Conditions of Contract

This Standard Conditions of Contract for Construction of Civil Work Projects was authored by the Ministry of Works and Urban Development (MoWUD) in May 1994. It is being widely put in use in government construction contracts both at the federal and state levels.

Even though adopted mainly from FIDIC 1987, MoWUD 1994 is believed by many as one sided meant for helping totally the interest of the employer i.e. the government at the time. Among other things, curtailing advance payment and price adjustment clauses, increasing the percentage of liquidated damages to 20% compared to its preceding BaTCoDA 1987 contract form, Absence of financial claims and stating MoWUD as a quasi-arbitrator and final and binding decision maker on claims are some of the major drawbacks of MoWUD 1994. These problematic provisions were later addressed through construction conditions amendment consisting nine clauses by the defunct MoI in 2004.

Some of the provisions among the clauses included in construction conditions amendment by MoI in 2004 consist: reduction of liquidated damage from 20% to 10 %, reinstating 20% advance payment, reducing retention money from 10% to 5% and allowing price adjustment/escalation. The intervention by ministry of industry is to integrate these percentages with international practices. However, many players of the construction sector are not aware of the amendment owing to its limited current use especially in private sector.

4.4.2 PPA 2006 contract form

The Standard Bidding Document for the Procurement of Works, issued by the Public Procurement Agency (PPA), 114 January 2006. PPA 2006, the latest local conditions of contract in use is mainly copied from the World Bank's standard bidding document for small works with minor modification. The PPA 2006 conditions of contract for works has its own limitations from the outset for reasons stated in section 4.2.3.4.

For instance, Sub-clause 44.1 of the World Bank's conditions of contract for small works state "the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency." Contrary to the World Bank's provision, Sub-clause 47.1 of PPA 2006 of ICB states that price adjustment will be made after deducting for advance payment without stating the logic behind. The employer may argue that the advance payment is given to the contractor without interest; hence, need to minimize his expense attributed to price escalation. However, it is apparent that contractors always lose 20% of the prices adjustment subject to escalation.

In addition, Sub-Clause 47.2 of PPA 2006 of ICB allows a correction factor Z_o/Z_n for price adjustment factor to payments made in a currency other than the currency of the source of the index for a particular indexed input. However, it is curtailed from the PPA 2006 NCB which affects domestic contractors. Besides, it does not even have a suspension clause which is a critical provision of many contract forms. Generally, the provisions of PPA 2006 contract forms are too short to deal with the complex nature of construction contracts.

4.5 Readability and Interpretation of Contract Provisions

In this part, the Clarity of Concepts and Ideas in Contract Provisions were discussed as to respondent response. Readability is the degree of understandability of an idea presented in a sentence. In some literatures, readability is referred as intelligibility to mean how concise a sentence is to convey its idea clearly to a reader. Interpretation refers to clarification of ambiguous and conflicting points in a sentence.

4.5.1 Clarity of Concepts and Ideas in Contract Provisions

Contract" means the Conditions of Contract, Specifications, Methods of Measurement, Drawings, priced Bill of Quantities, Schedule of Rates and Prices, the Letter of Acceptance, the Contract Agreement, Addenda and other documents issued thereof. Conditions of contract are often conveniently described as being either 'general' or 'special'.

Table - 4. 7 respondent’s response of clarity and understanding of provisions in contract forms

Clarity and understanding of provisions in contract forms	Respondents			
	Employers	Consultants	Contractors	Percentages
Very Good	-	1	2	6.67%
Good	6	9	14	64.44%
Fair	2	3	5	22.22%
Poor	2	1	-	6.67%
Total	45			100%

As depicted in the above table, the majority of respondent groups together, 64.44 % of contractors, consultants and employers, respectively rated the provisions in contract forms as good in terms of clarity and their understandability. It was three stakeholders together rated fair by 22.22% of consultants, employers and contractors respectively. Many professionals believe the ideas embodied in contract forms are full of legal jargons and complex concepts. However, one consultant interviewee believes local contract forms are literally readable. A contractor interviewee argues contract forms of local origin are unclear and not full. The reason forwarded is that, local contract forms create ambiguities as they are copied in a distorted manner from foreign contract forms.

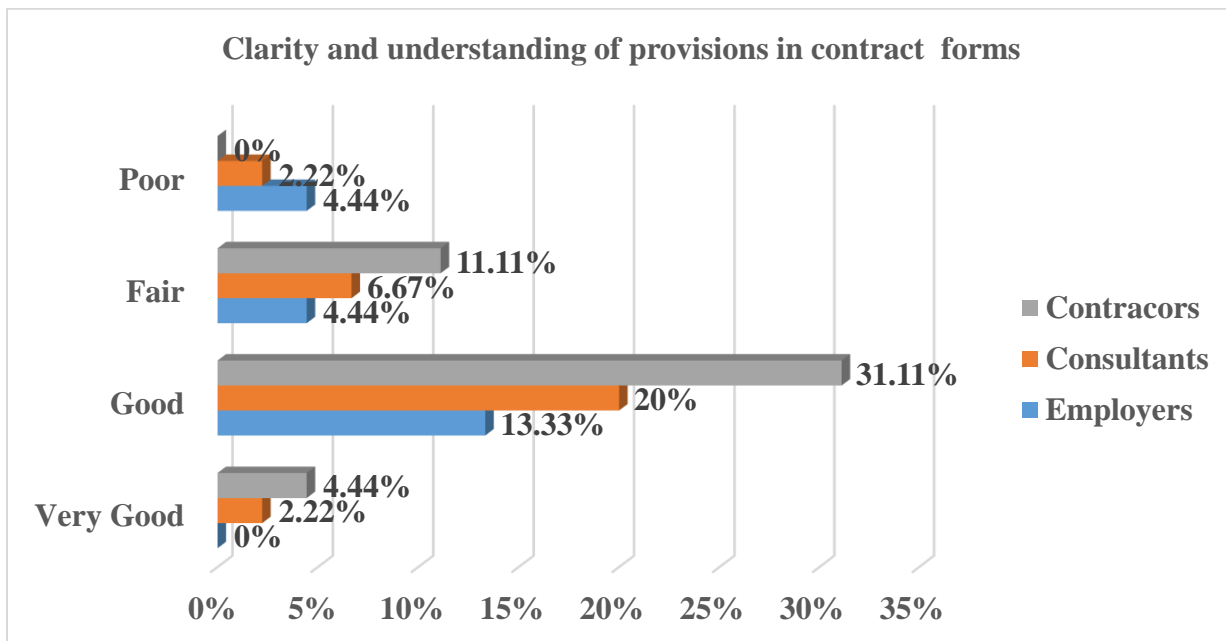


Figure - 4. 6 respondent’s response of clarity and understanding of provisions in contract forms

In order to amend contract provisions to convey their intention in full respondents were asked to rate among the hypothesized options. Accordingly, referring the issue to the party publishing the contract forms (42% Consultants, 32% Contractors and 26% Employers) providing glossary for contract forms were indicated an important measures. Only 8% of employers and contractors consider the matter as a sole responsibility of the Engineer.

4.5.2 Phraseology and Conciseness of Local Contract Forms Compared to FIDIC

Conditions of contract are included within the contract to express the relationship between employer and contractor and to define clearly what is to happen if that relationship is disturbed by the failure of either party to fulfill their obligations.

Table - 4. 8 respondent’s response of phraseology and conciseness of domestic contract forms

Phraseology and conciseness of domestic contract forms	Respondents			
	Employers	Consultants	Contractors	Percentages
Compatible	3	4	6	28.89%
Fairly Compatible	11	3	9	51.11%
Incompatible	2	3	4	20%
Total	45			100%

As shown in the above table, the vast majority of respondents together, 51.11%, employers, Consultants and contractors were consider the phraseology and conciseness of domestic contract forms as fairly compatible compared to commonly use FIDIC contract forms. Almost a quarter of consultants and contractors (8.89% and 13.33% respectively) and few employers (6.67%) feel local contract forms are compatible with international ones.

