



**ALTERNATIVE DISPUTE RESOLUTION METHODS
IN CONSTRUCTION INDUSTRY:
AN ASSESMENT OF ETHIOPIAN SITUATION**

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When the remaining portion of my life has shaped itself to other business and apparently the strict academic life is hard to accept, after many years when I rejoined the University for Formal Class Room Education it was really challenge for me to cope up with the system. However, I overcame this unimaginable confront with internal courage and with all provisions made to me from every one. Dr.-Ing. Abebe Dinku, the advisor of this thesis is on the front line. His unfailing responses for all academic queries since my very beginning term paper on causes, effects and remedies of cracks in concrete, construction materials course, and then after through out my stay in the university has played vital role for my success. I really thank him; without his sincere supervision, guidance, and advice this research work couldn't be materialised. My special credit goes to Eng. Yohannes Bayonakis owner and manager of Baro Construction plc, Eng. Kassa Haile and Eng. Aberra Kassa of National Engineers, for their keen interest on the research work and remarkable contributions. I express my deepest gratitude to all who made this thesis a reality, including Ethiopian Roads Authority Civil Engineers particularly Eng. Zerfu Tesema and Eng. Teferra Tolerra. I thank all engineers, architects, and lawyers, who privately contributed in responding the questionnaires and giving their opinions for the enrichment of the thesis.

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Abbreviations

ADR = Alternative Dispute Resolution

BaTCoDA = Building and Transport Construction Design Authority

DRA = Dispute Review Advisor

DRB = Dispute Review Board

DRE = Dispute Review Expert

ERA = Ethiopian Roads Authority

FIDIC = Federation International Des Ingenieurs Conseils

IHA = Imperial Highways Authority

MoWUD = Ministry of Works and Urban Development

MOI = Ministry of Infrastructure

ABSTRACT

The aim of every construction project stakeholder is the completion of a project that meets the objectives of time, cost and quality. However, the construction process is often fraught with disputes over the interpretation of construction documents, existing conditions, the legitimacy of variations, timely payments, etc. The emerging Alternative Dispute Resolution (ADR) methods which are non-litigation alternatives offer opportunities for effectively resolving disputes in the construction industry. Depending on the nature of the relationship between the parties involved in the disputes and the circumstances under which the dispute is evolved, different methods of dispute resolution mechanism may be preferable. This research reviews alternative dispute resolution methods in construction industry with an assessment of the Ethiopian situation. It provides insights into decisions making on appropriateness of dispute resolution method that suit their needs.

These days both public and privately owned construction projects are increasing through out the country. The industry must change its treatment of conflicts, claims and disputes. Time should be used for works instead of wasting time for unnecessary litigation, and out-of-court dispute resolution methods need to be developed in the processing of construction management and project contract administration.

The Ethiopian civil codes that deal with contract in general and construction contract in particular are reviewed in this thesis. Construction of public works made by the Statutory or other administrative authorities that is governed by administrative contract as stated in civil code is also considered in the research.

Compromise and Arbitral Submission proceedings are addressed in the civil code with due procedure for detail implementation. The legal application of conciliation and arbitration relevant to public works and administrative contract, are examined in the research. The arbitrability of administrative contracts has controversial implications on the civil procedure code article 315 sub articles (2) and (4).

Construction law is a component of the major constituent of contracts in general in the Ethiopian civil code. Article 3019 (1) describes the provision of this chapter that is applied to contracts of work and labour relating to work to be done in connection with building repair or installation of immovable (civil code article 3019).

Applicable to Ethiopian construction projects, there are three main known standard conditions of contracts, the MoWUD, FIDIC and the ERA's standards. These conditions have clauses for treatment of Settlements of Disputes with initial provisions of Engineer's decision, and successive other appeals.

Conflicts and disputes are not synonymous concepts: conflict is the process of expressing dissatisfaction, disagreement and unmet expectations. On the other hand dispute is associated with distinct justifiable issues. This concept is discussed with references to different researchers' opinions. However, the resolution or management of disputes and conflicts in the construction industry may have three types of approaches;

- i. Preventive,
- ii. Amicable and
- iii. Judgmental resolutions systems.

Disputes and conflicts in the Ethiopian construction projects are assessed during the research work. The disputes between the stakeholders in the industry are enumerated, and existing trends of dispute resolution in Ethiopian construction projects relevant with the conditions of contract are also considered.

The proceedings of claims are not yet widely shown itself to the construction projects executed by domestic contractors. The attitude towards claim requires proper concept. Someone who asks claim does not mean he/she is insubordinate to the construction industry. If one suffers from loss of money or time or both there is no reason for not providing compensation if his/her request is legitimate. Ethiopian domestic contractors have to understand their rights and get involved in the construction business professionally and ethically.

Case studies are carried out in disputed projects. The resolution options applied to these projects support the preference of Alternative Dispute Resolution Mechanisms over Litigation. Normal court tribunals do not perform construction disputes as required. This fact is witnessed in one of the case studies.

When disputes or conflicts occur, stakeholders need to give due attention and facilitate amicable resolution. Once disputes escalate out of control and reach litigation, it means loss to either or both parties, since the outcome is unpredictable.

Dispute occurrences between stakeholders are witnessed by the respondents during the assessment. On dispute- conflict existence between client and consultant 62.07% of them cited that consultants do not complete the services in the scope, inadequate quality of design, drawings, and specifications. 42.11% of the responses from client-contractor dispute, ascertain that contractors' delay on progress and completion of works, contractors do not follow their plans and occurrences of liquidated damages. Not approving payment on time, not responding and deciding timely on variations, decisions, drawings, clarifications and instructions required from consultants is 41.38% in dispute occurrences between consultant and contractor.

Alternative Dispute Resolution Mechanisms in the construction industry have wide application all over. However, due to absence of general construction policy, and weak relationship between the stakeholders', Ethiopian construction projects suffer from a lack of legitimate ADR application. The litigation option does not show itself compatible option for dispute resolution as witnessed. Hence, Alternative Dispute Resolution methods have to be developed in the Ethiopian construction projects administrations and managements.

Key words: *Alternative Dispute Resolution (ADR), Arbitration, Claim, Conflict, Dispute, Litigation, Mediation*

CHAPTER ONE

INTRODUCTION

1.1 General

Construction is plagued, perhaps more than any other industry, with disputes due to the inherent conflict of interest between the buyers of construction services (i.e. the owner or employer) and the sellers of the services (i.e. the contractor). The buyer wants to receive the most value for its construction finance whereas the seller wants to spend the least amount of money while meeting its contractual obligations. Unfortunately, these obligations are seldom, if ever, stated in clear enough language to preclude misunderstandings. Over the years, the industry has learned to rely on the design engineer or the architect, who formulates the construction documents, i.e. the most likely author of the misunderstanding, to clarify it and to decide on the corresponding responsibilities of the parties (Steve Revay, 1995).

Construction projects are among the most complicated of human enterprises. High levels of art and craft are required to translate an owner's vision into plans and specifications, then into real structures, one that fits the needs of the individuals and the public. In addition to technical skills, the ability to coordinate the diverse efforts of many individuals is crucial to success. The participants on any significant project include the owner, architect, engineer, project manager, prime contractor, several subcontractors, suppliers of materials and equipments, materials manufacturers, insurance companies, banks, owner's lender, financiers, etc. In most instances, these partakers arrive at the project as a member of a staff or crew of distinctly different companies. Problems crop up during construction projects due to delay, unexpected additional or extra work, defective work, cost overruns, structural failure and accidents, late informations, interpretation of documents, unforeseen circumstances, etc. If these causes are not addressed, they result in disagreements that may escalate into litigation. This escalating process will involve more people, additional time, and higher costs.

What can anyone do to prevent disputes from arising? It might not be possible to give a simple and straightforward answer. However, owners, consultants and contractors who are the main participants, can do quite a lot of effort to reduce the number of disputes and to manage

conflicts that arise, so that they do not become prolonged and drain resources of time and money.

With the increasing development of complex and fast track construction projects, disputes are virtually inevitable. The perceived shortcoming of litigation and arbitration, with their concomitant rise in costs, delays, and adversarial relationships, have encouraged the rapid growth of Alternative Dispute Resolution (ADR) processes, such as mediation, conciliation, adjudication, and other hybrid processes that are being widely used by the construction industry worldwide (Cheung, Henry and Lam 2002).

Mediation is a dispute resolution mechanism in which a neutral third party meets with the disputants and facilitates negotiation to the parties to come to their own solution. Conciliation needs the involvement of third party in settling dispute with expert opinion in amicable dispute resolution process. Adjudication is a process in which the decision of a third party neutral, named in the contract, is binding upon the parties with respect to any matter in dispute until the contract is complete.

Disputes in the construction industry often involve the resolution of complex technical and factual issues. The formal processes such as litigation may often not be the best way of dealing with this type of disputes. Traditionally, arbitration has widely been used, being even included in standard contracts as a means of dispute resolution and has been found to be cheaper and less time consuming than litigation.

However, many disputes have been amicably resolved satisfactorily, sometimes informally, without the need for arbitration or litigation. ADR methods are the responses to shortcomings of the conventional judicial system such as rigidity and limited choice, especially in the modern commercial world (Hibbered and Newman 1999). Therefore, the introduction of ADR methods is to formalize the informality. The new commercial environment appeals to the application of ADR methods with its characteristics of choice. Often, more than one method may be used in the same dispute and parties can then shape the outcome based on the unique circumstances of the dispute. Fenn and Gameson (1992) have advised that ADR does not seek

to replace the court processes, nor does the use of ADR imply that litigation and arbitration should not be used at all; they should only be used when other venues have been exhausted.

1.2 Genesis of the Study

The objectives of this research are, through case studies:

- i.** to identify the existing practice of disputes resolution methods in Ethiopian construction projects, with respect to public construction and domestic contractors,
- ii.** evaluate the prevailing dispute handling methods, and finally
- iii.** recommend possible ADR methods.

In a construction project setup, conflicts are inevitable due to numerous reasons, including conflict of interest between those who take part in the processes, the non-exhaustiveness of the construction document, actual working condition, and other related factors. Ethiopian construction project practices are not exceptional to this collective truth.

What proceedings do we have with respect to Ethiopian Civil Code and Civil Procedure Code or any other relevant rules and regulations, for dispute resolution mechanisms? The current conditions of contract for civil engineering works provisions and its practicable application to ADR are the initiation to this research.

The adapted MoWUD standard condition of contract from FIDIC might have been adequate for the time when it was put into practice. When MoWUD's standard condition of contract was introduced, the construction contracting was mainly between public agencies and government construction contracting firms for public projects, that is, the contracting parties were government bodies. Accordingly, when dispute arises between these parties their common government institution is legitimate to reconcile their cases as deemed necessary.

But for the case of two independent such as non-government stakeholders, this may not be appropriate; it requires independent body of their common choice. The current advancement of Ethiopian domestic contractors into large and complex construction projects invites the necessity of alterations from the inapplicable standard condition for dispute prevention or solution methods of construction projects, to practicable methods. Construction activities, in

all their complexities of interpersonal relationships and technology, seem to confirm this notion. When construction disputes become trials, the limited sources of time, talent and money are used in a very non-productive manner. The reduction of such unproductive efforts should be a major priority. A study of the nature of construction disputes might be fitting in this respect. By understanding such contentious facts, it is hoped that adversarial activities can be controlled or reduced.

Implementing the ADR system may be, primarily, the client's responsibility, successful operation being shared by the client and contractor. It is a good practice to plan in advance and to agree on a means of dispute resolution prior to the start of a project when all parties are operating from position of relative strength. In light of the costs, complexities and number of parties involved in most construction projects, there is always a chance that disputes will arise at some point during the course of a project. Failure to select a means of resolving disputes prior to the start of project may force one or more parties to participate in an undesirable process that may initiate dispute.

1.3 Particulars of the Research

At the inception of this report, discussions were held with professionals, contractors, consultants, public works clients and regulatory bodies. Concerns for requirement of research for conflicts, disputes and claims management in appropriate system are common to all. The topic is vast and for this particular research it is opted to focus on public works, domestic contractors and local fund. However, for better concept and to gain experiences to a certain extent assessments were made in foreign funded projects that involved domestic contractors.

Whereas such non technical research works related to contract administration of construction projects is carried out in civil engineering works, it is not easy to get the required unabridged data in present Ethiopian construction projects administration. There are lacks of proper recording events in the whole life of project implementation. The public agencies for administering public projects do not have rich culture to entertain such type of researches.

When we approach domestic contractors, the case even goes to worse state of affairs. Contractors, who are supposed to play the main role in understanding conflict, claim and dispute with clue to its resolution, have little or no awareness with exception of a few. Some consultants are better aware to the situation and have relatively better understanding.

Consequently, Alternative Dispute Resolution Methods in Ethiopian construction projects have to be assessed and future ground have to be laid for further development. If there is no such circumstances it has to be started somewhere, some time and has to be developed in due course.

CHAPTER TWO

LITERATURE REVIEW

2.1 The Ethiopian Legal System and Contracts

2.1.1 The Legal Structure

Ethiopia had three modern constitutional eras. The Ethiopian Empire led by the last Ethiopian Emperor statute No.149/1955 of November 4th 1955, the Provisional Military Government later reshaped itself as Peoples Democratic Republic of Ethiopia, proclamation No.1/1987 of September 12th 1987, and the Federal Democratic Peoples of Ethiopia constitution No.1/1995 of August 21st 1995.

According to Chapter five, article 50 of the current Constitution there are nine sub articles describing the structure of the Organs of the State. This description illustrates that, the Federal Government and the States shall have legislative, executive and judicial powers.

The house of representatives is the legislative body, which is the law-making organ. That is responsible for producing different proclamations. The highest executive powers are vested in the prime minister and in the council of ministers that implements and translates the law as required. The judicial system is independent and the judges shall exercise their functions as directed solely by law.

The Ethiopian legal system is a codified system of law. There are five main codes.