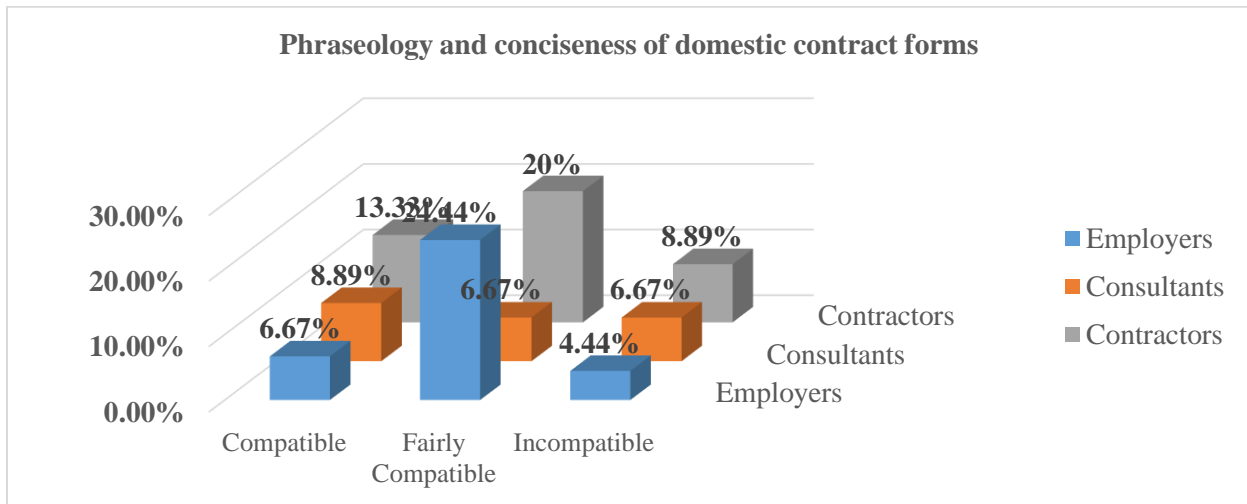


Figure - 4. 7 Respondent’s response of phraseology and conciseness of domestic contract forms

Some measures to be taken to balance the incompatibility of domestic contract forms are suggested in the hypothesized factors are considered by respondents as follows:

- Revise the current contract forms to address recent developments in the field (23% consultants, 16% Employers and 9% Contractors).
- Use FIDIC contract forms (19% Contractors, 10% Employers and 7% consultants).
- Apply current contract forms by providing clarifications in special conditions (9% consultants and 7% Contractors).

Some interview respondents each from employers and consultants suggest the revision of domestic contract forms while another respondent from the employer believes there was no major incompatibility as domestic conditions were basically adapted from FIDIC contract forms.

4.5.3 Who Interpret Contracts?

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement. When ambiguity encountered in contract provisions, there is a need for interpretation to come up with agreements on such matters. There are many types and rules of interpretation, to deal them here will be out of the scope of this thesis. However, interpretation needs legal knowledge and support from the applicable law. In Ethiopia the applicable law is the Civil Code where construction contract is regulated by Art. 1676 (applicable to contract in general), Art. 2610-2631 and Art. 3019-3040 (applicable to private construction contracts) and Art. 3131-3146 (applicable to administrative contracts). In Anglo-Saxon common laws interpretation is done objectively in most cases i.e. mainly according to the legal conviction of the community.

Table - 4. 9 respondents respond of in relation to interpretation of contracts

In relation to interpretation of contracts	Respondents			
	Employers	Consultants	Contractors	Percentages
Engineer	12	10	9	68.88%
Arbitration	2	1	1	8.89%
Dispute Adjudication Board	-	4	3	15.56%
Institutions courts	-	1	2	6.67%
Total	45			100%

In relation to interpretation of contracts, the majority of employers and consultants (69% and 64% respectively) and 33% of contractors believe such matters shall be referred to the Engineer. According to 15% of employers and consultants each and 25% of contractors, it shall be referred to DAB. On the contrary, 7% and 33% of consultants and contractors respectively believe it shall be submitted for arbitration. 16% of the employers consider referring it to DAB and Arbitration. Few (7%) consultants suggest referring the issue to the source of the contract form as a solution. **Besides**, 9% of contractors suggest referring the issue to regulatory bodies. To take the issue further, 7% of the consultants believe interpretation need to be referred to the court; however, both employers and contractors are against it.

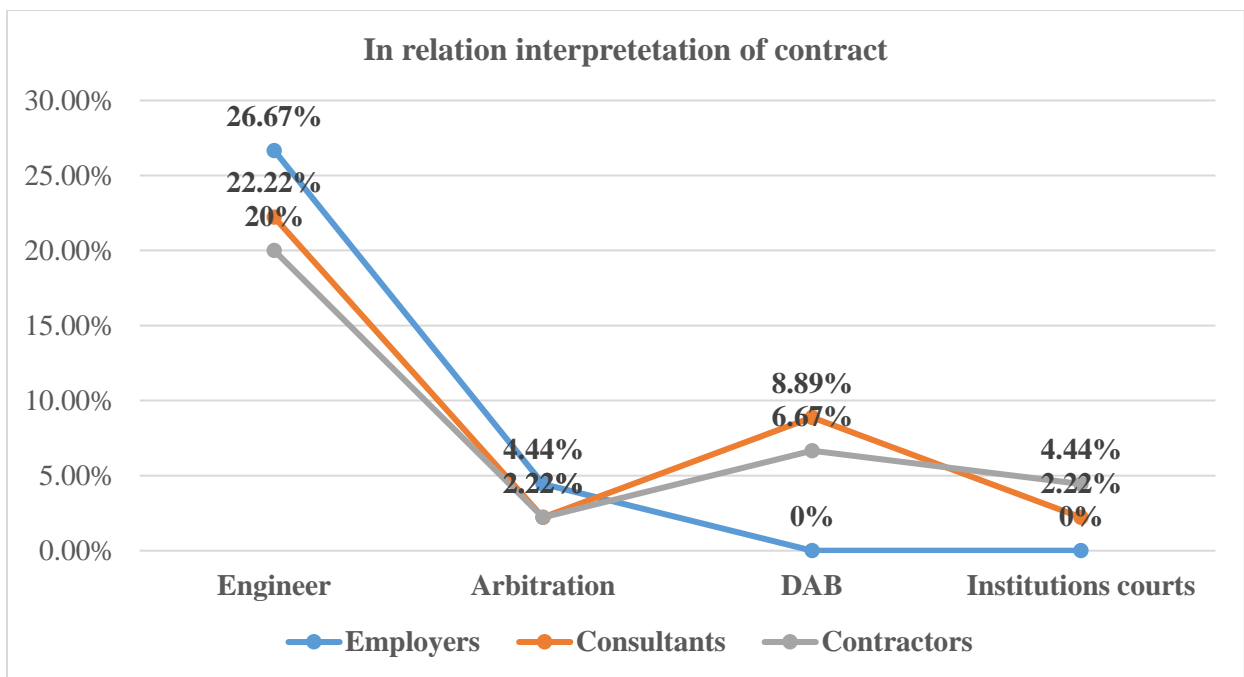


Figure - 4. 8 respondents respond of in relation to interpretation of contracts

4.5.4 Experienced Contractor and Substantial Completion

Contract forms are loaded with complex legal jargons difficult to understand. Some words are too subjective and given different interpretation from person to person. The case in point are the words experienced contractor and substantial completion.

Clause 58(1) of the MoWUD condition of contract defines a provisional sum as provisional sum means a sum included in the contract and so designated in the bill of quantities for the execution of work or the supply of goods, materials, or services, or for contingencies, which sum may be used, in whole or in part, or not at all, at the direction and discretion of the engineer.

Table -4. 10 respondent's on the clarity of Experienced Contractor and Substantial Completion

The level of clarity of Experienced Contractor and Substantial Completion in terms of interpretation	Respondents			
	Employers	Consultants	Contractors	Percentages
Very Good	6	4	8	40%
Good	9	5	3	37.78%
Fair	3	4	1	17.78%
Poor	1	1	-	4.44%
Total	45			100%

As shown in the above table, the level of clarity of terms such as 'Experienced Contractor' and 'Substantial Completion' in contract forms together were considered very Good by 40% of employers, consultants and contractors. 6.67% of contractors, 20% of employers and 11.11% consultants rated the clarity of these words responds as good. It was rated fair by 6.67%, 8.89% and 2.22% of employers, consultants and contractors, respectively. Besides, 2.22% consultants, and 2.22% employers believe the clarity of such terms was poor.

Experienced contractor is stated in Sub-clause 12.2 of FIDIC 1987, Sub-clauses 1.1 and 4.7 of FIDIC 1999 and FIDIC 2006 MDB. In these contract forms, the concept of 'experienced contractor' is related to foreseeability i.e. ability to forecast eventualities associated to risks. Except labeled in these contract forms as unforeseeable conditions by an experienced contractor, he is assumed to incorporate risks other than these conditions while entering a contract.

Substantial completion is another contested idea in contract forms. Sub-clause 48.3 of FIDIC 1987 states attributable issues of substantial completion without any clarification the parts of the permanent works that need to be completed to qualify for a work substantially completed. Recent editions of FIDIC (1999 and 2006 MDB edition) distanced from the term 'substantial completion' in a move to minimize ambiguities from the very subjective nature of the word. The subjectivity of the issue creates a loop hole for further claims and disputes. In the UK, a work is substantially completed if there are no patent defects where latent defects can be rectified in the defects liability. In some literatures a work is substantially completed in relation to its occupancy i.e. if it is habitable. However, the work occupied and habitable does not necessarily mean it is substantially completed.

4.5.5 Sufficiency of Interpretation Provisions in Contract Forms

A construction contract, being one that involves multiple parties, is bound to lead to disputes. Interpretation provisions in many conditions of contract include: the definitional provisions (subclause 1.1 of MoWUD 1994, PPA 2006 FIDIC 1987, FIDIC 1999 and FIDIC 2006 MDB); interpretation guidance (sub-clause 1.2 of MoWUD 1994, FIDIC 1999 and FIDIC 2006 MDB; sub-clause 1.3 and 1.4 of FIDIC 1987; sub-clause 2.1 and 2.2 of PPA 2006); and the order of priority of contract documents that make up the construction contract. Sub-clause 2.3 of PPA 2006, Sub-clause 5.2 of FIDIC 1987, Sub-clause 1.5 of both FIDIC 1999 and FIDIC 2006 MDB only state the priority of documents in case of ambiguities and discrepancies after stating both documents are mutually explanatory. However, when the contract is silent and come across with conflicting and ambiguous ideas interpretation of such matters is vital.

Table - 4. 11 respondent’s response of provisions related to interpretation in contract forms

Provisions related to interpretation in contract forms	Respondents			
	Employers	Consultants	Contractors	Percentages
Sufficient	3	5	6	31.11%
Insufficient	9	10	12	68.89%
Total	45			100%

In light of the above table, the three stakeholders together, on average, 31.11% of the employers, consultants and contractors each believe provisions related to interpretation in contract forms were sufficient. On the contrary, the majority of employers, consultants and contractors together responds about, 68.89% believe provisions related to interpretation in contract forms were insufficient.

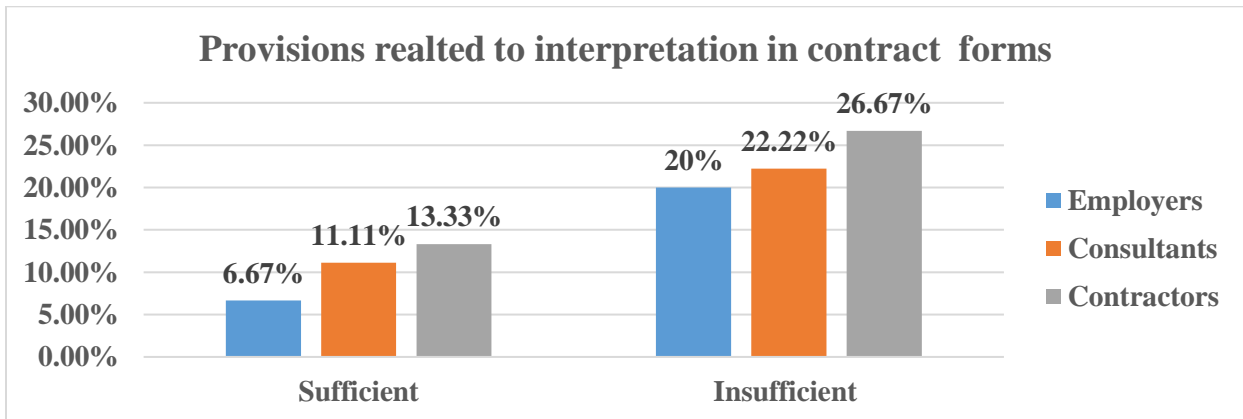


Figure - 4. 9 respondent’s response of provisions related to interpretation in contract forms

4.6 Price Adjustment of construction contracts

As (Sims, 2005) has pointed out that Variations are a fact of life in building contracts. There can only be a minority of contracts of any size in which the subject matter when completed is identical in every respect with what was contemplated at the outset. It is sometimes said that the bill of quantities system of contracting makes it too easy for a building owner or his team to change their minds. The effects of such changes can be easily seen and readily evaluated, and there is therefore a lack of incentive to make firm design decisions before work starts on the site. This does not allow for the additional loss and/or expense which might be claimed.

It is common to come across construction projects experiencing cost overruns as a result of multitude factors related to basic construction materials price hike. Fairness of current price adjustment practices and its method are discussed below on the basis of the survey response.

4.6.1 Components Allowed for Price Adjustment

The major components of construction cost directly involved consist of material, labor and equipment costs. While there is a change in cost rise or fall of these direct cost components, provisions provide price adjustment clauses. However, only three material components comprising, cement, and reinforcement bar are allowed for price adjustment in the local context.

Table - 4. 12 respondent's on the limited adjustment scheme as affecting domestic contractors

Limited adjustment scheme as affecting domestic contractors	Respondents			
	Employers	Consultants	Contractors	Percentages
Strongly Agree	4	9	16	64.44%
Agree	5	4	4	28.89%
Disagree	1	1	-	4.44%
Strongly Disagree	1	-	-	2.22%
Total	45			100%

In light of the above table, the majority respondents of together on average, 64.44% employers, contractors and consultants were strongly agree on such limited adjustment scheme as affecting domestic contractors. In addition, 11.11% of employers, 8.89% of consultants and 8.89% of contractors respectively, were agree to this point. On the contrary, the majority of employers (2.22%), and 2.22% of consultants, respectively disagree to the proposition stating that the current practices of price adjustment do not affect local contractors.

4.6.2 Price Adjustment Methods Used in Domestic Construction

There are two methods of price adjustments; base price (proxy/document proof) and indices normally used in the domestic construction industry. Sub-clause 70.1 of FIDIC 1987 refers price adjustment on account of price rise and falls to the particular conditions. Previous projects using these contract forms have been using document proof or base price adjustment methods. However, it is subject and open to manipulation. Sub-clause 47.1 of PPA 2006, Sub-clause 13.8 of FIDIC 1999 and FIDIC 2006 MDB edition provide indices method or adjustment formula.

Table - 4. 13 respondent's response of price adjustment method

Price adjustment method	Respondents			
	Employers	Consultants	Contractors	Percentages
Base Price/ Base Date	8	14	13	77.78%
Price Indices	5	2	3	22.22%
Total	45			100%

In light with the above table, the majority of respondents together, on average, 77.78% of employers, consultants and contractors believe the use of base date (proxy) price adjustment method was better. Some interviewees from consultants, suggest the need of widening limited inputs other than cement, and reinforcement bar. The of employers (11.11%), 4.44% and 6.67% of contractors and consultants respectively respond in favor of price indices method of adjustment. On contrary, interviewee from consultants and all professionals interviewed from contractor advice the importance of reasonable and fair weighting which is representative of both adjustable and nonadjustable inputs.

With respect to establish new local indices and revise it periodically are summarized in as follow.

Table - 4. 14 respondent's response of Establish new local indices and revise it

Establish new local indices and revise it	Respondents			
	Employers	Consultants	Contractors	Percentages
Establish new local indices and revise it periodically	15	11	13	86.67%
Use foreign Price Indices	4	1	1	13.33%
Total	45			100%

It is known that there are no established domestic price indices. Therefore among those respondents in favor of price indices; 33.33%, 24.44% and 28.89% of employers, contractors and consultants respectively showed the need of establishing local price indices and revise it periodically. On the contrary, 8.89% of employers, 2.22% consultants and 2.22% suggest the use of foreign indices. However, using foreign indices have its own drawback which is attributed to its reliability and credibility. Foreign indices are used for inputs from a foreign source. However, the source must be declared and agreed while concluding the contract. Some consultant interviewee suggests, if the agreed source of input cease to produce or supply the material, change of source of indices is acceptable. On the contrary, if the change of source is on the contractor's preference, the engineer need to consider the previous and the new price indices and choose which ever is advantageous to the employer.

One respondent from the contractor suggest in relation to credibility of foreign indices to use reliable and recognized institute indices and verify from local banks or statistics offices. One respondent from the employer believe to establish list of well-known sources of indices and use from the list. However, for local inputs there is no choice than using proxy prices by ensuring that they are quoted from reliable sources if local indices are not available or use a correction factor of Z_o/Z_n as a last result.

4.6.3 Adjustment Coefficient, Z_o/Z_o

There is a provision in contracts to handle when currency of payment is different from currency of index/price. With regard to inflation of local currency compared to some other foreign currencies stated in the contract, Z_o/Z_n will be included as appropriate to be used as a multiplier for price adjustment coefficient. This additional multiplier coefficient is stated in Sub-clause 13.8 of FIDIC 1999 and FIDIC 2006 MDB as follows, 'in cases where the "currency of index" is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the central bank of the country, of this relevant currency on the above date for which the index is required to be applicable.'

All employer respondents and the majority of contractors and consultants (70% and 57%) showed the need for adopting Z_o/Z_n where as 43% and 30% of consultants and contractors respectively respond against using this alternative adjustment coefficient. An interesting difference between the ICB and NCB version of PPA 2006 shows that, Z_o/Z_n is included in Sub-clause 47.2 of ICB while it is omitted in the NCB version.

4.7 Termination

Termination of construction contract can be resulted from completion of performance; default of either the contractor or employer, when the contract becomes onerous etc. In this part termination caused by default of either party to a contract is dealt with by compiling the survey result and desk study covering two road contracts and one building contract.

4.7.1 Termination Procedures and Actual Practices

Termination conditions are clearly stipulated in contract forms. The survey showed to what extent contracts are terminated following the procedures of contract provisions.

Table - 4. 15 respondent's response of agreement on the termination of contract

Agreement on the termination of contract	Respondents			
	Employers	Consultants	Contractors	Percentages
Yes	10	12	15	77.78%
No	3	3	2	22.22%
Total	45			100%

In light with the above table, 22.22% of the employer respondents, 26.67% and 33.33% of contractors and consultants, respectively showed their agreement that termination was carried out as per the conditions stated in contract forms. The remaining half of employers and the majority of employers, consultants and contractors (6.67%, 6.67% and 4.44% respectively) believe termination was not done as per the procedures provided under contract provisions.