- i)** The Civil Code of 1960;
- ii)** Criminal Code of 1960;
- iii)** Civil Procedures Code of 1965;
- iv)** Criminal Procedures Code of 1965; and
- v)** Commercial Code of 1960

The Courts of the Federal Government and Regional states are:

- i) First Instance Courts;
- ii) High courts; and
- iii) Supreme Courts;

2.1.2. Contracts in General

A contract is an agreement whereby two or more persons as between themselves create, vary or extinguish obligations of a proprietary nature (Art. 1675 civil code). 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, legal 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 article 1679); and the parties subject to the mandatory provisions of the law shall determine the content of the contract (Art. 1731 civil code).

Agreement of the parties is outlined in the civil code article 1680 as:

- (1) A contract shall be completed where the parties have expressed their agreement thereto,
- (2) 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.

Requirements of the law for the formation of valid contracts are:

- (i) the parties must be capable of contracting and give their consent sustainable at law,
- (ii) the object of the contract is sufficiently defined and is possible and lawful,
- (iii) the contract is made in the form prescribed by law, if any (article 1678 Ethiopian civil code)

2.1.2.1 Administrative Contract

Ethiopian civil code article 3131 gives rules applicable to contracts of administrative authorities. According to this article, sub articles (1) and (2) contracts concluded by the State or other administrative authorities shall be governed by the provisions of this code, which relate to contracts in general or special contracts. The provision of this title shall supplement or replace such provisions where the contract is in the nature of an administrative contract. This article is reinforced by article 3132 for administrative contracts.

A contract shall be deemed as an administrative contract where:

- (a) It is expressly qualified as such by the law or by the parties; or
 - (b) It is connected with an activity of the public service and implies a permanent participation of the party contracting with the administrative authorities in the execution of such services;
- administrative contract formation and other provisions are codified from article 3134 through 3171 in the civil code.

When performing an administrative contract, the officer shall follow, model specifications, general clauses, conditions, and common directives. These may be drawn up by each interested administrative authority applicable to particular contract that may be declared by Legal Notice and published by the Negarit Gazeta, such as Proclamation No. 430/2005 of 12th January 2005 for Determining Procedures of Public Procurement and Establishing its Supervisory Agency. These procedures are briefed as follows:

1. Model specifications need to constitute standard specifications, formulated in advance and in a general way by the administrative authority, for the concession of public services.
2. General clauses and conditions have to fix the provisions applicable to all or some of the contracts concluded by specified administrative authority.
3. Common directives shall fix the technical provisions applicable to all contracts relating to a given kind of works or supplies.
4. A contract concluded by an administrative authority shall be of no effect where the authority, which has concluded it, has not received the necessary authorisation prescribed by administrative laws or regulations.

2.1.2.2 Contract of Public Works

A contract of public works is a contract whereby a person, the contractor, binds himself in favour of an administrative authority to construct, maintain or repair a public work in consideration of a price [Civil code article 3244 (1)].

Formation of contract, normal performance of contract, rescission of contract, non performance of contract and assignment of or giving the contract security are detailed in the substantial civil code of 1960 from articles 3246 through 3296.

The proceeding of formation of contract is that the administrative authorities may put up for competition the accomplishment of a project for a work among skilled persons or among specialized undertakings.

- The administrative authorities shall be strictly bound to respect the rules of the competition made by them.
- After the competition, they shall be free to allot the contract to whom they think fit, unless they have expressly undertaken to choose the competitor who is ranked first.

Where the contract only relates to the supply of materials for carrying out a public work and the supplier himself takes no part in carrying out the work, the contract shall not be one of public works but of supplies only [Civil code article 3244 (2)].

Contracts of supply, states that the submission of the preliminary claim has to be submitted to the administrative authorities according to the civil code article 3306. This is stated as:

- (1) The supplier shall firstly make his claim to the administrative authority in the cases and within the measure in which the contract imposes upon him such preliminary procedure.
- (2) A recourse to the judicial authority, which is not preceded by the obligatory claim to the administrative authorities, shall not be admissible.
- (3) Where the contract prescribed a period for the claim to the administrative authorities and the supplier has failed to make such claim in due time, such claim shall be barred and the recourse to the judicial authorities shall not be admissible.

2.1.3 Compromise and Arbitral Submission

The Civil Code under title of Compromise and Arbitral Submission States the issues of Compromise, Conciliation, and Arbitral submission from articles 3307 – 3346:

2.1.3.1 Compromise

According to the Ethiopian civil code article 3307, a compromise is a contract whereby the parties, through mutual concessions, terminate an existing dispute or prevent a dispute arising in the future. This article states both solutions for occurred disputes and precaution measures to control anticipated disputes.

A compromise may be made to create, to modify or to extinguish legal obligations. The forms required by law for the creation, modification or extinction of these obligations without consideration shall be compiled with the law as outlined in civil code article 3308 (1), (2).

2.1.3.2 Conciliation

When the parties in dispute require conciliation according to civil code article 3318, they appoint a conciliator. The appointment of the conciliator is with the following provisions,

- (1) The parties may entrust a third party with the mission of bringing them together and, if possible, negotiating a settlement between them, or,
- (2) The conciliator may be appointed, at the request of the parties, by an institution or by a third party.
- (3) The person appointed as conciliator shall be free to accept or to refuse his appointment.

The outlined Conciliation procedures on the civil code are incorporated in this thesis on amicable dispute resolution methods under section 2.4.2.3, which includes duties of parties, duties of Conciliator, time –limit and power of the conciliator.

2.1.3.3 Arbitral Submission

The Ethiopian civil procedure code on chapter 4 article 315 gives the following procedure for arbitration.

- (1) Where arbitration is required by law or persons have entered into a written agreement to submit present or future differences to arbitration the provision of this chapter shall apply.
- (2) No arbitration may take place in relation to administrative contracts as defined in Art. 3132 of the Civil Code or any other case where it is prohibited by law,
- (3) No person shall submit a right to arbitration unless he is capable under the law of disposing of such right.
- (4) Nothing in this chapter shall affect the provisions of Art. 3325 – 3346 of the Civil Code,

There is controversial connotation between articles 315 (2) and 315 (4) and is discussed under section 4.3 of this thesis.

Appointment of arbitrator by court, procedure before arbitration tribunal, making of award, appeal and execution are prescribed in the civil procedure code from article 316 through 319.

As per the definition of the civil code article 3325 (1) the arbitral submission is the contract whereby the parties to a dispute entrust its solution to a third party, the arbitrator, who undertakes to settle the dispute in accordance with the principles of law.

(2) The arbitrator may be instructed only to establish a point of fact without deciding on the legal consequences following there from.

Capacity and form for Arbitration is stated in the civil code article 3326 as:

- (1) The capacity to dispose of a right without consideration shall be required for the submission to arbitration of a dispute concerning such right.
- (2) The arbitral submission shall be drawn up in the form required by law for disposing without consideration of the right to which it relates.
- (3) Articles 3327 to 3346 deals with all the processes of arbitration in detail, the appointment of an arbitrator and the time limit are integrated in this thesis, typical step in arbitration 2.4.3.2.1

2.1.4 Construction Law

Construction law is part of the main component of Contracts in General of book IV title XII of the civil code, and Construction Contracts are treated on Contract of work and labour relating to immovables.

Civil code article 3019 (1) describes the provision of this chapter that is applied to contracts of work and labour relating to work to be done in connection with the building, repair or installation of immovable. The contract shall be complete where the parties have agreed on the work to be done and on the price. There shall be evidence of the contract where the contractor has undertaken work to the knowledge of the client or received an advance from the client (civil code article 3020).

The work to be done may be described by means of a plan, schemes or other document. The contractor shall comply in such case with the indications given in such documents (civil code article 3021). Details of the provision of this contract are described in the Ethiopian civil code from article 3022 to 3040. In addition civil code articles 2610 – 2631 for contract of work and labour of very limited amount as stated under article 2611 (2) where the total cost of the building to be done does not exceed five hundred Ethiopian Birr is part of construction contract.

2.1.5 Construction Conditions of Contracts

Construction conditions of contract in practice are for national and international contractors. The former Building and Transport Construction Design Authority (BaTCoDA) had adapted the General Conditions of Contract for Civil Engineering works from FIDIC. The then Ministry of Works and Urban Development reprint this in 1994 and still on use by the Ministry of Infrastructure, Design and Construction Supervision Office for the federal and respective regional authorities. The Ethiopian Roads Authority was using the standard specification of 1968, although nowadays the general condition of contract of MoWUD is substituting it with considerable inclusion of amendments. The FIDIC condition of contract is for international contractors.

2.1.5.1 Settlement of Disputes

2.1.5.1.1 The FIDIC Clause 67 Settlement of Disputes

The Engineer is the key person in FIDIC clause 67.1 for any dispute that arises between the employer and the contractor. *[In FIDIC the Engineer is the person appointed by the Employer to act as Engineer for the purpose of the contract according to clause 1.1 (iv)]*

“When dispute arises between the client and the contractor, the matter shall be referred to the Engineer, with a copy to the other party in writing. No later than the eighty-fourth day after the day on which he received such reference the Engineer shall give notice of his decision to the Employer and the Contractor.”

“If either the Employer or the Contractor be dissatisfied with any decision of the Engineer, or if the Engineer fails to give notice of his decision on or before the eighty-fourth day on which he received the reference, then either the Employer or the Contractor may, on or before the seventieth day after the day on which the said period of eighty-fourth days expired, as the case may be, give notice to the other party, with a copy for information to the Engineer, of his intention to commence arbitration, as hereinafter provided as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and subject to sub-clause 67.4, no arbitration in respect thereof may be commenced unless such notice is given.”

“According to FIDIC, if the Engineer has given notice of his decision as to a matter in dispute to the Employer and the Contractor and no notification of intention to commence arbitration as to such dispute has been given either the Employer or the Contractor on or before the seventieth day after the day on which the parties received notice as to such decision from the Engineer, the said decision shall become final and binding upon the Employer and the Contractor.”

a. Amicable Settlement

FIDIC proposes that where notice of intention to commence arbitration as to a dispute has been given in accordance with Sub-Clause 67.1, arbitration of such dispute shall not be commenced unless an attempt has first been made by the parties to settle such dispute

amicably. Provided that, unless the Parties otherwise agree, arbitration may be commenced on or after the fifty-sixth day after the day on which notice of intention to commence arbitration of such dispute was given, whether or not any attempt at amicable settlement thereof has been made.

b. Arbitration

When a dispute does not get settlement in both the Engineer's decision and the amicable settlement as stated above, FIDIC gives right of commencement to Arbitration. This is under the rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC) unless otherwise specified in the contract.

2.1.5.1.2 The MoWUD Clause 67 Settlement of Dispute – Arbitration

The dispute shall be referred to and settled by the Engineer who shall within a period of ninety days after being requested by either party to do so give written notice of his decision to the Employer and the Contractor. According to MoWUD, standard condition clause 1 (c) *The Engineer is the natural or judicial person designated as Engineer in writing by MoWUD.*

MoWUD shall finally settle all disputes or differences in respect of which the decision, if any of the Engineer has not become final and binding as aforesaid or his Authorized Representative shall be final and binding. The MoWUD conditions of contract does not give option for Alternative Dispute Resolution Methods, Amicable and Arbitration which is inclusive in FIDIC. There is no provision for formal arbitration, though the clause bears the title, arbitration. The practical roles played by the Ministry are not formal Arbitration as discussed in section 2.4.3.2 and 2.4.3.2.1 of this thesis.

Disputes mainly from contractors are presented to the Ministry of Infrastructure, Design and Construction Supervision Office; MoI's experts evaluate the evidence according to the rules, contract and practice that is applied appropriately in the dispute, propose the likely outcomes of the case, and give their final decision. The process is rather tending to adjudication at certain projects and at others conciliation. Nevertheless, it is not formal arbitration ruling and award. The other argument is that when a contractor enters a contract agreement with public authorities for public works, their contract is administrative contract according to article 3132

of the civil code. This implies that the contract is non-arbitral according to the civil procedure code article 315 (2). Thus, in reality there is no arbitration clause on MoWUD standard condition of Contract. Subsequently, it implies that the parties have agreed based on their contract that the decision of MoI's Engineer or the minister is binding on them.

2.1.5.1.3 ERA's Settlement of Disputes

The ERA's Standard Specification treats the settlement of disputes mainly for road construction projects. This has five sections in successive steps in settling disputes, commencing with the Engineer, who shall respond within 120 days, his recommendation shall be final and binding. If the Engineer fails to make a recommendation within the prescribed period of 120 days or if either party is dissatisfied with his recommendation, either party may, within 150 days of the original request to the Engineer, refer the dispute to the General Manager of Highways. The General Manager shall decide the matter within 30 days, furnishing each party a copy of his decision. The decision of the General Manager of Highways shall be final and conclusive and binding on both parties unless within 30 days of receipt of such decision the Contractor presents notice to the General Manager of Highways of his intention to submit the dispute to arbitration.

In the event the Contractor receives notice of his intention to submit the dispute to arbitration as previously mentioned, the General Manger of Highways shall refer the matter to the IHA Board of Commissioners who shall hear the parties, review the record, if need be hear witness, and attempt to bring the parties to agreement. Failing such agreement the IHA Board of commissioners shall with in a reasonable time render a written decision. Such decision shall be final and conclusive unless within 30days by notice to the General Manager of Highways the Contractor appeals to arbitration. Arbitration shall be in Addis Ababa under the Rules of Arbitral Submission (Articles 3325 – 3346) of the Civil Code of the Empire of Ethiopia. Both parties shall have the right of appeal to the High court of Ethiopia against such award. This standard condition of contract has arbitration option.

2.2 Dispute-Conflict in the Construction Industry

2.2.1 Introduction

The initial attempt of this thesis was to make the research under the title “Dispute Resolution and Conflict management”. That is to identify disputes and conflicts in the Ethiopian Construction Industry and assess the resolution method and their managements respectively. However, the assessment revealed that this concept is not disseminated in the industry, except with very few senior professionals. Very few respondents appreciated the demarcation. After due consultation is made the approach has been modified to current research work. Hence, even though this, final research is made under the title “Alternative Dispute Resolution Methods in construction industry: an assessment of Ethiopian situation”, the concept of dispute and conflict is briefly presented as expressed by different researchers. Ethiopian construction projects’ stakeholders also illustrate this concept in section 4.1 of this thesis.

The construction process involves Multi-organizational activity. Conflict and disputes can therefore exist at all levels in the contractual chain: between Client/Consultant, Client/Contractor, Consultant/Contractor, Contractor/Sub-Contractor, Sub-Contractor/Sub-Contractor, Client and Sub-contractor and so on. Types of conflict and dispute arising from construction contractual relationship can be summarized into three categories.

1. “Time” related (that is claim from the contractor for the extension of time for completion of the project),
2. “Money” related (that is claim from the contractor for payment of the value of variations and/or reimbursement of loss and expense),
3. “Quality” related (that is Assertions by the client of defective material and workmanship).

2.2.2 Dispute-Conflict Concept

Survey of the literature on conflicts and disputes in construction reveals confused usage of the terms. The terms “conflict”, “dispute”, and “claim” are used separately or in pairs and frequently without clear indication of the precise meaning of each use. There is often lack of

clarity as to whether the researcher is referring to “claims” per se (that is claims which are resolved between the parties and do not therefore become dispute), or to “disputes” (that is those claims which are not resolved and escalates to disputes), or conflict that is not either appeared as claim or dispute.

Is there a difference between conflict and dispute? Some authors interchange the two terms, others point to conceptual differences, even if they are blurred. However, 'Conflict' and 'dispute' are two distinct notions. Conflict, it is proposed, exists wherever there is incompatibility of interest, and therefore is pandemic. Conflict can be managed, possibly to the extent of preventing a dispute resulting from the conflict. Dispute is associated with distinct justifiable issues. Generally the process of dispute resolution lends itself to third party intervention. It is concluded that effective management of conflicts and disputes would be furthered by separating the two fields, and particularly by applying a more stringent structuring (Peter, Michael and Edward, 1998).

John Burton (1990) distinguishes the two based on time and issues in debate. Disputes, Burton suggests are short-term disagreements that are relatively easy to resolve. Long-term, deep-rooted problems that involve seemingly non-negotiable issues and are resistant to resolution are what Burton refers to as conflicts. Though both types of disagreement can occur independently of one another, they may also be connected. In fact, one way to think about the difference between them is that short-term disputes may exist within a larger, longer conflict.

Costantino and Merchant (1996) define conflict as the fundamental disagreement between two parties, of which a dispute is one possible outcome. This is similar to Douglas Yarn's (1999) observation that conflict is a state rather than a process. People who have opposing interests, values, or needs are in a state of conflict, which may be latent (meaning not acted upon) or manifest, in which case it is brought forward in the form of a dispute which cannot exist without a conflict.

Conflict is the process of expressing dissatisfaction, disagreement, or unmet expressions. Conflict is ongoing, amorphous and intangible (Costantino and Merchant 1996).

Loosemore and Djebarni (1994) comment that whilst there is little consensus among sociological scholars on a specific definition of conflict as a common denominator is that for

conflict to occur there must be an incompatibility of needs and a perception by one party that this incompatibility interferes with the attainment of that person's needs.

Brown and Marroit (1993) subscribe a similar definition. "A conflict exists, in the mind of an individual, when he/she perceives a situation of incompatibility among objectives, whereas a dispute is a conflict of which both parties are conscious and which is the subject of alteration between them.

Brown and Marriot (1993) defines further dispute as a class or kind of conflict, which manifest itself in distinct, justifiable issues. It involves disagreement over issues capable of resolution by negotiations, meditation, or third party adjudication.

Brown and Marriot (1993) furthermore cite the definition given by D.Foskett QC in the law and practice of compromise: "An actual 'dispute' will not exist until a claim is asserted by one party which is 'disputed' by the other" Brown and Marriot (1993).

In similar vein Fenn et al (1997) suggests, "Conflict exists where there is an incompatibility of interest. When a conflict becomes irreconcilable and the mechanisms for avoiding it are exhausted, or inadequate, techniques for resolving the dispute are required."

A dispute is a product of unresolved conflict and, in contrast to conflict, is tangible and concrete. It has issues, positions, and expectations for relief (Costantino and Merchant 1996). In addition to disputes, conflict can manifest itself in a variety of other ways- sabotage, lack of productivity, low morale, and withholding information are some examples.

Not only does the incidence of conflict and disputes vary from project to project, but also seemingly similar circumstances (and sometimes even the same design/construction team) lead to conflict and disputes on one project, but not on another. It seems that if the participants in the construction process, especially the client, have a sound understanding of the factors, which cause conflict, and disputes they could, if they wish, take appropriate avoidance measures. Conflict is normal in the construction industry. One should expect it. After all, the construction industry is one of the most diverse industries. It embraces many crafts and professions. It involves many parties, each with its own values, beliefs, interests, education and needs.

Construction disputes frequently appear to be problems of money, but proposals for settlement can depend on alternative materials, additional work, corrections to completed work, or even the prospect of repeat orders and future work. The modern requirements for reduced construction time, stricter financial control and ever-increasing complexity in contracts have resulted in a greater proportion of conflicts with a managerial origin. These conflicts include problems caused by inefficient management (by either party), inadequacies in briefing, failure of programming, late issue of drawings, design errors, over-zealous supervision, poor communications, etc.

The legal and administrative systems we have traditionally depended on for resolving dispute tend to be adversarial and are designed to select winners and losers, often ignoring the legitimate concerns of one side or the other. However, if only one side "wins", the losing party is likely wants to shift the conflict to another arena or seek revenge in an unrelated situation. Furthermore, conflicts which depend on the interpretation of technical data have an additional need to deal wisely with uncertainty and with what is and is not known about the natural systems and scientific principles involved.

2.2.3 Conflict Management

Success in construction projects mainly depends on how well project managers handle conflicts. There are in general five conflict management approaches: withdrawal, compromise, forcing, smoothing, and problem solving. Conflict results are very relevant to the interaction of the approaches. Improperly managed, the interaction often generates psychological residue such as anger that ruins the project.

Project managers need to manage conflict mainly so as, to avoid its escalation to disputes, to prevent deterioration of relationships, to avoid adverse effects on timing and quality of the product, and to curtail the costs of conflict resolution.

Knowing the areas where conflict is likely to arise, and carefully planning to address them, can reduce the risk of conflict, and therefore increase the chance of a successful project for all concerned.

2.2.4 Causes of Disagreement in Construction Projects

There is a great deal in the literature, as to the causes of conflict and disputes. Indeed, suggested causative reasons are almost as numerous as are researchers. There is also a profusion of key terminology. Some writers refer to “causes” of conflict, others “sources” “reasons”, or “triggers”.

The following are identified as causes of disagreements from literature survey: (Henk Botha, 2000)

- a.** Misunderstandings usually occur because of poor communication.
- b.** Values differ between people, professionals and skills,
- c.** People often have unrealistic expectations. The client wants speedy completion and a quality building at a low price. The contractor may want more time, a more reasonable quality and maximum price.
- d.** Emotions play a role, the ability to handle stress causes conflict. A person’s self-esteem (or lack of it) can cause also conflict. Factors under this heading include languages, dynamics, geography, childhood experiences, upbringing and religion.
- e.** Education levels, both structured and unstructured learning can have an influence on conflict.
- f.** Many things are different between projects. There are different teams, different funders and designers.
- g.** Not all people are equally skilled to visualize two-dimensional drawings in a three-dimensional way.
- h.** Changes to plans, deadlines, payment dates, and so on, can cause conflict.
- i.** It does not matter whom or what one must blame for a delay. It could be the weather, a subcontractor, the bank or whoever. The mere fact that there is a delay could cause conflict.
- j.** Parties often inadequately define quality. High quality may mean different things to a plasterer and to the project director or project manager. One must use objective standards to define materials and workmanship. One must precisely describe what one requires. A client may specify a much higher standard than what he really wants while wanting a lower price.

- k. A sub-contractor may misunderstand the actual requirements and may quote a lower price than other contractors may, then when he realizes his mistake, conflict results.

Some of the areas that generate conflicts are as follows :(Robert C. Epstein, 2004)

2.2.4.1 One-Sided Contracts

Owner-drafted contracts frequently reflect the mentality that conflict can be avoided by protecting the owner from all possible claims. Such contracts contain exculpatory language, waivers and limitations intended to bar virtually all claims by the contractor. The idea is to protect the owner from all foreseeable and unforeseeable risks by shifting responsibility for those risks to someone else. One-sided contracts, however, may generate as many claims as they prevent.

Construction claims principally are caused by:

- (a) unforeseen or changed project conditions;
- (b) changes in the work,
- (c) late provision of drawings, access, permits, equipments or materials;
- (d) inadequate drawings or specifications; and
- (e) interference in the work,

When commencing construction, contractors justifiably expect that all necessary permits are in place; they will have access to the work; they will receive timely engineering and owner-supplied information; shop drawings will be promptly reviewed; and unexpected conditions or changes will be fairly compensated. Where these expectations are not met, contractors often lose money on a project, prompting claims no matter what the contract provides. In a worse case scenario, severe losses may force a contractor out of business, resulting in a failure to complete the work and the attendant delays, disruptions and inevitable costs to the project. Construction conflicts are more likely to be avoided through a fair allocation of project risks, not only in trying to safeguard the client in formulating the one-sided contract document. The guiding principles are that risks should be allocated as follows: First, risks should be allocated to the party who has direct control over the portion of the process that creates the risk. Second, where no party has direct control, risk should be allocated to the party who is best able to protect against an unexpected loss or casualty. Finally, where no party has control, risks

become the responsibility of the owner, who is the party that initiated the construction project and presumably is the ultimate beneficiary of the results.

2.2.4.2 Project Delivery Systems

The delivery system selected for a project, and the contract structure reflecting that system, can greatly affect the risk of conflicts regarding such fundamental issues as scope, time, money and risk allocation. The traditional single-prime contract for a fixed price between the owner and contractor is the most commonly used and best-understood project delivery format. This type of contract, with a clear chain of command, removes all ambiguity regarding which party is responsible for management of the construction work and which is responsible for the design (Robert C. Epstein, 2004).

Driven by market forces, recent decades have seen the use of innovative project delivery systems and innovative contract forms reflecting those systems. Design-build, construction management and fast-track delivery systems often provide economic benefits to the owner. An owner may need an office building by April, a shopping center by June, or a school by September. Such circumstances can justify a fast track or design-build approach. Innovative project delivery systems, however, often blur the traditional roles and responsibilities of parties on a construction project. Owners should understand that the use of non-traditional contract approaches creates greater risks of misunderstandings, particularly where the scope of work and compensation are changing continuously during the project. Owners, therefore, should understand that the contingencies involved in non-traditional construction approaches are greater than in the traditional single prime contract approach, and should plan accordingly (Robert C. Epstein, 2004).

2.2.4.3 The Design

An incomplete, inaccurate or poorly coordinated design inevitably will produce a project with conflicts and unanticipated costs and delay. Conversely, nothing diminishes the risk of misunderstanding and litigation, and provides more protection for the owner, than an accurate and complete design. The traditional single prime contract can succeed only if, when the

contract is priced, the plans and specifications are reasonably detailed and complete. Otherwise, the contract sum becomes an unreliable figure subject to changes and claims for delays and impact damages.

However, in order to obtain a complete and accurate design, the owner must give its architect/engineer a reasonable period to develop a complete set of plans and specifications, and provide a fair fee for that service. The owner who pinches pennies with its architect and sets an unreasonable schedule invites substandard plans/specifications, and time and cost overruns. The owner's failure to pay fairly for adequate design and engineering will drive its design team to use off-the-shelf specifications and uncoordinated drawings, requiring the contractor and the design team to design the project as construction progresses. For similar reasons, fast-track construction increases the risk of misunderstanding and litigation. While commencing construction before a complete design is in place may be justified by the owner's economic needs, the costs and risks of that approach should be considered when estimating cost and projecting completion dates.

2.2.4.4 Site Conditions

Views differ on whether, and to what extent, a contract should provide additional compensation for differing site conditions. Some forms of contracts include a differing site conditions clause, which entitles the contractor to additional compensation for unexpected subsurface conditions meeting certain criteria. Some owners (public and private) model their contracts on these forms. Other owners utilize contracts that are silent on the issue, or expressly prohibit recovery for differing site conditions while placing all of the risk of the unknown on the contractor.

The assurance of equitable compensation for differing site conditions encourages cautious contractors to submit lower bids, unencumbered by contingencies for unknown conditions. Perhaps just as importantly, a differing site conditions clause helps protect prudent contractors against being underbid by competitors who are either too careless or too reckless to include such a contingency. Because hidden conditions can make the difference between a profitable contract and a financial disaster, competent contractors often insist on an equitable adjustment

clause before submitting a bid on a job with significant risk of differing site conditions. No matter which approach is taken, the wise owner will make a thorough subsurface investigation so that as much can be known about the site as possible. That information should be shared with the contractor whether performing under a differing site clause or as a part of a contract with exculpatory language. Reliable structural engineering and design, and realistic pricing by the contractor, cannot be generated in the absence of such knowledge. A good exploratory program by a competent engineering firm will diminish misunderstandings and disputes resulting from extra work and foundation failures. The quality of this investigation, as much as an exculpatory clause, will diminish disagreements leading to litigation.

2.2.4.5 Site Services

Generally, the owner has no contractual obligation to provide for inspection or site monitoring. The contractor has the obligation to provide its work in accordance with the plans and specifications, and free from defect. Nevertheless, the cautious owner will provide on-site representatives for significant projects. That representative may be from the consultant's office or he/she may be a permanent employee of an owner who does major construction work. Unfortunately, some owners, even on large projects, attempt to avoid overhead costs by cutting corners here. Even if the owner ultimately proves that the contractor made a bad pour or connected the steel improperly, it is infinitely better that discover the defect early rather than well into the construction stage, where litigation is usually the result. A good inspection is the contractor's and owner's best friend. It is just common sense for the owner to protect itself from the catastrophic consequence of others' failures.