All interviewee professionals also believe termination was not done according to the contract provisions. One consultant interviewee further commented, if it is inevitable to terminate a project it is advisable to make it on the early stages of the project. For example, terminating a three year project after two and half years brings unbearable loss to the employer. When the employer terminating a contract, it is important and need to be confident to hold the contractor on default. The reason behind this is that either the employer or engineer may have done a contributing factor for the contractor's default. If the contractor repudiate the contract expressly or implied (i.e. abandoning the site, withdrawing equipment etc.) the employer can bring a court order (specific performance order).

The Possible reasons for the problem to exercise termination as per the provisions were also selected from the hypothesized factors. Financial loses attributed to termination is identified by many respondents (50% contractors, 43% consultants and 31% Employers) among the major assumed three contributing factors followed by long and cumbersome re-tendering process from the resulting termination (42% contractors, 29% consultants and 31% Employers). In addition, Lack of awareness by parties regarding termination clauses was seen from the respondents view (31% Employers, 29% consultants and 8% contractors) as the least contributing factor compared to the above two reasons

4.7.2 Prolonged Suspension as a Ground for Termination

The engineer may instruct the contractor to suspend some or all of the works as appropriate. However, Sub-clause 8.11 of FIDIC 1999 and FIDIC 2006 MDB expressly state for a suspension continued for more than 84 days, the contractor ask the engineer permission to proceed with the works. If the engineer fails to respond within 28 days, the contractor may treat the issue as omission or even terminate the works. The survey showed that prolonged suspension has a minimal effect to end up in termination.

Table - 4. 16 respondent's response of Prolonged Suspension as a Ground for Termination

Prolonged Suspension as a Ground for Termination	Respondents			
	Employers	Consultants	Contractors	Percentages
Very High	2	1	1	8.89%
High	1	1	1	6.67%
Low	6	9	14	64.44%
Very Low	3	3	3	20%
Total	45			100%

In light with the above, the majority of contractors (31.11%), 20% of consultants and 13.33% of employers feel the possibilities of prolonged suspension to result in termination was low. Of consultant respondents and 20% of employers and contractors each showed its degree of possibility very low. On the contrary, 2.22% of employers and contractor each believe the degree of prolonged suspension end up in termination was very high. To sum up, all together respondent that about, 64.44% were low on the degree of prolonged suspension end up in termination.

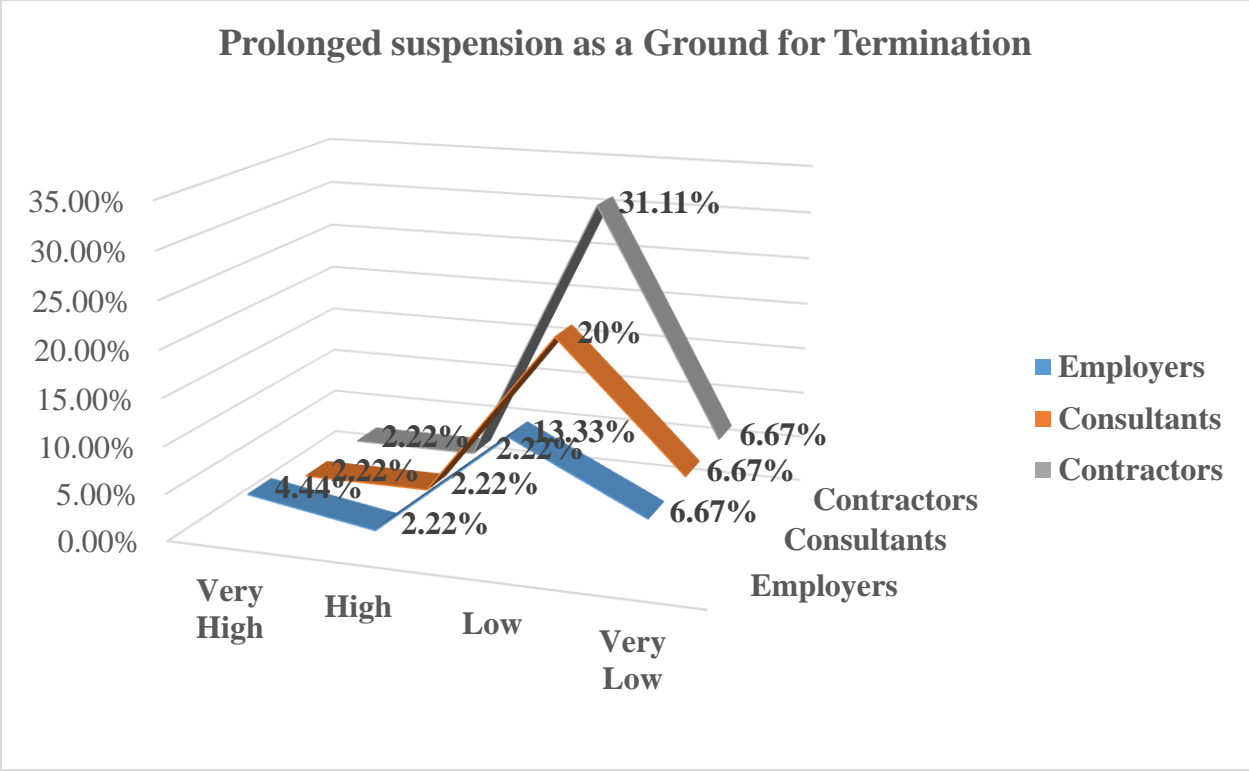


Figure - 4. 10 Prolonged Suspension as a Ground for Termination

If termination comes in to picture due to negligence of the engineer, the employer bears the responsibility towards the contractor. In such cases, one of the employers suggests that the engineer shall be made responsible for its actions. One of the consultants believe that a counterpart engineer can solve this problem where as one of the contractors stressed that taking the necessary precautions during design and tender preparation is vital to avoid suspension.

If termination is due to the Employer’s default, the contractor shall be compensated for forced demobilization, idle equipment, anticipated profit etc. In such cases, the employer’s loss is immense. To avoid such occurrences, some comments were forwarded by the respondents. Accordingly, two respondents from the employer argue that the wastage of capital and resource due to employer's default is high and sometimes this wastage arises from engineer's negligence; hence, the employer need to act timely and as per the contractor’s request while another employer suggests that the employer should not give or approve suspension order unless there is a pressing need. One employer state the wastage of resources could arise when termination was due to the contractor's default as equipment and properties of the contractor are held by the employer until completion of the project by another contractor.

4.7.3 Termination as an Option for too much Cost Overruns and Time Slippage

It is a common understanding that most of construction projects in Ethiopia suffer too much cost overruns and time slippage. Some projects might have been better off should they have been terminated instead of letting them to proceed.

Table - 4. 17 Termination as an Option for too much Cost Overruns and Time Slippage

Termination as an Option for too much Cost Overruns and Time Slippage	Respondents			
	Employers	Consultants	Contractors	Percentages
Strongly Agree	-	1	1	4.44%
Agree	-	-	-	-
Disagree	10	8	6	53.33%
Strongly Disagree	9	6	5	44%
Neutral	-	-	-	-
Total	45			100%

In light with the above table, 22.22% of employers, 17.78% and 13.33% of consultants and contractors, respectively disagree to the point allowing troubled projects to continue whereas the remaining 20% of employers, 13.33% and 11.11% of consultants and contractors respectively showed their strong disagreement. Considerably few respondents i.e. 2.22% and 2.22% of employers and contractors respectively strongly agree projects need to be continued irrespective of their cost and time overruns.

Comments were forwarded to improve such practices. Some respondents from the employers and consultants comment to have better design input to increase the quality of design services and close follow up of contract administrations. If the project is believed to be delayed due to the contractors default, it is good to terminate at the early stage and re-tender out the project could be better. The other some consultants and contractors believe employers shall exercise evaluation of performance of contractors before awarding the contract and assist contractors to perform better through training and other assistance, create employer awareness on time value of money. However, if this fails termination could do the client good by saving resource and time. Each case shall need to be considered on its merit for proceedings. Another consultant believes political interference is the major factor that affects decision on termination. A more solid political system helps to avoid unnecessary loss due to unsuccessful construction.

4.7.4 Employer to Takeover Contractor's Equipment during Termination

According to Sub-clause 63.1 of FIDIC 1987, the employer may use contractor's equipment for completion of the works as he thinks proper after termination on the contractor's default. On the contrary, Sub-clause 61.1 of PPA 2006 expressly state that contractor's equipment on site are deemed to be the property of the employer if the contract is terminated due to the contractor's default.

The respondents respond that 33% of contractors, 22 % of consultants and 15% of employers believe it is not logical to take over contractor's equipment. On the contrary, the majority of employers and consultants (15%, 10%) including 5% of contractors feel it is logical to take over contractor's equipment due to termination on the contractor's default. However, sub-clause 61.1 of PPA 2006 need to address issues; for instance, transferring (by contractual presumption) the ownership rights of the contractor on all project related properties to the employer in case of fundamental breach of contract.

Furthermore, the logic behind such clauses especially in the FIDIC context is to use the equipment and finish the works which in effect minimize the cost to the employer. Two employers, four consultants and three contractors comment that the employer's loss should be first assessed instead of just confiscating contractor's property. Three contractors suggest the employer should only recover from the contractor his advance payment balance and any extra payment effected to the contractor not to go beyond that. On the other hand two contractors propose the employer to get protection from legal authority not to remove the equipment and materials from the site is a better option.