2.2.4.6 Who is in Charge?

A careful reading of some construction contracts makes it difficult to find anyone in charge. The architect/engineer often provides generic specifications, pushing true design responsibilities for specialty items down through the prime contractor to various sub-levels of subcontractors and suppliers. There might be conflict when no one was in charge, with each of the parties attempting to shift the risk to another. The owner and its architect/engineer, whatever their approach to exculpatory and risk-shifting provisions, should carefully review

technical data to make certain that the project will function, that means even if an owner has to employ outside consultants or experts during the construction stages.

The contractor also should not allow its subcontractors' work to be performed and integrated into the project without careful observation. The contractor is responsible for its subcontractors. He is in charge for their work, and needs to assure that it is properly done.

2.2.4.7 Contractor Submittals

The shop drawing process seeks to avoid failures and misunderstandings by allowing the contractor to demonstrate the detailed application of the architect/engineer's design. It is here that the prime contractor, the owner and architect have the best opportunity to avoid non-conforming products or defective work. Unfortunately, prime contractors are often approving subcontractor's or supplier submittals while relying on the architect/engineer for final approval or disapproval.

Although the architect has final legal responsibility to approve or reject shop drawings, a contractor who does not give time and attention to this area substantially increases the risk of failure and litigation. Contractors have a substantial self-interest in making sure that material and equipment suppliers conform to the design plans, and that unauthorized changes have been made. In short, all parties who have the opportunity to review shop drawings bear the responsibility to do so in order to assure successful project completion, no matter what the contract provides.

The areas discussed above, if given proper attention, present opportunities to reduce conflict on construction projects, so long as all parties recognize their responsibilities. The contractor must provide quality construction materials and workmanship. The architect/engineer must provide quality designs and details. The owner must pay a reasonable price for these services. No contract language will prevent conflict where these responsibilities are not met.

2.3 Claims in Construction Projects

2.3.1 Introduction

A construction claim arises when one party to the contract has suffered a loss for which the other party should compensate that party. Therefore, a construction claim is an assertion of and a demand for compensation by way of evidence produced and arguments advanced by a party in support of its case. Construction claims originate from a variety of causes both direct and indirect with the contract.

Construction contracts anticipate that the contractor will, in certain circumstances, be entitled to extra payment and/or time extensions. The contractor seeks these entitlements by making claims to the Engineer. The contractor's objective is to obtain the payment or relief, which he believes he is entitled to, whether under the contract or otherwise.

It often happens that claims that might otherwise be valid are rejected because:

- a.** timely notice was not given,
- b.** the claim is late,
- c.** contract procedures were not followed,
- d.** proper records were not kept
- e.** the claim does not establish any valid entitlement under the contract,
- f.** inadequate information is available or provided to verify the claim or support its quantification;

Failure to properly record and document construction projects can be fatal in a claim. Written agreements and documentary evidence will almost always outweigh oral evidence and alleged verbal agreements.

It is crucial to keep in mind the following items during the course of a project, which will help to support or defend a claim, should one arise: (Rick McClymont, 2003)

- 1.** Keep all bid documentation and record any pre-contractual agreements, representations and understandings in writing and ensure they are in the contract or can be relied upon at a later stage.

2. Ensure that a fully signed written agreement is in place before commencing work on a project. While oral agreements are generally enforceable, written ones are easier to prove.
3. Read and be familiar with all contract terms, especially the notice provisions. Failure to provide notification of a potential claim could preclude a party from bringing its claim.
4. Keep all project correspondence. It is often helpful to organize project correspondence according to each key party and whether the correspondence is incoming or outgoing. For example, it is important to remember that in order to litigate a delay claim, it is generally necessary to reconstruct the project in detail on a daily basis.
5. Record all relevant conversations and send follow up correspondence. Parties may proceed on a project for months based on a particular representation or understanding, only to find out later during litigation that the other party denies everything. Where there is no response to correspondence, a court may find that a failure to respond affirms what was said in the letter.
6. Take pictures or videos at all stages of the project. Nothing can help a judge or lawyer more to understand a problem or deficiency on a project than an illustrative picture of it.
7. Keep all plans and drawings and ensure that you have accurate records of all amendments or addendums.
8. Make sure a project diary is kept along with diaries for key personnel. Diaries should record: 1) the weather; 2) manpower, visitors and contractors on site; 3) key deliveries; and 4) any notable event such as problematic or hidden site conditions or events that may cause delay or affect productivity. Ensure that entries express facts, rather than opinions.
9. Maintain an as-planned schedule and regularly update it with an as-built schedule. There are several computer programs available to schedule and track progress. The end product of a proper scheduling exercise is a plan that should tell a contractor or owner what sequence work should be done in, when it should start, what work has to be completed first, when successor activities should start, and when it should finish. Having an accurate schedule for a project and regularly updating it will provide a valuable tool for tracking and recording delay and the impact of that delay.

- 10.** Record all key events, especially ones that may lead to a claim, and specifically record:
1) when the event occurred; 2) what it was; 3) who noticed it; 4) the projected impact it may have on cost and time; 5) whether notice was given and to whom; and 6) response to notice.
- 11.** Record all change orders and claims for extras and when they were submitted for approval, and separate those that are approved from those that are not. A contractor who has failed to get approval for a change orders should always diligently express and protest their ongoing concerns in writing. When doing so, the contractor should adhere to the contractual notice requirements. Parties should also be aware of the ability to give notice that they are performing under protest.
- 12.** Document the additional costs caused by an event. It is particularly important to keep proper accounting and employee payroll records pertaining to additional overhead and employee costs.
- 13.** Finally, contact legal counsel as early as possible. Contractual interpretation and strategic decisions made early can greatly enhance prospects for success in a construction

2.3.2 The Claim Essentials

It is essential that for every claim, the contractor provide to the engineer appropriately documented claims, which sets out:

- a.** the name and brief description of the claim, that is claim identification;
- b.** the provisions of the contract on which the claim is based (and which provide for it to be a risk allocated to the principal requiring additional payment and/or extension of time),
- c.** details any additional work undertaken or costs incurred,
- d.** valuation of the claim, supported by sufficient details (and proof if required),
- e.** details of any delay and time extension due,
- f.** keep contemporary records: to support the claim; and permit the Engineer to examine them (FIDIC Clause 53.2),

2.3.3 Documenting Disputed Claims

Preparation by the contractor for a disputed claim should involve putting together a more comprehensive claim dossier, containing:

- a.** an executive summary of the claim,
- b.** an explanation of how the events giving rise to the claim relate to rights in the contract, making reference to the specific contract clauses, etc, which apply,
- c.** a factual narrative, which references the significant documents (e.g. contract and specification provisions, minutes, instructions, claims, substantiation provided, correspondence, etc) and refers to the events which led to the claim- a chronology is often helpful,
- d.** copies of these significant documents
- e.** drawings, photographs, investigation results, expert opinion (through mutual consent with Engineer), and other like evidence which is available to substantiate the claim,
- f.** a summary of the facts and opinions agreed to by parties, including any statements or figures presented by the other party with mutual acceptance,
- g.** calculations and justifications for the amounts claimed,
- h.** a summary of steps taken to mitigate the situation that resulted in the claim,
- i.** a discussion of the applicable legal principles and contentions (with authorities) supporting the claim,
- j.** details of the payment, extensions of time, damages, etc, being sought,

In a dispute situation, a copy of relevant parts of the claim dossier may be needed to be provided to the adjudicator, mediator or arbitrator (and of course to the other party). To minimize duplication it is helpful if as much as possible of this can be in a jointly agreed dossier, with supplements from each party on matters that have not been agreed. Remember that the neutral party is coming into the dispute with no background knowledge, and needs quickly to understand the context, competing arguments and relevant information. Clear executive summaries and logical indexing of all documents are essential.

2.4 Construction Disputes Resolution Systems

There are several methods of resolving disputes in the construction industry. For purposes of this research, they are classified as preventive, non-judgmental (amicable), and judgmental as postulated by writers such as Fisher (1999), Dighello (2000) and Agarwal (2001). These are discussed under the following sections:

2.4.1 Preventive

In the construction industry, there are expert neutrals who may be advisors jointly employed at the beginning of the relationship of the contracting parties for the purpose of preventing disputes rather than allowing issues to grow until they become real disputes. These include collaborating, a unique concept in dispute resolution, that is proactive and which may prevent disputes. It attempts to deal with problems before they arise, by establishing good working relationships amongst all the parties. This accomplished through fostering of teamwork, communication, and trust and does not create enforceable obligations, but rather relies on the development of mutual goals and values so that the Parties work as a team towards a common goal. In such an atmosphere, disputes are likely to be less frequent and may be solved quickly when they arise (Dighello 2000).

2.4.1.1 Partnering

Partnering is a process which aims to create a good principal-contractor relationship from the outset. It can lay the foundation for better and more productive working relationships on the project, by establishing an atmosphere of trust and frankness in communications. A central objective is to encourage contracting parties to change from their traditional adversarial relationships to a more co-operative team-based approach and to prevent disputes. Care is needed however, if only because of its name, that partnering does not complicate legal relationships.

Partnering involves a workshop meeting, at the commencement of the contract period, between all those involved - principal, contractor, subcontractors, engineer, etc. The meeting

is managed by an independent third party, and might for example take a full day. The outcome is recorded in an agreed Charter or Mission Statement.

The parties get to know each other and define common goals, improve communication and foster a problem-solving attitude among the group of individuals who must work together as a team throughout the project. The setting of mutual goals can encourage harmony, personal growth, good morale, enthusiasm, teamwork and high performance.

In their outcome, they may for example include:

- individual and shared objectives
- a plan or program to achieve these objectives
- a joint approach to common issues, such as:
 - safety
 - quality
 - neighborhood
 - environment
 - cost control
 - project scheduling
 - timely completion
- means of achieving good communication, co-operation and pride
- specific dispute prevention processes, designed to:
 - evaluate performance
 - promote co-operation
 - head off problems.

After the workshop, project leaders continue to meet (with or without the assistance of the third party) to establish performance measures for each of the shared objectives. The draft of these measures is then discussed and finalized by all participants. Smaller projects may not need such attention to detail. Larger projects may need additional workshops to provide for review, bring on board new members of the project team, and assess progress.

The measuring and monitoring of team goals is important. Ideally, quantitative or subjective measures are established for each goal. Performance against these is then measured on a regular basis and shared amongst participants.

Partnering has been described as a "covenant of good faith". It is morally persuasive, but is not intended to alter in any way the duties which otherwise exist or are defined by the contracts between the parties. If the covenant fails, the fallback is to their legal responsibilities and relationships defined in law and in the contracts.

2.4.1.2 Dispute Review Boards

A Disputes Review Board (DRB) involves a panel of expert neutral persons being set up at the outset and therefore being available throughout to provide an independent assessment of the possible causes of disputes. A DRB usually consists of three members, selected by both the contractor and the owner soon after the award of the contract. With smaller contracts, the panel might be a single person, which may be regarded as equivalent to appointing an expert conciliator or mediator for the duration of the contract.

The DRB members are provided with the contract plans and specifications, become familiar with the project procedures and the participants, and are kept abreast of job progress and developments. The DRB meets with the principal and contractor representatives during regular site visits and encourages the resolution of disputes at job level. The process helps the parties to head off problems before they escalate into major disputes.

The DRB members visit the job regularly during construction and are kept advised regarding progress, they can actually observe the problems at the time they occur and, based on their own construction experience, understand the technical details and contractual ramification involved.

The DRB's output consists of a written non-binding recommendation for resolution of a dispute. The report includes an explanation of the DRB's evaluation of the facts and the contract provisions and the reasoning that led to its conclusions. Acceptance by the parties is facilitated by their confidence in the DRB member's expertise, first hand understanding of the project conditions, and practical judgment - as well as the parties' opportunity to be heard.

Dispute Resolution Advisors (DRA), who are normally experts in the field, help the parties to identify contractual issues early and processes them through to agreed conditions. The DRA needs to display some mediation skills. The benefits include fewer disputes, less budgetary surprises and smoother cash flow for the parties throughout the contractual relationship (Fisher et al 2001).

2.4.1.3 Facilitator

In other intra-personal or inter-personal conflicts, such as those in commercial or corporate as well as community disputes, there are other forms of neutrals that would assist, parties prevent or resolve disputes/conflicts or facilitate decision-making process. One good example is facilitation, which has found itself in the construction industry. It is less structured, more flexible and open-ended than mediation and may be applied in a wider range circumstances. Facilitation is a process whereby an independent outsider becomes involved in a problem by giving assistance to the parties in dispute through a process of decision-making without making any binding decisions for the parties. The wide range of matters that a facilitator may contribute includes information-gathering, fact-finding, holding meetings, establishing voting criteria and private consultations. Facilitators are experts in communication, negotiation and mediation skills.

2.4.2 Non-Judgmental (Amicable)

The non-judgmental methods bring the disputants to a round table and mutually resolve their dispute, and such methods are through negotiation, mediation, conciliation, mini-trial, etc.

2.4.2.1 Negotiation

According to Fisher (1991), direct negotiation is a common dispute resolution process in which parties themselves, or their representatives, try to resolve the dispute without involving any neutral third party. It is a voluntary and an unstructured process agreed by both parties, privately and confidentially. The features that contribute to the success of direct negotiation include avoiding taking entrenched positions in the dispute, but rather seeking solutions,

which meet the needs and interest of both parties. However, the success of negotiation depends on interpersonal communication skills of the parties during the entire process. Negotiation would be the first port of call when a dispute occurs and should resolve a dispute at this stage.

In negotiations, parties approach each other for discussions to find a mutually acceptable outcome to the dispute. Negotiations may, or may not, involve partisans supporting each of the parties.