4.8 Dispute Resolution Procedures and Conformity of Some Provisions of Ethiopian Law

A construction contract, being one that involves multiple parties, is bound to lead to disputes. When a dispute arises in a construction contractual relationship, the parties often spend a great deal of time in negotiations in an attempt to resolve the dispute, rather than resorting to courts. It is easier to say that, because of the nature of construction contracts, or better yet the construction process, conflicts and disputes are almost inevitable. This is because, in construction projects, a number of different contracting entities with different needs are expected to cooperate and coordinate their efforts. This part has contained Domestic Arbitration Institution Practices, Contribution of Adjudicator for Smooth Contract Administration, Claim Procedures, Time Frame to Submit Claims, and Arbitrability of Administrative Contracts.

4.8.1 Domestic Arbitration Institution Practices

Arbitration agreement is an agreement by the parties to submit to arbitration all or certain disputes which have arisen or which may arise between them in respect of a defined legal relationship, whether contractual or not. Arbitration of construction projects have been started locally in recent years. An arbitration agreement may be in the form of an arbitration clause in a contract or in the form of a separate agreement. The arbitration agreement shall be in writing. An agreement is in writing if it is contained in a document signed by the parties or in an exchange of letters, telegrams or other means of telecommunication which provide a record of agreement, or in an exchange of statements of claim and defense in which the existence of an agreement is alleged by one party and not denied by another. The parties to an arbitration are free to choose one or more arbitrators. The chosen arbitrator should have the necessary expertise to resolve the technical disputes arising from the construction contract. To this effect, there are two domestic arbitration institutions in Addis Ababa. The practice of local arbitration is at its infant stage. Most of industry professionals in the construction sector are not even aware of their existence. Interviewed professionals also stressed the fact that these institutions are not known widely in the sector.

Table - 4. 18 respondent's response of local arbitration practice

Local arbitration practice	Respondents			
	Employers	Consultants	Contractors	Percentages
Very Good	-	1	1	4.44%
Good	5	4	3	26.67%
Fair	7	5	4	35.56%
Poor	6	5	4	33.33%
Total	45			100%

As shown in the above table, 8.89% of consultants, 11.11% of employers and 6.67% of contractors, respectively agree that local arbitration practices were good while 8.89%, 11.11% and 15.56% of contractors, consultants and employers respectively believe it was fair. On the contrary, the majority of employers 13.33%, 11.11% and 8.89% of contractors and consultants consider domestic arbitration was poor. A construction lawyer interviewed on this issue admitted that the institution is not yet fully developed as expected to handle arbitration.

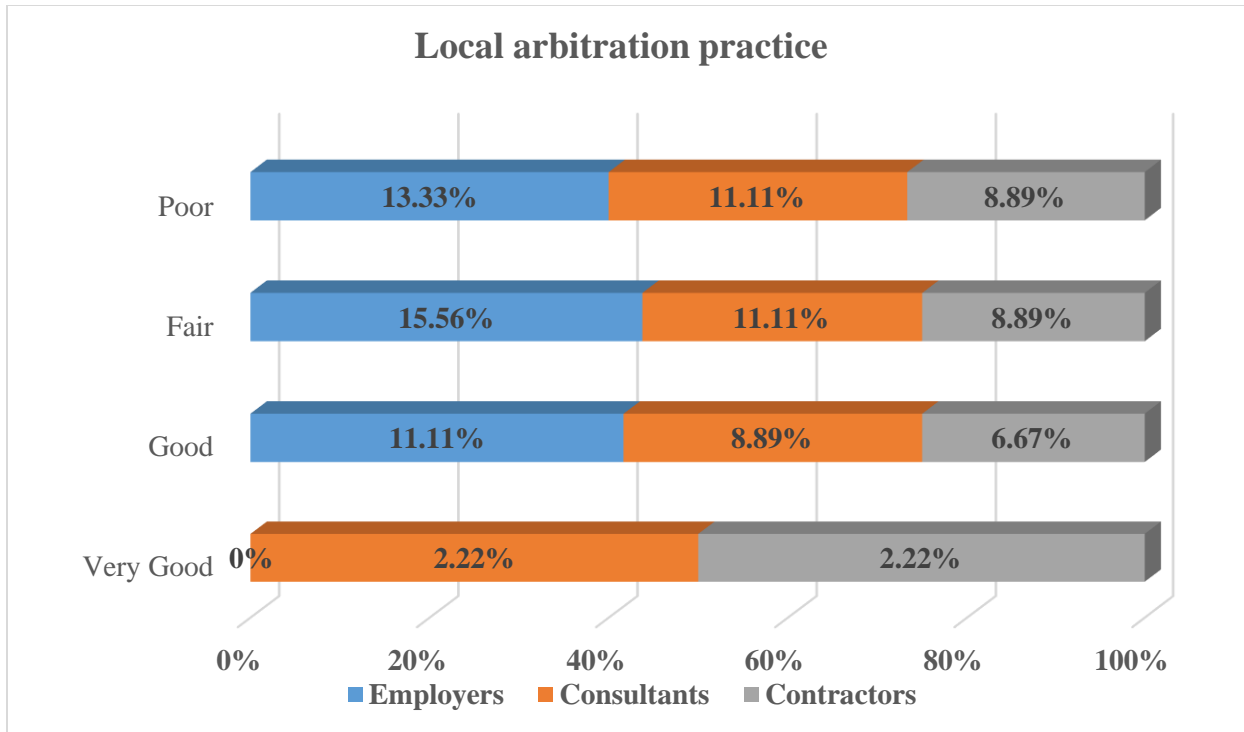


Figure - 4. 11 respondent's response of local arbitration practice

In order to amend the practices some employer commented the need to have well experienced professionals and establishments and capacity building, training, case study, and experience sharing from expatriates. Some consultant respondent stressed the importance of training of lawyers with construction/engineering background. Some contractor feels arbitration institution should be well organized and well recognized by stakeholders in the construction industry. It needs to have qualified professionals. Contractors should also take claims to the arbitration so that the capacity of local arbitration can be tested.

4.8.2 Contribution of Adjudicator for Smooth Contract Administration

In the construction industry, adjudication" can be defined as a process whereby an appointed neutral and impartial party is entrusted to take the initiative in ascertaining the facts and the law relating to a dispute and to reach a decision within a short period of time. Appointment of adjudicator at the start of the project helps for a smooth progress of projects through handling claims right away on the outset. Sub-clause 25.1 of PPA 2006 states that the adjudicator to give decision within 28 days. It is a good move compared to Sub-clause 67.1 of FIDIC 1987 and Sub-clause 20.4 of FIDIC 1999 which gives the Engineer/DAB 84 days to give his decision on claims. It also helps to avoid issues related to the engineer being agent to the employer.

Table -4. 19 respondent's response of appointment of adjudicator closely follow up claims handling

Appointment of adjudicator on the start of the project to closely follow up claims handling	Respondents			
	Employers	Consultants	Contractors	Percentages
Strongly agree	6	5	3	31.11%
Agree	8	6	7	46.67%
Strongly Disagree	-	-	-	0%
Disagree	-	3	-	6.67%
Neutral	2	3	2	15.55%
Total	45			100%

Accordingly, 6.67%, 13.33% and 11.11% of contractors, employers and consultants respectively strongly agree on the appointment of adjudicator on the start of the project to closely follow up claims handling. The majority of employers and consultants (17.78% and 13.33% respectively) and 15.56% of contractors agree on the issue. On the other hand, 4.44, 4.44% and 6.67% of contractors, consultants and employers respectively showed their neutrality while only 6.67% of consultants are in a position to disagree with the proposition where adjudicator is necessary at the start of a project.

4.8.3 Claim Procedures

In order to provide a generic framework of claims management, developed a model of construction claims generally categorized into six main phases, encompassing all the fundamental processes of claim procedure, which are identification; notification; examination; documentation; presentation; and negotiation. Claims have increasingly become inevitable in construction projects. A great amount of money, time, and merit of claims are the most critical factors that prudent companies should not overlook. Hence, Construction claims are discerned as a time-consuming and expensive process, requiring great human endeavor and know-how to process them successfully.

A claim procedure is vital to substantiate claims and guide their handling. In respect of this Sub clause 52(5) of MoWUD 1994 and Sub-clause 53.1 FIDIC 1987 contract forms expressly state the procedures to be followed and the time frame on which these claims will be submitted. However, the current PPA 2006 contract form do not have claims handling procedures on which respondents show the degree of impact due to the absence of claim provisions.

Table -4. 20 respondent's response of appointment of adjudicator closely follow up claims handling

Appointment of adjudicator on the start of the project to closely follow up claims handling	Respondents			
	Employers	Consultants	Contractors	Percentages
Strongly agree	13	10	9	71.11%
Agree	-	-	-	0%
Strongly Disagree	-	-	-	0%
Disagree	4	3	3	22.22%
Neutral	1	1	1	6.67%
Total	45			100%

As shown in the above table, the vast majority of respondents (22.22% consultants, 20% contractors, and 28.89% E) agree the absence of claim procedure clauses has high degree of impact on the dispute resolution of projects. Few respondents, 8.89%, 6.67% and 6.67% of employers, contractors and consultants respectively reveal the omission of claim provisions have only low impact on dispute resolution. On the other hand, 2.22% together of employers, consultants and contractors believe such matter have no significant effect.