As negotiation is a consensual process, it requires willingness by both parties to attempt resolution by this method. If the relationship between the parties has broken down beyond this point then negotiation will not be possible. Negotiation can take many forms ranging from an informal chat or a telephone conversation between the parties or their lawyers to a highly structured and complex process taking place over an extended period.

Distinction has been drawn between simple bilateral negotiation which does not involve third parties in the process, the content or the resolution; and supported negotiation where a third party acts in some partisan role for each of the parties. Any third party involvement does not extend to acting as facilitator or dispute resolver.

The four characteristics of a good negotiated settlement are:

- Fairness
- Efficiency
- Wisdom and
- Stability

It is important that the parties involved perceive an agreement as fair. Perceived fairness depends on participation. Therefore, people's problems (e.g. perception, emotion, ego, communication, etc) must also be dealt with.

Care is needed in preparing for negotiation, including review of all the pertinent facts (both pro and con) and evaluation of the best alternative that can be achieved if the negotiation fails.

Each party needs to explain its own interests, and listen carefully to the other party. A conscious effort is needed to avoid premature judgment, while multiple options for settlement are quietly explored. This does not only require patience, self-control and courtesy, but also a commitment to and trusts in the negotiation process. Alternative options need to be developed in a flexible and innovative way.

2.4.2.1.1 Steps (Techniques) in Negotiating

When parties participate in negotiation, they shall be transparent and ready for discussions:
(Gashaw Yayehyirad, 2004)

- a. get well prepared on the event, (issue) and allow sufficient time,
- b. arrange a pre-meeting; both parties make their own reconnaissance,
- c. identify what is the interest of the other party,
- d. plan for the negotiation,
- e. set objectives,
- f. be realistic,
- g. Lead negotiator- he/she can be non-site staff or have no chief site experience. He/she is only a commercial person. Expert to make negotiations he/she needs someone who gives him/her background of the technicality of the event, issue.
- h. Be transparent, thorough, and honest to the lead negotiator. If you are part of the negotiating team, discuss before getting into the matter.
- i. Each member of the team has to know his/her roles and contribution as per his/her specialization.
- j. Listen well to proposal, give priority to listen than talking,
- k. stick to plan,

Whatever the form of the negotiation is, the process, content and outcome always remain in control of the parties. If a negotiation collapses, the next stage would be mediation.

2.4.2.2 Mediation

Mediation is a private, quick, cheap process (compared to either arbitration or litigation) where a third party makes possible dialogue between the parties in order that the parties can reach their own decision that is initially non-binding. The parties can however, agree to be bound by their final decision.

Mediation is a mechanism in which a neutral third party meets with the disputants and facilitates negotiation to help the parties come to their own solution (Pretorius 1993, Yuena 2002). It is a voluntary but structured with ground rules agreed upon by the parties. The mediator assists the disputants to generate option; helping both, parties understand better their respective positions and manage emotions. Although the mediator controls the process, he or she does not impose any resolution or opinion on the merits of the case, promoting a win/win situation, leaving the disputants themselves to control the outcome. Hence, the process is flexible, private and confidential with legal rights of the parties protected when there is no agreement reached. Mediation is a rapidly growing form of ADR and has been effectively adapted for multiple party dispute resolution with tremendous success.

There are several reasons why mediation is an increasingly popular process for resolution of construction disputes. Mediation is a response to the financial cost and emotional stress to contractors, owners, developers, design professionals, and others who resort to arbitration or litigation to resolve their construction disputes. All too often, arbitration is not a low-cost alternative to litigation as a means of dispute resolution. In either arbitration or litigation, a third party or parties determines the resolution of the claim. Owners and managers of involved companies not only lose control of the cost of resolution of the dispute but also the decision-making process. Except for the unusual circumstance, business relationships are severed, seldom to be re-established. Mediation is a confidential process and the parties and their lawyers are required to sign an agreement to that effect. Mediation allows the business executive to minimize legal costs, control the decision-making process, avoid most of the emotional stress, maintain business relationships, and provides the most rapid process for full and final resolution of disputes.

2.4.2.2.1 Mediation Distinguished from Arbitration and Litigation

Both arbitration and litigation are binding procedures while mediation is non-binding. This crucial point is still not well understood by either the business or legal community. Since mediation is not binding, the business executive retains control over the scope, amount, and details of resolution of the claim. Frequently, the resolution includes elements, which would not be achievable in either arbitration or litigation. All parties should be encouraged to make contact with the mediator in whatever frequency and method creates comfort and confidence in the mediator and the process. Experienced advocates encourage their opposition's contact externally with the mediator, knowing that the greater the confidence the adversary has in the mediator, the greater the likelihood of final resolution. These advocates are also comfortable that an experienced mediator will retain his or her impartiality throughout the mediation process.

2.4.2.2.2 Mediation Agreement

Mediation can occur by contractual requirement or agreement after a dispute arises. Sharing costs of mediation is important to a successful resolution whether the cost sharing is contractually required or agreed to after a dispute arises. Both parties must have a financial and emotional stake in a successful resolution of the dispute through mediation. Careful contract drafters will require mediation in their home city to reduce their own costs of resolution. While there are no known decisions enforcing a mandatory mediation clause prior to arbitration or litigation, the current judicial climate strongly encouraging mediation should be sufficient basis for enforcing the mediation clause.

At any time after a dispute arises, including after trial or during the appellate process, mediation may be agreed to and conducted. An agreement to mediate needs no procedure, or detail. The parties need only agree on the approach and select a mediator or a mediation organization. There is very little structure to the process and the necessary agreements relating only to confidentiality and payment of the mediator are routinely signed at the commencement of the mediation. A party desiring to mediate but concerned about the reaction of their adversary is advised to contact the administrator at one of the mediation companies who is

skilled in convincing the other party to agree to mediation. Such organizations will also provide the mediator and the location for the mediation. Alternate methods of encouraging a reluctant adversary to mediate include suggesting to a motion judge or presiding judge that you are eager to mediate but your adversary is reluctant. Given such an opening, most judges will bring strong pressure to bear on the other party to mediate.

2.4.2.2.3 Who Should Attend Mediation from the Parties in Dispute?

It is crucial to the success of mediation that an individual who has full and complete authority to resolve the case represent each party. It is unacceptable in a mediation to have final decision while the decision making individual is not present at the mediation. Arguably, one of main reasons for mediation failures is that the individual with authority to resolve the dispute is not present. Every effort must be made to have the responsible person with full authority present for the entire mediation. Insuring the presence of the appropriate individual is the joint responsibility of the attorneys for the advocates, the mediation administrator, and the mediator. An attorney who has a concern about who will be present should communicate that concern immediately to all parties involved in structuring the mediation.

2.4.2.2.4 Types of Mediators

A difference of opinion exists as to whether a skilled mediator can mediate any type of dispute including disagreements in construction industry. There are eloquent advocates for the idea that a person skilled in the process can bring disputing parties together regardless of the topic of the dispute. Equally, persuasive arguments are made that the mediator's knowledge of the subject area combined with experience and skill at the process bring a credibility not otherwise present, which has a great impact on the parties, enhancing the likelihood of dispute resolution. The attorney representing a disputing client is well advised to discuss this issue with the mediator and with others who have used that particular mediator to become knowledgeable about the mediator's experience and subject area knowledge. Construction disputes require mainly interpretation and understanding of technical proceedings by the parties. It is recommended if the mediator is equipped with both capacities. That is technical knowledge in construction industry and experience in mediating strategies.

2.4.2.2.5 Mediator Styles

There are also two schools of thought on how the mediation process should be utilized. One school of thought promotes continuing discussion and creation of understanding and empathy between parties. Its detractors sometimes call this approach “touchy-feely” or “hot tub” mediation. The other school advocates reaching the monetary issues more quickly and utilizes a more aggressive approach with the parties to reach resolution. While each approach has much to recommend, and each may be more or less appropriate to certain types of disputes, experienced construction industry executives after an appropriate exchange of their positions and frustrations, generally wish to address the monetary aspects of the dispute. These executives are generally sophisticated and assertive people who have risen to a position of authority in their organization because of those personality characteristics and generally respond better to an assertive mediator who is candid about the strengths and weaknesses and costs of their dispute. In selecting a mediator, the careful attorney will attempt to match the personalities and sophistication of the disputing parties with that of the mediator.

2.4.2.2.6 The Structure of Mediation-How it Works

Many mediators commence the mediation by holding a joint meeting. In that meeting, each party will have the opportunity to state its position to all of the other parties. No witnesses are called, no cross-examination is allowed, and a premium is placed on brevity and concise statements. Either the attorney or the party or both may speak. The purpose of the initial session is for each party to hear facts and positions not previously communicated to the decision-maker. The underlying concept is that most disputes occur when communications break down and the initial session is an aspect to the process by which communications begin. Immediately after the initial session or, sometimes, *in lieu* of an opening session, the parties will be separated into their own rooms and the mediator will continually circulate from room to room reminiscent of prominent and contemporary shuttle diplomacy. In situations where the mediator believes that a joint meeting has the potential to aggravate animosities, or where there has been a full communication of the parties' positions, the mediation will commence with the caucuses. In a caucus, communication between the mediator and the parties is confidential and the mediator fully explores the position of each party in a separate caucus.

The positions, concerns, and proposals of each party are communicated to the others with the help of the mediator. Generally, after several rounds of caucuses, a full and final resolution is reached. During the process, the mediator will move past nonessential detail and address and resolve the major obstacles to resolution. After an appropriate exchange of information, the mediator will focus on the practical economic costs of the dispute and help the parties reach an appropriate monetary resolution.

2.4.2.2.7 Mediation Strategies

a. When to Mediate

When to mediate is a very delicate question. Generally, mediation should be conducted as early as possible in a dispute. If the prerequisites to mediation can be met, the mediation should occur before litigation or arbitration is commenced. The only requirement to mediation is that there be a general understanding of the positions of each of the parties. Mediation will generally be unsuccessful if one of the parties has not communicated the amount or description of their claim. However, mediation is appropriate immediately after the initial exchange of the general positions of the parties. Mediation should not be delayed because one party is concerned that they do not know a piece of information held by one of the disputing parties. In such a situation, the letter to the mediator should request the mediator to determine that fact or facts in the initial caucus. If an independent investigation or expert analysis is required, such as engineering analysis, those should generally be completed before commencement of the mediation. With those caveats, the sooner the mediation occurs, the less money has been spent on the lawyers, the less anger and hostility has been generated, and the more money there is available to invest in the resolution as opposed to the dispute itself.

b. Negotiation Prior to Mediation

A difference of opinion exists whether the parties should attempt to negotiate and commence mediation after negotiation between attorneys break down. Many lawyers believe that they are fully capable of settling cases; after all, they have been doing just that for many years. Another school of thought argues that if the attorneys have exhausted their exchange of settlement amounts, and committed to each other that no greater or lesser amounts will be paid or accepted, they arrive at the mediation in a psychologically inflexible position, which makes

the job of ultimate resolution much more difficult. This school of thought believes that attorneys should exchange as much information and as many documents as they feel comfortable with but arrive at the mediation having exchanged few, if any, settlement amounts so that the greatest degree of flexibility is possible on the part of the lawyers and their clients.

2.4.2.2.8 The Role of the Attorney during Mediation

The purpose of mediation is to allow disputing parties to resolve their own disputes. That statement implies a limited role for the lawyer. The major contribution, which the lawyer can make to the process, is determining the appropriate time to reach the mediation, selecting the best mediator possible, and writing a persuasive letter to the mediator outlining a path to successful resolution. Almost all mediators, and advocate lawyers, should encourage maximum client communication with the mediator. Venting by the client is extremely valuable and the lawyer may be surprised at the flexibility and willingness of the client to reach settlement. The mediation process, and particularly the construction industry executive's involvement in that process, encourage and facilitate parties to discard posturing and candidly discuss their real objectives. The lawyer can be extremely helpful in reinforcing those statements of the mediator with which the lawyer agrees and which move the parties toward resolution. Many lawyers are slow to recognize that clients will place greater faith in an effective mediator than in their advice. If the client is pleased and satisfied with the result, the lawyer has fulfilled his or her professional responsibility. Lawyers need to remember it is the client's case, even if the lawyer thinks the value of that case was greater or less than the client agreed to in the mediation.

2.4.2.3 Conciliation

Conciliation is a process similar to mediation except that the conciliator can express an opinion on the merits of the case and is required to recommend a solution if the parties fail to agree (Dighello 2000, Agarwal 2001). The power of the conciliators is conferred by status.

In conciliation however, the third party neutral does not always meet together with the parties. The conciliator's role is also broader than in the mediation as it includes advising the parties on the possible result of the dispute if it were resolved in either arbitration or litigation.

In conciliation, the process begins with identification of the issues, then the options for resolution are explored, the conciliator advises on likely outcome of dispute in other forums and in light of this the options for resolution are considered; and ideally a consensual agreement is then reached.

The Ethiopian Civil Code enumerates the process spectrum for Conciliation, from article 3318 to 3323 as detailed below:

a. Duties of parties

- (1) The Parties shall provide the conciliator with all the information necessary for the performance of his duties.
- (2) They shall refrain from any act that would make the conciliator's task more difficult or impossible.

b. Duties of Conciliator

- (1) Before expressing his findings, the conciliator shall give the parties an opportunity of fully stating their views,
- (2) He shall draw up the terms of a compromise or, if none can be reached, a memorandum of non-conciliation.
- (3) He shall communicate these documents to the parties.

c. Time-limits

- (1) The conciliator shall carry out his duties within the period of time laid down in the contract or, in the absence of any such limit, within six months from the date of his appointment.
- (2) During this period, the parties may perform such acts as are necessary to preserve their rights.

- (3) They may not bring their dispute before the court prior to the expiration of this period unless the conciliator has drawn up a memorandum of non-conciliation.

d. Powers of Conciliator

- (1) The conciliator's powers shall be interpreted restrictively.
- (2) The parties shall not be bound by the terms of the compromise drawn up by the conciliator unless they have expressly undertaken in writing to confirm them.

e. Conciliator's Expenses and Remuneration

- (1) The conciliator shall be refunded any reasonable expenses he has incurred in the discharge of his duties.
- (2) He shall not be entitled to remuneration unless otherwise expressly agreed.

2.4.2.4 Mini-trial

Another process involving neutral third party in a dispute is the mini-trial, which brings together senior decision makers from each disputant to hear presentations by junior representatives or their respective legal representatives and help them to negotiate on resolution at private. This is mainly used in big projects where the senior decision makers may not be aware of the real situation and the subordinates may not be aware of the needs and priorities of the parties (Dighello 2000).

This is a structured process with two distinct components. Parties engage in an information exchange that provides an opportunity to hear the strengths and weakness of one's own case as well as the cases of the other parties involved, before negotiating the matter.

In mini-trial, the case is heard not by judge, but by the senior professional or other high-level business people from both sides. The representative should have full settlement authority. A third party neutral usually joins the party representative listening to the proofs and argument, and can make any necessary decision to regulate the process. At any time, the neutral can advise, mediate, or offer advisory opinions. Following the presentations, the parties' representatives meet, with or without the neutral, to negotiate a settlement. Frequently, the

neutral will serve as a mediator during the negotiations or be asked to offer a non-binding opinion on the potential court outcome.

2.4.3 Judgmental

2.4.3.1 Adjudication

The decision of a third party neutral, named in the contract, is binding upon the parties with respect to any matter in dispute until the contract is complete. At that time the parties may challenge the decision through arbitration or litigation.

When all efforts by the parties to resolve differences amicably have failed, by which time the parties have developed entrenched adversarial positions in the dispute, then, a third party has to listen to both sides and make a judgment. One such method used is Adjudication or Expert Appraisal or determination. This is a process whereby the disputants present their cases to an independent expert who then evaluates the evidence according to the relevant law, rules, contract and practice that is applied appropriately in the dispute and gives a confidential opinion on the likely outcome of the case if it were to go to court or arbitration (Agarwal 2001). The disputants agree before hand that they will be bound by the opinion of the expert and that this decision is binding on the parties in the interim, until a further decision by a court of law or arbitration is reached.

2.4.3.2 Arbitration

Arbitration is a process where a third party who is independent of parties, but may be selected by them, makes an award determining the dispute. The Award is binding and can be enforced by courts.

Arbitration is the settlement of a dispute by the decision not of a regular and ordinary court of law but of one or more persons chosen by parties themselves who are called arbitrators. Thus, arbitration is out-of-court proceeding where the arbitrator acts as a judge.

Arbitration is a dispute resolution process in which one or more neutral third parties hear the evidence and arguments of each disputant and make a decision for them. The outcome is one of a win/lose situation and is not based on any precedent(s). The decision of the arbitrator is legally binding and, often, there is no provision for appeal to a court of law. There are exceptions, such as misconduct of the arbitrator. Rules of evidence used in arbitration depend on the prior agreement between the parties. It may take a long time, same as for a litigation process, and may even be more costly. What makes it attractive is the mutual agreement by the parties, appointment of arbitrator, privacy and confidentiality (Boulle 1996)

2.4.3.2.1 Typical steps in Arbitration

i. Initiating the Arbitration

Before launching into Arbitration, the parties should communicate directly and attempt to resolve their differences by negotiation or mediation. In addition to competent legal advice, many other factors (such as long-term prospects, etc) will be important at this stage. However, if negotiation and mediation fail to achieve agreement, then, provided all the contract's pre-arbitration requirements have been compiled with, either party can initiate arbitration in accordance with the arbitration agreement.

ii. Appointment of Arbitrator

There are some disputes which only depend on a technical decision (e.g. the quality of workmanship or performance of a product) for which a person with appropriate technical expertise may be the best arbitrator. There are others, which only depend on a point of law, for which a lawyer may be the most suitable. However, many disputes involve a mixture of disputed facts, technical issues and law. The arbitrator bases decisions on the evidence, which is the source of the technical information required. Similarly, legal factors are usually the subject of legal submission from the parties' legal advisors. A technical arbitrator can understand technical evidence (whether or not it is within his or her own discipline), which otherwise would need to be explained in more detail to a non-technical arbitrator. All arbitrators should have a general understanding of the law, a detailed knowledge of arbitration law and practice of judicial skills.

A person appointed to act as arbitrator must not have any financial or personal interest in the outcome, and should not disclose any circumstance likely to create an assumption of bias,

including any dealings or acquaintance with either of the parties. The appointment of a person with a relationship with either of the parties may be challenged, on the basis that the appointee is not or may not be impartial, even if that person was named as arbitrator in any agreement entered into before the dispute arose.

One or both of the parties asking a particular person if he or she is prepared to act as arbitrator and then subsequently writing to confirm the actual appointment usually accomplish the actual appointment. Alternatively, the party or parties can ask the person to act as arbitrator and that person can write back to confirm the acceptance. The appointment is complete when the arbitrator has consented to act, and both parties know the appointment.

The Ethiopian civil code states the appointment of arbitrator under article 3331 to 3333 as outlined under:

a) by the parties,

- (1) The arbitrator may be appointed either in the arbitral submission or subsequently,
- (2) The submission may provide that there shall be one arbitrator or several arbitrators,
- (3) Where the submission fails to specify the number of arbitrators or the manner in which they shall be appointed, each party shall appoint one arbitrator,

b) by the arbitrator or by the court

- (1) Unless otherwise provided, where there is an even number of arbitrators they shall appoint another arbitrator who shall preside the arbitration tribunal before assuming their functions,
- (2) Where there number is odd, the arbitrators shall appoint the president of the arbitration tribunal from among themselves.
- (3) Failing agreement between the arbitrators, the appointments provided in 1 and 2 above, shall be made by the court at the request of one of the parties.

c) Procedure for appointment

- (1) Where necessary, the party availing of the arbitral submission shall specify the dispute he wishes to raise and appoint an arbitrator.

(2) Notice thereof shall be given to the other party and, where appropriate, to the person entrusted with the appointment of an arbitrator under the arbitral submission.

d) Time-limit

(1) Where the other party or the person required to appoint an arbitrator fails to do so within thirty days, the court shall appoint such arbitrator.

(2) The time limit shall run from the day when the notices provided in (c, 2) above reached its destination.

(3) Modifications to these rules may be provided in the arbitral submission,

The appointment of the arbitrator cited by the Ethiopian Civil Code is for tribunal arbitration in general, consisting more than one arbitrator. However, for sole arbitrator the procedure implies the same approach. The practice for sole arbitrator is mutual appointment by the disputant parties, or approval of appointment of one party by the other.

iv. Communication

If no communication is received from the arbitrator after appointment, the claimant should take the initiative by writing and requesting the arbitrator to convene a preliminary meeting as soon as possible. A copy of this letter, and indeed of letters or other part (with the original being marked to show that this has been done)

v. Statement of Claim and Response

The aggrieved party (the claimant) sets out a summary of the matters in dispute and the relief or remedy sought in a statement of claim. This is needed to tell the other party (the respondent) what has to be answered. It summarises the alleged facts, but does not include the evidence by which facts are to be proved. The statement of response from the respondent is to admit or deny the claims. There may also be a counter claim by the respondent (that will stand on its own if the original claim is withdrawn) or a set-off (which only serves to offset any successful claim), which in turn require a reply from the claimant. These statements are called the pleading, and their purpose is to identify the issues and avoid surprise. The degree of formality required will vary according to the circumstances.

vi. Discovery and Inspection

These are legal procedures, which allow the parties to investigate the background documentation. Each party may be required to list all relevant documents, which are or

have been in that party's possession or control; this procedure is called discovery. Except for documents, which are subjected to legal privilege, parties then inspect any of the documents listed through discovery. An agreed bundle of the relevant documents may be prepared for the arbitration.

vii. Exchange of Written Evidence

It is used for most evidence to be put in writing. It is desirable that this written evidence be exchanged, and given to the arbitrator, for reading prior to the hearing.

viii. Hearing

This is a meeting for the arbitrator to hear any oral evidence, any questions of the witnesses, and clarify the information. Each party is entitled to the opportunity to put its case and present when the other party is putting its case. A hearing may be dispensed with, by agreement, if the issues can be dealt with entirely from the documents.

ix. Site Inspection

It may be sometimes necessary for the arbitrator to visit the site, in order to understand better the evidence. If so, this should be done in the presence of both parties.

x. Legal Submissions

Each lawyer usually provides the arbitrator with summary of the relevant evidence and law. Submissions on identified legal questions made prior to the hearing help the arbitrator put the issues and evidence in context. Closing submissions may be made orally at the end of hearing, but it is often more convenient to have them put in writing soon after the hearing is finished.

xi. Award

Now the arbitrator must consider all the information and decide the questions involved. An award is then written to summarise the arbitration and give the relevant decisions. Unless otherwise agreed, the award will include the arbitrator's reasons. An award is binding on both parties. Generally, the parties accept an award and that is the end of the matter. The arbitrator has no power to enforce the award, but a party may apply to the court to have it enforced a judgment.

2.4.3.3 Litigation

Litigation (used when all other venues failed) is a dispute resolution method that is inquisitorial and adversarial, where by the disputant initiates legal action against the other party by going to court (Agarwal 2001). It has a win/lose outcome and rarely satisfies both parties (Fisher et al 1991). It is costly and results into much delay for the disputants and may not do justice to the parties. However, the benefit of litigation is that the court has authority to find out the “truth” from the parties and the enforcement of the order or judgment is supported by other law enforcement agencies. It is also used when parties have low resources and need an umpire or when they cannot agree to other forms of dispute resolution.

2.4.4 Alternative Dispute Resolution versus Arbitration and Litigation

Taschuk et al (1999), compared ADR and the traditional litigation and arbitration processes and found that cost, promptness and speed of resolution, privacy, confidentiality, flexibility, formality, fairness, parties’ real interest and willingness, preservation of the business relationship, control of the process, appropriateness of the circumstances are favourable for ADR methods in a dispute resolution. However, Agarwal (2001) argued in favour of the traditional litigation and arbitration processes by saying that ADR methods may not be appropriate where a court precedent or public record or in situations where remedies which can be judicially enforced are needed. In addition, in situation where flexibility is not possible, or where the parties cannot communicate, then ADR will not work. Likewise, the outcomes of ADR processes are not as certain or binding for lack of precedent and therefore will only work if the parties are committed since chances of renege are common. One major bottleneck of ADR is lack of procedures that have to be created by the parties themselves. Lawyers fill this gap by bringing in easily adversarial procedures akin to courtroom that may complicate matters. However, many construction disputes are not necessarily well suited to litigation and in some instances; the processes and precedents of litigation may even worsen the disputes. The recent trend is to look for methods of resolving disputes other than traditional processes (litigation and arbitration), which typically begin after the conflict has escalated and the parties’ positions have hardened.

CHAPTER THREE

PROBLEM IDENTIFICATION AND RESEARCH METHODOLOGY

3.1 Statement of the Problem

Construction works in Ethiopia vary from simple privately owned to very large and complex schemes either owned privately or public construction projects. These works are executed by single individual builder to huge construction contracting firms. Domestic contractors are obliged to have business licenses and shall be registered as contractor with different category and grades as laid by the Ministry of Infrastructure, Design and Construction Supervision Office. Even though, it is mandatory to have license to participate on public construction works, the practical deployment of their registered equipments and technical manpower does not have inspection mechanism. Moreover, many private works are carried out by non-licensed “construction contractors”.

Construction facilities may be designed by professionally organized firms, individual professionals, and by the contractor of the works, as required by the owner. Consulting firms are also required to be licensed to perform the consulting works. Consulting firms are employed by the owner of a project to prepare construction documents.

In Ethiopian construction projects the traditional letting of contracts involve the three main participants, the employer or owner, the consultant or the engineer and the contractor or the executor. Design and build or turn key projects are not many in the Ethiopian public construction projects taken as a whole. Due to the nature of the contract when responsibilities are shared between numbers of stakeholders conflicts and disputes occurrence are considerable. Ethiopian Public projects involve diverse participants mainly the user, client, financier, designer, supervisor, executor, etc these combination invites more disputes and conflicts between the parties.

When any disagreement arises between the stakeholders while executing the works, is there appropriate institution to treat their conflicts? When claims escalate to disputes in Ethiopian construction projects how do they resolve their disputes?

Standard Conditions of Contract for all types of contract for national contractors is MoWUD's conditions of contract for construction of civil work projects of 1994. This condition of contract has clause for settlement of dispute. What does this clause really mean? Do the stakeholders know their right and obligation laid down on this clause? Do we have appropriate arbitration in current Ethiopian construction situation? Is there clear construction policy and in particular Alternative Dispute Resolution Mechanism?

The inadequacy of efficient alternative dispute resolution methods are observed in Ethiopian construction projects. There are complaints from the stakeholders that public construction projects are not arbitrable. The clause related to dispute settlement in the Standard Condition of Contract does not respond to the queries and is not addressing proper ADR or arbitration.

Alternative Dispute Resolution methods that have wide application elsewhere did not show up in the Ethiopian construction projects. The absence of Arbitration clause in the standard condition contract leads the resolution option either to accept the decision of the government authorities or to go to court. Courts do not give judgment for construction related dispute on time, and appropriately due to lack of expertise in the field of construction industry.

3.2 Application of the Research

Amicable solution of conflicts and disputes is applicable on all civil engineering projects and is the best option. Understanding the primary causes and derivatives of conflict and disputes will reduce unnecessary wastage of energy, money and time consumed during progression of claims and liquidated damages. The result of this research will enable the parties in construction industry to:

- promote the requirement of Alternative Dispute Resolutions Mechanisms development in settling dispute and conflicts,
- broadens the scope of the stakeholders to exercise their proper right, and fulfil their duties,
- Play constructive role in construction project execution,
- avoids and/or minimizes disputes and conflicts,
- minimizes claims and liquidated damages expenses,

3.3 Research Methodology

The research methodology is structured in theoretical exploring of relevant topics in Dispute Settlement, practical participation of the stakeholders through questionnaires and interviews and observations.