Most respondents from employers in favor of the high drawback feel that it is difficult to accurately establish the sources of the disputes and obtain sufficient particulars to analyze the claim while one of the employer believe if there is no such procedure the dispute will be more complicated. On the other hand, most of consultants feel the claimant could not state a specific clause upon which the claim is based; hence, the engineer or adjudicator or arbitrator(s) could not decide rightly since no clause could be cited. Some consultants further comment that it would cause ambiguity and create gap during contract administration and will complicate claim handling process even more. Most of the contractors believe lack of sufficient, complete and procedurally flown evidences and documents would affect the resolution process. In addition to this, there might be lack of contemporary records and undefined time to respond for the claim will become a problem. One employer reveals unless there is misinterpretation of provisions while claim the right for either of the parties, the absence of claim provisions have no significance effect on claims initiation, submission and dispute resolution. One consultant further comments as it was not significant as long as there is a dispute resolution mechanism.

4.8.4 Time Frame to Submit Claims

Time extension is a common category of claims frequently alleged in the construction industry. In fact, it is aimed to defray the deduction of liquidated damages when delays are occurring in the projects. Compensated money for overhead costs is separately considered. The contractor is given limited time frame to initiate claim and to submit particulars in Sub-clause 53.1 of FIDIC 1987 while the Employer is free from such limitations to initiate claim according to Sub-clause 53.2 of FIDIC 1987, Sub-clause 20.1 of FIDIC 1999 and FIDIC 2006 MDB. On the other hand sub-clause 2.5 of FIDIC 1999 and FIDIC 2006 MDB state procedures for Employer’s claims without stating a time frame except to submit claims before its expiry for extension of defects notification. Not only the contractor is limited by time, Sub-clause 20.1 further state as the contractor waives his right and loses his rightful entitlement if he is not comply with such provisions. However, FIDIC 1987 contract form is silent on the issue. According to an interviewee from consultants, the contractor do not lose his substantive rights in the law of tort, but his negligence to submit on time will be considered.

Table - 4. 21 respondent’s response of leave the employer free of time frame

Leave the employer free of time frame	Respondents			
	Employers	Consultants	Contractors	Percentages
Fair	12	10	5	60%
Unfair	4	3	11	40%
Total	45			100%

As depicted in the above table, 26.67% of employers, 22.22% of consultants and 11.11% of contractors believe it was fair to leave the employer free of time frame. The remaining 8.89% of employers, 6.67% consultants and 24.44% of contractors feel it was unfair.

Accordingly, the reason those who feel it is fair to leave the employer without any time frame to submit his claim further suggested that the employer is the owner of the work and submission of claim any time will not hinder the contractor’s performance and it does not affect the work progress. Two of the employers commented that the contractor is the one building the project and can see the risk immediately while the client is not and the consequence could be seen after some time.

Those who feel it was unfair to leave the employer without time frame also forward their comments. Accordingly three employers and two consultants are in favor of more time than the contractor whereas two employers, five consultants and nine contractors believe the employer should be bound with equal time frame with the contractor to initiate claim.

4.8.5 Arbitrability of Administrative Contracts

Administrative contracts are not arbitrable according to the civil procedure code article 315(2) while it is not restricted in the civil code. However, public contracts are being arbitrated locally and internationally in recent years. In respect of such contradiction all respondents of employers, consultants and contractors unanimously respond in favor of administrative contracts to be referred to arbitration. A thorough discussion is made in section 7.3 on the issue of arbitrability of administrative contracts.

Some employers, consultants and contractors suggest amending Art. 315(2) of the civil procedure code in a way to make administrative contracts arbitrable. On the other hand, two employers and one contractor reveal that it is possible to refer administrative contracts to arbitration should the establishment proclamation of a public office allow it to use arbitration as specific laws govern general laws. The case in point stated by respondents is ministry of construction , a public implementing agency of building construction as its establishing proclamation allows settling disputes outside a court.

4.9 Conformity of Selected Clauses with Ethiopian Law

In this part discussed some selected clause with law of Ethiopian. Provisions of contract forms need to conform to applicable law of a country. As far as conformity is concerned, contract provisions stipulate the maximum penalty for engineers is the total amount of his professional fee which is too minimum compared to the damage suffered by the employer. However Art. 2636 of the civil code introduce the concept of liability based on professional negligence.

In respect of dispute resolution, Clause 67 of MoWUD 1994 expressly states the decision given by MoWUD is final and binding. In doing so the Ministry assumes dual roles, the owner of works representing the government and an arbitrator. However, it contravenes the law as MoWUD is not mandated to work as a court. Legally, it is not possible to imagine such kind of arrangement; the decision of such institution cannot be taken as a “decision”, let alone to be designated as final and binding decision. Again, denying a right to appeal against or potentially excluding the review of such decision by courts is doing double injustice to the other disputing party.

Contract forms recently used locally in the construction sector i.e. PPA 2006 and FIDIC red book subsequent editions (FIDIC; 1987, 1999 and 2006 MDB) have arbitration clauses. The major of works in Ethiopia is the government with more than 90% share of all construction works. Construction contracts entered with public implementing offices is considered as administrative contracts. Administrative contracts are not arbitrable according to article 315(2) of civil procedure code whereas the civil code do not restrict in its arbitration articles. However, administrative contracts are submitted for arbitration in recent years as opposed to the procedure code. Such procedural provision (article) is highly controversial even among the lawyers. The basis for their argument may base itself on the following grounds; jurisprudential ground and public policy ground.

➤ **Jurisprudential ground (i.e. based on the philosophy or science of law)**

Rights/powers and limitations to those rights/powers are created by substantive law and not by such adjective law i.e. like procedural law. According to a construction lawyer interviewed for this thesis, there is no any limitation on the rights/powers of the administrative authority under the law of administrative contract under the civil code, which is a branch of law classified under the substantive law; whereas the procedural law, like the civil procedure code, is an adjective law. Therefore it cannot create limitations which are not in existence under the said substantive law. The conclusion from this analysis is that Art. 315(2) being inoperable; the cases being arbitrable!

➤ **Constitutional/public policy ground**

Administrative authorities are part of the (executive) branch of government; hence, the government is a sovereign public entity. Besides, the government has established a public justice system through courts or the judiciary where cases related to government or public interest shall be tried and decided by courts of competent jurisdiction.

On the contrary, arbitration is a legal institution which exists in the realm of private justice system. Thus, submission of government cases/disputes to such private justice system is contrary to the sovereign power of the government and contrary to public interest. Therefore, from this analysis, irrespective of the status of the procedural law, the government has taken a clear and an important public policy decision by declaring the submission of disputes arising out of administrative contracts being non – arbitral.

4.10 Case Study of building project

The desk study conducted on one building project strengthens that contract provisions are not followed during time extension and variations. The detailed analyses of desk studies are presented as below.

The project located around Ras - Desta hospital which is B+G+10 commercial building. The tender sum for labor base structural work was 10,621,796.62 birr and the original planned works duration was 24 months. There were numerous additional works associated with the continuously revised works. The building design changed from B+G+10 to B+G+11 and additional floor area was added. As the contractor could not finish on agreed time, the extension time granted was 7 months. The actual completion period was 24 months which was an increase of 29.2% of the original contract period. The numerous changes of works contributed to delay. Due to additional floor and floor area expansion of the building were the main reasons for the occurrence of variation. The consultant through his design review and actual investigation, has identified and report to the owner massive variation will be expected because of these reasons.

Relay on the Consultant's report, the owner allows him to grant an order to the contractor and at the same time to quantify and submit the final estimation of the varied quantity for approval.

The project includes the following variations during the construction period:

- Design change initiated by owner from B+G+10 to B+G+11
- And additional floor area expansion

From the above reasons the total area of slab concrete and slab formwork varied from 11,520.20m² to 14,434.00m².

Table - 4. 22 Cause and effects of variation and time extension

Item	No. Causes of Variation	Nature of Variation	Source of Variation	Effects	
				Time	Cost(Birr)
1	Variation caused by additional floor and floor area expansion	Addition	Employer	7 Months	865,398.60
Total				7 Month	865,398.60

* The engineer approved 10% of the initial cost of varied item.

4.10.1 Condition of Contract Applied For the Case Study

The contract agreement was made on the basis of:

- Public procurement agency (PPA) - 2006,
- Standard Bidding Document (SBD),
- For Procurement of Works for International Competitive Biddings (ICB).

Therefore, the Variation Procedures and Valuation methods are as per Clauses 38.1 and 40.1 of public procurement agency (PPA) - 2006 General Conditions of Contract.

As per clause 40.1 “For both Admeasurement and Lump Sum Contracts, the Contractor shall provide the Engineer with a quotation for carrying out the Variation when requested to do so by the Engineer. The Engineer shall assess the quotation, which shall be given within seven days of the request or within any longer period stated by the Engineer and before the Variation is ordered.”