1. Literature survey,

The literature survey includes Ethiopian legal system for settlement of dispute as outlined on the civil and civil procedure codes, the standard condition of contracts for national contracts, causes of disputes-conflicts, claims proceedings and, alternative dispute resolution mechanisms.

2. Design questionnaires and distribute to those who take part in the industry,

The general questionnaires are designed to be uniform to all in the sector, client, consultant, contactor and professionals. Then after the initial assessment, questionnaires are designed for different stakeholders. These questionnaires are distributed with preamble on the topic as objective of the research. The questionnaires are structured to cite causes, consequences, and how disputes are being resolved. Moreover, their opinion and what should have to be done. Finally, what are future expectations from these parties in the industry are discussed.

3. Conduct interviews with selected representatives,

Interviews were made with public authorities who are responsible for settling disputes in the final suite for application from disputants.

4. Identification and Analysis of projects in which various ADR methods were used (if any)

These were recognized while processing the questionnaires with contractors, government consultants and public authorities responsible to review disputes as referred by standard condition of contracts.

5. Analyse the responses from questionnaires and interviews,

The analysis of questionnaires and interviews directed the process instead of identifying Alternative Dispute Resolution Mechanism, rather to give attention to the causes of dispute and conflict between the main participants. The questionnaires were designed anticipating that only requiring responses for methods of dispute resolution may not be satisfactory. Therefore, it was prepared to explore the whole scenario in the process of construction works from inception to construction. Hence, the analysis was carried out based on the responses of the participants.

6. Evaluate existing trend,

The current treatment trend of dispute settlement between the public client and construction contractor is evaluated from case studies through reviewing documents, responses from interviews, the legal background and the translation of the standard conditions of contract.

7. Conclusion from research done,

Conclusion is produced from the analysis made in the research.

8. Recommend compatible methods and further research ,

Recommendation to the proper relevance of Alternative Dispute Resolution Mechanism from others successful practices are suggested. Much is expected from the forthcoming academicians, researchers and practitioners to enrich the requirement, implementation and evaluation of out-of- court dispute settlement in future Ethiopian construction industry.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Preliminary Remarks

Respondents were presented with a range of questions designed to gauge the causes, consequences and the extent of ADR use. This was specifically intended to get their understanding and practice. The cases they had been involved in, and the experiences they have had in dealing with ADR methods (if any)

The questionnaires were designed to include both who have direct contractual agreement and those institutions which do not have contractual obligations. However, these organizations or associations have contributions and impacts on the contracting parties.

For the assessment, questionnaires were distributed to public clients, private and government consultant and contractors.

Table 4.1 Distribution of questionnaires

No.	Stakeholders (Participants)	Distributed in number	Returned in number	Returned in %
1	Clients	17	12	70.59
2	Consultants	15	10	66.67
3	Contractors	33	28	84.85

Although owners and contractors may have different awareness on construction project management, they have common interest in creating an environment leading to successful projects in which performance quality, completion time and final costs are within prescribed limits and tolerances. It is interesting, therefore, to note the comprehensive experience of clients, consultants and contractors who gave responses during this research.

4.2 Identifying Dispute-Conflict Concept

Dispute- Dispute or difference is deemed to arise when the other party rejects a claim or assertion made by one party and that rejection is not accepted. This is demonstrated in figure 4.1 on page 55.

It refers to the occurrence of contest or debate between parties involved in the actualisation of contractual obligations in respect of an assertion(claim) tabled by one or more of the parties involved in the execution, financing, or administration of a construction project (or a consultancy projects as well).

Conflict- Conflict is recognized when lack of contractual and technical knowledge by all parties to the contract, equivocal and/or ambiguous terms and conditions of the contract clauses and specification exists. Conflict may occur between the various documents of the contract agreement.

Mostly personal behaviour contributes to this, than the work relation. Most of the time conflict has nothing to do with the work as the responsibility of all parties is well defined.

It pertains to the inherence of differing interests (i.e. may develop to the extent of resulting in adversarial stances) of those involved in the realization of the objectives of a construction contract.

Construction contract conditions, specifications and drawings are elaborated with the specific objective of managing and controlling these adversarial interests of the parties involved in construction contracts. Where these documents are exhaustively complete and do not invite difference in interpretation, conflicts are managed most effectively.

Three respondents among sixty-five questionnaires distributed, that is; less than 5% cited the above classification. Nevertheless, dispute-conflict incidences are manifested through out the implementation of construction projects that require attention for resolution or management.

Figure 4.1 illustrates the proceedings of claims when it develops to dispute. According to Brown and Marriot (1993), “an actual ‘dispute’ will not exist until a claim is asserted by one party which is ‘disputed’ by the other”. The assessment with the Ethiopian construction industry stakeholders during the thesis work confirms this statement.

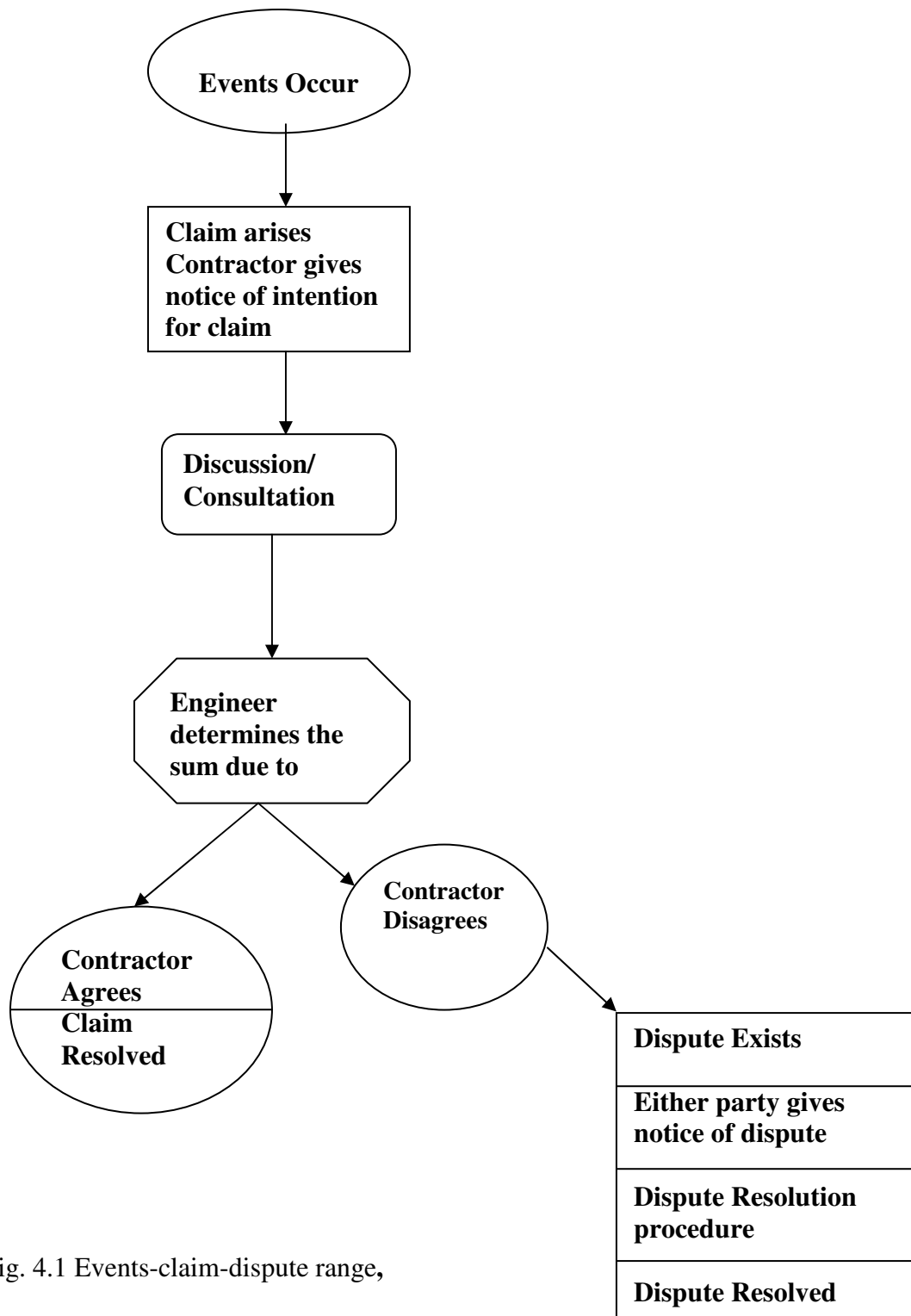


Fig. 4.1 Events-claim-dispute range,

4.3 Dispute – Conflict Occurrences between Client and Consultant,

The owner makes a contract with a consulting firm to undertake the feasibility study, design and/or supervision of the planned project. The terms of contract are arranged in mutually agreed terms. The owner provides information relevant to the intended project as much as possible. The designer makes necessary processes until compiling the complete document for tender and execution of the works. The client has to settle an agreed amount of professional service fee for the services; and the consultant is expected to provide the document within stipulated time and given scope, including proper supervision and approvals of materials, workmanships, payments due to the contractor.

However, the client-consultant relationship in Ethiopian construction projects is not smooth per se; these shortcomings are cited as below:

1. consultant do not complete the services in the scope, that is; projects not satisfying the functional objectives set for and anticipated of;
2. consultant do not complete the services as scheduled on time,
3. clients do not present their complete requirements in the terms of reference, and changing the initial project idea or need additional works to be included in the project during completion stage of the design and/or throughout construction,
4. clients do not pay the service charges on time, and resistance on settlement of consultant's fee on delayed projects,
5. inadequate underground investigations by consultant;
6. consultant's incomplete and /or wrong design and/or drawing and/or specifications; poor quality of design and missing details, design faults and/or inaccuracies occurred are detected during construction,
7. inadequate Engineer's cost estimate submitted for purpose of budget allocation to the project; mainly variations due to increase of work volume that has impact on budget of the client,
8. inadequate effort in the control for conformance of qualities, dimensions, etc. vis-à-vis to those set out in the contract documents,
9. competence of professionals assigned by the consultant,
10. failure to give approvals and instructions,

11. not understanding or neglecting the conditions of contract by the consultant,
12. Employer's interference on the contract administration works of the consultant,

Table 4.2 Summary of Dispute-Conflict between Client and Consultant

No.	Causes of dispute or conflict	No. of respondents	percentage
1	Consultants do not complete the services as required, inadequate quality of design, drawings, and specifications	18	62.07
2	Project cost exceeds budgeted amount as a consequence to additional cost, and variation of works	12	41.38
3	Delay in effecting payment, and resistance on settlement of consultant's fee on delayed projects,	9	31.03
4	Lack of clear and comprehensive terms of reference, more demand of owner after completion of design and after award of contract and raise of new ideas (untimely).	8	27.59
5	Employer's interference on the contract administration works of the consultant,	7	24.14
6	Consultants do not complete the services as per the agreed time schedule,	6	20.69
7	Inadequate effort in the control of compliance of qualities, dimensions, etc, vis-à-vis to those set out in the contract document, and quality requirement,	5	17.24
8	Others, each differing from others,	1	3.45

The two main potentials for disputes are:

1. Consultants do not complete the services in the scope, inadequate quality of design, drawings, and specifications, and
2. Project cost exceeds budgeted amount consequently to additional cost, and variation of works.

These two are interrelated, in a way that from the offset if the design, details, specifications and bill of quantities are prepared with all available information to the maximum efforts, the foremost disputes will be controlled efficiently.

Due to the inadequacy of design, specifications and other relevant documents produced by the consultant if damages arise and the client sustains damage there have to be professional indemnity insurance. Nevertheless, there is no such obligation in the current Ethiopian situation, though there is requirement on the Ethiopian Civil Code article 2031 that states responsibility for professional fault.

4.4 Disputes-Conflicts Incidence between Client and Contractor,

In the entire construction project implementation, the main stakeholders are the client and the contractor. Each has to be responsible for its obligation as laid down on the agreement, conditions of contract and prevailing law.

These main partakers of the works are besieged with diverse disagreements; such incongruities are shortcoming to the progress and timely completion of the works. These are identified as below:

1. contractors do not supply materials, equipments, manpower, etc as scheduled,
2. contractors' misuse of the advance payment outside the uses of for the specific projects,
3. clients do not plan projects carefully in collaboration with the consultants,
4. clients do not release payments on time,
5. lack of expediency in the handling over of site possession, work permits etc. by the client;
6. client's lack of readiness to settle claims amicably;
7. limitations of the engineer's authority in making decisions (at all or expediently;) due to lack of full delegation by the client and/or consultant,
8. lack of understanding of the contract conditions and the law under which the contract is being administered by the contractor;

9. demanding high quality of material and/or works than specified in the contract by the client,
10. poor performance and delay of work behind the planned time schedule by the contractor,
11. in some cases, rechecking and rejection of works (quality/quantity) by the client after approval of the consultant,
12. request for time extension is not submitted on time as per the conditions of contract by the contractor,
13. variations orders beyond the limit requested by the contractor,
14. poor management of contractors,
15. lack of proper record keeping by the contractor when required for evidence by the client,
16. low bid price by the contractor that has comprehensive effect on the time and quality of the works, (due to improper pre-bid evaluation criteria by employer or consultant).
17. ambitious project scheduling by the contractor and does not keep it as planned,
18. lack of understanding valid claim by the client,
19. arising from client not willing to recognize possible excess in quantity of works executed by the contractor,
20. contractor not undertaking the works(or parts thereof) according to the given specifications,
21. cost escalation which frequently occurred due to continuous change of material and fuel not accepted by the client,
22. completion time delay and liquidated damages imposition by the client,
23. loophole of specifications in the contract document,
24. right of way problem,
25. expropriation of local materials under the premises of the client,
26. unavailability of local materials,
27. local people problems or uprising of workers,

Table 4.3 Summary of Dispute-Conflict between Client and Contractor

No.	Identified causes by respondents	No. of respondents	percentage
1	lack of expediency in settling advances and progress payments by the client,	21	55.26
2	contractors' delay on progress & completion of works, contractors' do not follow their plans, liquidated damages	16	42.11
3	excess quantity and variation orders than planned, price escalation and excess financial and/or time requirement	16	42.11
4	poor workmanship of contractor for various disciplines of works, and clients demanding high quality of material and/or works than specified in the contract,	13	34.21
5	late handing over site possession, work permits, right of way problem	10	26.32
6	clients do not accept claims, and lack of solving problems, amicably,	6	15.79
7	clients' do not plan projects carefully, change of scope of works during progress of work,	6	15.79
8	lack of understanding of the contract conditions and the law under which the contract is being administered,	6	15.79
9	others, each differing from others,	1	2.63

This survey reveals that the top three disputes or conflicts between the Ethiopian clients and contractors are:

1. Lack of expediency in settling advances and progress payments by the client,
2. Contractors' delay on progress & completion of works, do not follow their plans, occurrence of liquidated damages, and
3. Excess quantity and variation orders than planned, price escalation and excess financial and/or time requirement

These can be jointly managed by adapting partnering on job site being with those who are participants of the project.