Subsequently, the engineer assesses the varied works and instructs the contractor to carry out the varied work accordingly.

As per clause 38.1 “If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than twenty five percent (25%), provided the change exceeds 5 percent of the Initial Contract Price, the Engineer shall adjust the rate to allow for the change.”

Since, in our case the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item is 25.3 percent, and the change in Initial Contract Price is eight point fifty percent (8.15%), then engineer adjusted the rate.

4.10.2 Result of the Case Study

The result of the case study show as the engineer approved the variation, since the particular item is 25.29% of the bill of quantities which provided eight point fifty percent (8.15%) of initial contract price. The cause of this significant amount of variation is related to the owner interest on design modification which causes quantity change as a result this variation causes seven (7) month delay in project completion time. Therefore, the owners of the project must be paid the variation occurred additional work due to design modification and work as well as allow additional time extension due to additional work added to contractors as per contract entered both side parties.

CHAPTER FIVE

5. CONCLUSIONS AND RECOMMENDATIONS

The objective of the thesis, as clearly stated in the introduction part, is to assess the current state of standard forms of contract in the domestic building construction sector i.e. problems attached to conditions of contract currently employed in the country. In light of this, the research is meant for to investigate the existing construction management practices followed by suitability of available conditions of contract in the domestic construction sector, assessing conformity of some selected clauses with the Ethiopian law especially in light of the Civil Code and contribution of contract forms for construction management profession.

5.1 CONCLUSIONS

The study has given good sight to assess the current state of standard forms of contract in the domestic building construction sector i.e. conditions of contract currently employed in the country. An attempt was made to investigate the assessment of conditions of contract problems focusing on performance of construction industry, contract administration, assessing conformity of some selected clauses with the Ethiopian law especially in light of the Civil Code and suitability of available conditions of contract of the existing in building construction projects and the finding of this study can be summarized by the following paragraphs.

With regard to investigate and evaluate the existing practices of construction management in general and contract administration in particular. From the results of questionnaire survey the majority of respondent groups; 33.33%, 24.44% and 17.78% of contractors, consultants and employers respectively, showed their verdict as there exists an incompetent local construction management practices currently. However, the remaining 82.22% employer, 66.77% contractors and 75.56% consultant respondents feel the practice is fairly competent.

The result from the interview showed that, regardless of its visible shortfalls and its infant stage, construction management practice in the local construction sector is fairly competent. As far as contract administration is concerned, the questionnaire survey and interview showed that contract administration do not meet the acceptable standard. According to the questionnaire survey result, the majority of contractors and consultants (47% and 37% respectively) and 16% of employers showed their disagreement to the point that 'local contract administration meets the acceptable standard.'

With concerned to assess the suitability of available conditions of contract in the construction industry. To achieve this objective, assessment of MoWUD 1994 and PPA 2006 was made. According to the findings, both contract forms have limitations to fully guide construction contracts. The concepts embodied in MoWUD 1994 are complex as it is adopted from FIDIC in a distorted way. PPA 2006 is relatively clear and too short to address complex contractual issues.

Another point to identify clauses perceived to contravene the applicable law of the country. To this effect, termination, dispute resolution and arbitration clauses were studied in light of the civil code and civil procedure code of Ethiopia. Even though it is amended latter, the popular shortfall in Clause 67 of MoWUD 1994 stating the decision of MoWUD is final and binding denying the disputant for appeal is not legally sound. However, the amendment is not known by many of the players in the domestic construction sector. Sub-clause 61.1 of PPA 2006 stating the contractor's equipment is deemed to be the employer's property during termination on contractor's default. The questionnaire survey, interview and desk study that the clause is not logical where it is against the applicable law.

At last, to look in to the contribution of these contract forms in developing the construction industry in general and competence of construction management profession. It is apparent from the analysis and discussion parts of the thesis that the problems substantiated were not carried out as per the provisions and due to lack of awareness of stakeholders. The researcher believes local contract forms have a positive contribution to the domestic construction industry, even though they have limitations as described in the findings such as distorted adoption from documents, and full of complex concepts and legal jargons. In a way it helps to improve domestic construction management practices in the local context with the prevailing situation.

Furthermore, the relation of stakeholders in the domestic construction sector lack trust among each other. Besides, the construction industry lacks collaboration with research and academic institutions which might have been benefited much from the integration with these institutions. Furthermore, the survey also showed that price adjustment and claim procedures are not practiced as per the procedures expressly stated in provisions of conditions of contract applicable in the domestic construction industry.

5.2 RECOMMENDATIONS

Based on the finding of the study in order to assessment of conditions of contract problems in building construction projects, the following recommendations are forwarded. The recommendations are:-

With respect to improve the existing practices of local construction management in general and conditions of contract in particular, stakeholders need to take further steps as stated below.

➤ *Expected from the Regulatory body*

- Revise the current MoWUD 1994 and PPA 2006 in such a way to address current developments of the construction sector, especially the PPA 2006 need to come to MoWUD 1994 as applicable considering current developments in the domestic construction sector.
- Provide a clear regulation and construction policy to guide the industry, and establish a construction industry council in a bid to properly lead the industry by promoting collaborative research and development with higher institutions.
- Assist the domestic construction industry by organizing a forum from every stakeholders of the sector such as interdisciplinary associations, and Assist public employers to strengthen themselves in staffing their planning, monitoring, evaluation and construction management unit to control their projects and Consider accreditation of professionals and firms to engage in the construction sector, and professional associations to lead their respective professions on the basis of their prescribed professional ethics required in their own respective field.

➤ *Expected from Employers*

- They need to check the financial health of contractors during evaluation of tenders, as shortage of cash flows ultimately impairs project progress and completion.
- Employers need to equip their staff with competent and seasoned professionals as it's vital to handle contractual issues of huge and complex construction projects, and Employers need to work to achieve timely response for issues forwarded from the engineer and Contractor.
- They need to strengthen their construction management team by setting up modern management techniques to evaluate and monitor reports of Engineers/supervision consultants goes in line with the actual situation in the ground, and to act on the early stages of the project to decide whether the project is suffering too much to consider termination before it is too late and Adhere to the contract provisions and procedures of termination as appropriate instead of letting troubled projects to proceed.

- They need to strengthen the procurement strategy for the future; hence it helps to award projects only for competent contractors, and Review the importance of traditional contracting system with the current trend in the international arena as compared to the domestic scene; for instance, considering design build.
- Even though there is lack of trust among stakeholders it is vital to consider partnering contracting system for the future, and Carry out capacity building for local contractors to meet cost, time, quality and safety standards required by the construction sector.
- Consider outsourcing of complex contractual issues to construction management consultants in a way to contribute for the development of the field, and establish qualification and accreditation criteria for those to be assigned as resident engineer and project manager positions in projects.

➤ ***Expected from Consultants***

- Set up modern management techniques supported by information technology systems where keeping the interest of the client (cost, time quality and safety) is vital, and adequate knowledge and education at least to match that of the contractor so as to manage the project.
- Avoid suppressing contractors outside their authority implied from the contract, and state of the art check and balance, tracking mechanism and professional ethics as a quality index.
- Be aware of the legal implication of their action and inaction in respect of the contract, and Act as per and only as the contract provisions as they only stand for their profession even though they represent employers in most cases.

➤ ***Expected from Contractors***

- Contractors need to offer in their tender the actual scenario instead of offering least prices as it ultimately back fires on them even to bankruptcy, and to improve their equipment, machinery and human resource to increase their capability to enhance their comparative advantage.
- Contractors must respect their Employer and adhere to the ethics of construction business for the wellbeing of the construction sector in general and the Works in particular, and need to concentrate on the works instead of cutting corners to make up their cost by unnecessary claims.
- Establish construction management and contract administration team within their company to handle day to day contractual issues.

- They need to look in to carefully and properly each and every contract documents before signing the contract to remedy any mishap therein, and need to have trust in professionals so that it will help boost their efficiency.
- They need to have modern recording techniques of their cost structure, resources, equipment etc., and Improve their awareness towards contractual issues instead of dwelling only on the BOQ.

With respect to Recommended Changes to Civil Procedure Code and PPA 2006 Contract Forms

- Article 315(2) of the civil procedure code need to be amended to avoid the obstacle it impedes on the arbitration proceedings of administrative contracts.
- Sub-Clause 62.1 of PPA 2006 need to amended in a way that only the loss of the employer shall be recovered, hence the remaining balance need to be returned to the contractor instead of confiscating the contractor's equipment/property.
- Clause 25 of PPA 2006 need to be elaborated in respect of dispute resolution procedures. It needs to be expressly stated including their chain of ladder up to arbitration and litigation.
- Sub-clause 47.7 need to be corrected to adjust prices before deducting the advance payment as per many international practices.
- PPA 2006 is not fit for large projects; hence it need totally be revised by integrating with MoWUD 1994 in lieu of the current state of the domestic construction industry.

5.2.1 Recommendation for Future Studies

- Assessment of Contract Administration of stakeholders in the domestic construction sector.
- Assessment of termination impacts on stakeholders: emphasis on Employers and Contractors
- Assessment of efficiency of the Ethiopian construction industry considering cost, time and quality parameters as compared to international standards.
- Study of price adjustment in the construction sector as compared to best international practices.
- Assessment of development of local arbitration institutions and their way forward.
- Study of termination clauses as applicable in the domestic construction sector.
- Study of Engineers Responsibility towards the Employer and the Contractor.

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Appendix

Dear Participant,

I am undertaking a research study entitled “Assessment of Conditions of Contract Problems in Ethiopian Construction Industry” as part of my MSc. Study in Construction Technology and Management at Addis College.

The aim of this research is therefore to assess the practices of conditions of contract/contract forms usage in such a way to forward recommendations based on the findings. The questionnaire is developed to assess the practice of major stakeholders in a construction project in using contract forms with the main focus on provisions related to price adjustment, termination and dispute resolution procedures.

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.

Kind Regards,

Yonas Gebeyehu /Researcher

Mobile No. 0937-38-45-04

The following survey questions are designed to assess the usage of contract forms in the domestic construction industry. Please consider each question in terms of your organization's experience and/or your personal knowledge.

Please indicate your response by ticking (X or √) mark at the appropriate box (es) or by filling the blank spaces provided, as appropriate. You may kindly use the back side of the paper if the blank space (s) is/are not sufficient.

1. Personal and Organization Profile

1.1. Name of Organization (Optional):

1.2. Type of Organization:

Client/Employer Consultant Contractor Professional Institution

Other (Please specify) _____

1.3. Years since establishment:

<5 years 5-10 years 10-15 years 15-20 years >20years

1.4. Organization's area of specialization:

Building Highway Water Works All infrastructure

Other (Please specify) _____

1.5. Your work experience in construction projects and construction project related works:

<5 years 5-10 years >10 years

1.6. Your participation in contract administration, construction supervision and project

Management:

5 years 5-10 years >10 years

1. General Questions

1.1. In general, how do you describe the performance of the Ethiopian Construction Industry?

Very Good Good Bad Very Bad
Other (Please specify) _____

2.1.1 If your answer is bad, what challenges may have contributed in your opinion for the Poor competence? (Please check all that apply in your point of view)?

- Lack of competent and experienced professionals in the field
- In appropriate and malpractices in the industry (fraud, corruption etc.)
- Absence of clear policy and regulations to properly guide the industry
- Scarcity of resources (capital, material, equipment etc.)

Other (Please specify) _____

2.2. Proper administration of construction projects is vital to optimize cost, quality and time.

2.2.1 How do you rate construction management practices in Ethiopia to achieve these goals?

Competent Fairly Competent Incompetent

If it is incompetent, what factor(s) do you believe behind the problem?

- Lack of professional, technical and managerial skill
- Limited professionals/firms for too many construction projects
- Too many consultant and management firms for few construction projects
- Negligence to provide the service as per the specified conditions

Other (Please specify) _____

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

Strongly Agree Agree Disagree Strongly Disagree

2.3.1 If you are in disagreement, where do you think the problem arises?

The contract/contract forms used

Problems attributed to the Employer/Engineer

Problems attributed to the Contractor

Other (Please specify) _____

2.4. Conditions of contract is one of the main integral part of contract document in construction contracts. Which contract form you/your firm use currently?

Ministry of Works and Urban Development, MoWUD 1994 contract form

Public Procurement Agency, PPA 2006 contract form

2.4.1 Federation International des Ingénieurs-Conseils, FIDIC Red Book contract form

FIDIC 1987 FIDIC 1999

FIDIC 2006, MDB (Multilateral Development Banks) Harmonized edition

Other (Please specify) _____

2.5. Understanding the provisions in conditions of contract by stakeholders is necessary to perform their duties. How do you rate the level of awareness of parties to use contract forms appropriately?

Employer Very Good Good Fair Poor

Engineer/consultant Very Good Good Fair Poor

Contractor Very Good Good Fair Poor

2.5.1 What do you recommend to improve understanding of parties in using contract forms?

Conduct on job training in individual firms/projects

Organize a forum between major stakeholders, public authorities, professional organizations, and academic institutions for the betterment of the industry

Creating awareness using peer discussion and experience sharing among professionals

Other (Please specify) _____

2. Readability and Interpretation

2.1. How clear and understandable are the concepts and ideas presented in the clauses of the conditions of contract currently used in the construction industry?

Very Good Good Fair Poor

3.1.1 If the provisions are not clear enough, what do you recommend to improve them in a Way to convey the intention of clauses clearly?

Provide glossary for contract forms

Refer the issue to the party publishing the contract forms

Refer the matter as a sole responsibility to the Engineer

Other (Please specify) _____

2.2. How do you rate the phraseology and conciseness of domestic contract forms compared to the commonly used FIDIC contract forms?

Compatible Fairly Compatible Incompatible

3.2.1 If it is incompatible what measure should be taken by major players in the industry?

Apply current contract forms by providing clarifications in special conditions

Revise the current contract forms to address recent developments in the field

Use FIDIC contract forms

Other (Please specify) _____

3.3 Interpretation is essential when ideas in clauses come across with ambiguity. To whom in

Your opinion shall such matters related to interpretation be referred to?

Engineer Dispute Adjudication Board

Arbitration Institution Courts

3.4 The terms 'Experienced Contractor' and 'Substantial Completion' are subject to varied Interpretation. How is the degree of clarity to your view in respect of these terms?

Very Good Good Fair Poor

3.4.1 If it is poor, what is your reason and recommendation to enhance its clarity to come up with a common agreeable terms _____

3.5 Provisions on interpretation in contract forms only deal with the order of priority of documents. Is it sufficient to interpret implied terms in the contract?

Yes

No

4. Price Adjustment

4.1. Price adjustment is allowed for labor, materials and equipment in conditions of contract.

However, adjustment is only allowed for materials comprising cement, bitumen, reinforcement bar and fuel in Ethiopia. As a result, domestic contractors are in disadvantage due to their limited capital base.

Strongly Agree

Agree

Disagree

Strongly Disagree

4.2. The two methods widely practiced for price adjustment are Base Price and Price Indices. Which method you prefer as suitable for the Ethiopian construction industry?

Base Price/Base Date/price

Price Indices

4.2.1 If you are in favor of Price Indices method of adjustment, how best is it to apply without any established price indices by the responsible public bodies in the country?

Establish new local price indices and revise periodically

Use foreign price indices

Other (Please specify) _____

4.2.2 If you favor the use of foreign indices, what control mechanism do you recommend on its credibility, unbalanced inflations of local currency and those currencies the indices are taken as the source?

4.3. Price adjustment formula uses an alternative adjustment coefficient using foreign indices through Z_o/Z_n . Shall this method be adopted?

Yes

No

5. Termination

5.1. Termination of a contract is the last resort where one or both parties fail to perform their obligations. Grounds for termination are provided in clauses of contract forms. Is termination on account of default done following the procedures as per the conditions stated in contract forms in Ethiopia?

Yes

No

5.1.1 If it is not applicable in a way as cited in the provisions, what do you think the possible factors that hamper its application?

Lack of awareness by parties regarding termination clauses

Long and cumbersome retendering process

Financial losses from the resulting termination

Other (Please specify) _____

5.2. Prolonged suspension is one of the major grounds for termination. How do you rate the potential of suspension instructed by the Engineer to end up in termination?

Very High

High

Low

Very Low

5.2.1 If you believe it is high, the Employer bears the responsibility due to the negligence of the Engineer. What measure is advisable to minimize such risks?

If the termination is due to the Employer's default, the contractor shall be compensated for idle Equipment, anticipated profit etc. how do you comment on this in light of wastage of capital and resources?

6.3. Claim initiation procedures are best listed in MoWUD 1994 and FIDIC 1987 contract forms while it is not as such dealt in PPA 2006 contract form. What draw back does it have in dispute resolution?

6.4. The contractor is given limited time frame to initiate claim and to submit particulars while the Employer is free from such limitations to initiate claim in recent PPA 2006 and FIDIC 1999 contract forms. How do you see its balance of risk?

Fair

Unfair

6.4.1 If it is fair what do you think the reason behind not to restrict the Employer to submit his claim any time unlike the contractor?

6.4.2 If it is unfair how much time shall be given to the Employer to submit claim?

More time than the contractor

Equal time to the contractor

Less time than the contractor

6.5. Public administration contracts are not arbitrable according to the civil procedure code article 315(2) while it is not restricted in the civil code. However, public contracts are being arbitrated locally and internationally in recent years. What is your opinion on this contradiction?

7.4. Consultants/Engineers and contractors are regular stakeholders in issues involving contractual matters. However, they are not aware of the legal implications of their action and inaction in most cases especially when their action resulted in claims and disputes. What measure shall be taken to create awareness concerning legal perspectives arise from construction contracts?

7.5. Even though it addressed some latest dispute resolution mechanisms such as Alternative Dispute Resolution (ADR), the PPA 2006 contract form is not exhaustive according to some industry experts compared to its preceding contract forms such as MoWUD 1994 and BaTCoDA 1987. Detail procedures addressed in these contract forms are referred to special conditions in the PPA 2006 contract form. What is your comment on the inherent risk of contradiction and ambiguity while drafting special conditions given limited professional input in such tasks?

Please kindly check no points are escaped!

Thank you very much for your time!