Delay of payment could be made effective by the client as early as possible. There is of course problem with the consultant in forwarding payment to the client with his own pretext. However, for allocated budget and the necessary approval is done by the consultant, there is no reason why the client holds payment due to the contractor. Delay of payment to the contractor has direct effect on the progress of the works, such as:

- the contractor has to pay his debt of construction materials on time and get the next consignment. If he dose not keep his promise his customer will not trust him any more and losses access to credit from his suppliers,
- the contractor has to pay workers payment on time, other wise he faces labour grievances,
- the contractor has to settle bank loans, over drafts, insurance premium, etc

What we can understand from this situation is that joint effort is required to avoid escalation of the disputes and/or conflicts to claim in adapting preventive type of dispute resolution mechanisms as discussed in sections 2.4.1.1, 2.4.1.2, and 2.4.2.3 of this thesis.

4.5 Dispute-Conflict Happening between Consultant and Contractor

There is no direct contractual agreement between the consultant and the contractor. The owner employs the consultant to act on his behalf. Nevertheless, the execution and progress of works are highly influenced by the consultant's involvement in the project. In spite of the absence of contractual obligations, consultants and contractors do have interaction in fulfilling their duties.

These interactions are cited as follows:

1. consultants do not supply complete design documents for the construction,
2. consultants do not clarify their design when requested by contractors, not responding and deciding timely on variations and/or instructions required by contractors;
3. contractors violate the design of consultants,

4. lack of collaboration/team working due to the nature of the contract.
5. contractors are not obedient to the instruction of consultants as per the general condition,
6. the consultant's tendency to under evaluate his contractual obligations for administering the contract fairly, ethically and professionally
7. fixing low prices for variations submitted by the contractor from the consultant;
8. recommending or fixing shorter time extension than demanded by the contractor,
9. quality of works and/or materials not meeting the required standard by the contractor,
10. high quality or performance demand by the consultant, which has not been specified in the contract,
11. lack of common understanding in quality control procedure from both sides,
12. contractor's failure to meet specification requirements, that is contractors do not executing the works according to the specification,
13. interpretation of the contract conditions,
14. the consultant requests additional works & does not approve the payment,
15. not understanding or neglecting the conditions of contract by either party,
16. assigning of incompetent staff for execution of works on site by the contractor, that is, lack of qualified contractor's personnel,
17. contractors do not supply adequate equipment and machinery on project execution,
18. unclear specifications and design documents which eventually create conflict,
19. contract conditions which give more autonomy for consultants and discriminate contractors,
20. poor recording of events by contractors, when required by consultants for approval,
21. fault finding and problem creating of resident engineers or site supervisors instead of facilitating the process,
22. dissatisfaction of the consultant with the engineer's facilities,
23. over time payments for the resident engineer or supervisor on site, when the contractor executes works out of normal working hours,
24. corruption,
25. inadequate work experience and qualification of consultant's site engineer/supervisor,
26. lack of self-confidence of consultant's residence engineer in approving some works or parts thereof on the site,

Table 4.4 Summary of Dispute-Conflict between Consultant and Contractor

No.	Identified causes by respondents	No. of respondents	percentage
1	quality of works and/or materials do not meet the required standard, high performance demanded by the consultant than specified in the contract,	13	44.83
2	not approving payment on time, not responding and deciding timely on variations, decisions, drawings, clarifications and instructions required,	8	41.38
3	failure of contractor on acceptance of consultant's instruction	7	24.14
4	contractor not doing the works in accordance with the contract,	6	20.69
5	the consultant's tendency to under evaluate his contractual obligations for administering the contract fairly; ethically and professionally,	5	17.24
6	fixing low prices and time extension for variations,	5	17.24
7	assigning of incompetent staff by either of parties,	5	17.24
8	incomplete record keeping,	3	10.34
9	others, each differing from one another,	1	4.76

Major areas, which are causes for disagreement between consultant and contractor, are:

- 1 approval of materials to be incorporated in the works and work performance by the consultant, and poor workmanship by the contractor,
- 2 not approving payment on time, not responding and deciding timely on variations, decisions, drawings, clarifications and instructions required,

These responsibilities of the consultant and the contractor can be mutually managed using preventive type of dispute resolution mechanisms during execution of the works.

4.6 Consequences or Impacts of Dispute-Conflict on Main Participants

Consequences depend upon the nature and validity of each specific issue that is under dispute and the adequacy of the contract documents in allocating the various risks anticipated throughout the execution of construction contracts.

4.6.1 Clients

The owner of a project could be the user itself, or public authority that constructs and provides for public. When works are not completed smoothly and hampered due to arising disputes between the stakeholders, it has its own impact to the client. These impacts are enumerated as under as identified by the respondents:

1. mainly additional cost (as a result of litigation process, if award is made against the client, etc),
2. it might have direct impact on the following projects (the client may cancel due to lack of adequate financing),
3. the projects are not completed on time,
4. time extension claims,
5. financial claims,
6. lower annual performance of its plan,
7. budget allocated is tied up, resulting in poor financial performance,
8. involving in legal cases, spending a lot of time and energy,
9. affecting the progress of the works, resulting in down time of machineries and man power to be claimed by the contractor from the client,
10. not getting the benefit of the project,
11. lack of smooth progress of the project,
12. lack of good quality and workmanship of the project,
13. undesirable litigation processes, (most government offices do not wish to go into arbitration),
14. re-bidding and award to finalize the project, thus loss of time and possible additional amounts,
15. possible accusations by the end-users,

4.6.2 Consultants

When disputes arise during implementation, consultants may not lose from the benefits of the project directly. However, disputed and/or conflicted projects do have impact on the consultant's reputation, especially if the disputes arise due to the problem of the consultant's insufficiency in producing contract documents, inefficient supervision and inadequate dispute resolution system by the engineer. These consequences are recognized as under:

1. reputation is very much affected irrespective of who is at fault,
2. may lose future clients and jobs,
3. additional cost,
4. additional time,
5. defame of the company in case of corruption,
6. affects healthy progress of works,

4.6.3 Contractors

Contractor is profit making business firm. Its success with its contractual commitment has dual impact, collecting its due payment with proper coverage of its cost, overhead and profit; and its sustainability in the industry with trustworthy reputations for future works. When disputes arise in a construction project, contractor is highly affected from the consequences of the incidence. The respondents recognized these facts as enumerated below.

1. reputation is very much affected irrespective of who is at fault,
2. additional cost if decision is made against the contractor,
3. loss of reputation,
4. loss of profit,
5. high over head expenses,
6. bankruptcy may arise,
7. development of negative attitude by both owner and consultant,
8. not getting the benefit of the project,

9. possible withholding of payments by clients/consultants on completed works- ruinous to the contractor's financial status,
10. possible foreclosure of contractor's collateral given for performance bond,
11. negative points on future bids unless litigation is settled in favour of the contractor,
12. failure of the client to go into arbitration would mean endless litigations at courts,

4.7 Recommendations to Avoid and /or to Reduce the Causes of Dispute- Conflict

General

1. supply exhaustively elaborated and detailed contract conditions, designs and specifications i.e. nullify, if possible, opportunities for differing interpretations of the requirements of the documents,
2. site investigations and designs should be adequately complete prior to processing construction contracts,
3. ensure that client, contractor and consultant have adequate and correct appreciation of their respective professional and ethical obligations,

4.7.1 Expectation from Clients

An employer is an initiator of a construction project, where the primary responsibility is vested on him. From inception through the construction life of a project, what the client shall consider attentively are recognized as listed below:

1. clients should make clear the way they want things to go and continue to have a role in promoting, that is, must set clear objective and provide clear terms of reference,
2. clients should set and prioritise the three main objectives, (cost, time, and quality/performance) for procurement of any project,
3. use of appropriate contract strategy(incentives, collaboration, risk sharing, etc),
4. proper assessment of risk should be carried out,
5. innovation, in formulating the contracts,
6. parties should be cooperative,
7. should prepare a comprehensive and clear contract agreement,

8. should clear sites before hand,
9. pay compensations in advance of project commencement,
10. to have qualified and competent professionals to work as a counterpart with the consultants and contractors, and take part in project management,
11. having or preparing clear program for the design of the project,
12. prepare sufficient budget including contingency to accommodate the prevailing cost increment,
13. having good awareness on conditions of contract and standard regulations by the implementing professionals,
14. to entertain claims according to the engineer's decision,
15. to be ready for amicable resolutions,

4.7.2 Expectation from Consultants

Consultant is responsible to translate the client's idea into plan and specifications. This obligation shall be accomplished professionally and ethically. The consultant or the engineer has responsibility to fulfil its commitment in collaboration with the client. The respondents identify these facts:

1. the clients and consultants should operate as a team to avoid the institutional risk of incomplete commitment and inconsistent decisions,
2. consultants must assign competent personnel to produce acceptable design document and supervise the construction work,
3. should be impartial,
4. should let the client know when issues arise (immediately),
5. should be ethical,
6. on time release of the needed programme of owner to immediate need of user,
7. immediate respons to any inquiries of construction team,
8. taking time and preparing clear and detailed contract document,
9. acting as a good facilitators by avoiding fault finding role,
10. assigning construction site professionals with good professional ethics,
11. to decide on claims on time being impartial to client and contractor,

12. clear its firm from corruption,
13. to behave its personnel in good professional manner,
14. to arrange for amicable resolutions on time between the parties,

4.7.3 Expectation from Contractors

When a construction contractor enters to a contractual obligation for execution of a project, the contractor shall properly analyse its capacity, present assignments, the contract documents, conditions of contract and compressive work atmosphere. Ethiopian construction contractors shall give attention to the following comments by those who gave their opinion during this thesis survey. These points give awareness and precaution to avoid and/or reduce the incidence of dispute and/or conflict that may arise due to inattention of a construction-contracting firm.

1. In Ethiopian construction industry, some contractors lack contract administration knowledge, they must equip themselves with this primary facts.
2. Contractors assign unqualified people on the project in trying to save a lot. They should give serious attention to assign proper professionals appropriately.
3. they should be innovative,
4. should immediately let the consultant know when problems arise,
5. should consider the consultant as partner than adversary,
6. build their capacity with respect to financial and project management,
7. reformation on the workmanship of contract item,
8. performance as per schedule of the contract,
9. utilization of the project finance as per schedule,
10. perform the work according to schedule,
11. supplying materials with standard quality and carry out the works according to design and specification,
12. avoid corruption,
13. be well organized in equipment and professionals,
14. fulfil quality management of works,

4.7.4 Anticipation from Government - Policy Makers

Construction industry need to have appropriate policy for efficient performance of construction projects. Government policy makers have to consider what the participants of this research have raised:

1. Revise/update contract documents and should examine current procedures used in planning and implementation of projects, because some of these are causing unnecessary delay, avoidable costs and poor performance. Training should be at top priority objective,
2. on time release and practice of resolutions and procedures,
3. to elevate capacity of contractors and consultants,
4. to pass control of standard conditions to professional associations,
5. to give decision on time,
6. cooperative in the fulfilment of project needs on cases of customs, banks, etc,

4. 8 Proposed Alternative Dispute Resolution Methods,

Respondents give suggestions and recommendations to dispute resolution with reasons. The collective opinions are summarized as follows:

1. Mediation or adjudication at most, as a rule, arbitration and courts are costly and require longer duration.
2. Arbitration (if dispute could not be settled amicably),
3. Establishment of Dispute Resolution Board from concerned associations, court, institutions, and government organizations,
4. refer matters jointly to arbitration, arbitrators being technically & legally qualified,
5. Joint meeting and discussion has to be exhaustively entertained before taking the issue to the court,

The justifications for the proposed amicable solution and arbitration include:

1. Both amicable settlement and adjudication are more expedient and much cheaper than arbitration and litigation at court, for mediation and adjudication options, this choice avoids waste of time, delay, loss, and enmity among the parties,
2. presentation of actual facts according to the contract to independent arbitrators will settle disputes,
3. arbitration is referred as ADR when compared with litigation, hence,
 - 3.1 cost of arbitration is much less than the cost of going through court process,
 - 3.2 arbitration allows the parties to a dispute to choose their own judges,
 - 3.3 arbitration is faster than litigation in the courts,
 - 3.4 arbitration is governed by natural justice whereas court depends on rules,
 - 3.5 in arbitral proceedings parties can place themselves on equal footings,
 - 3.6 the arbitrator never forgets that he is serving the parties,
 - 3.7 arbitral awards enjoy much greater international recognition than judgments of national courts etc.

4.9 Dispute Resolution Practice in Ethiopian Construction Projects,

We have seen on chapter two, section 2.4 of this thesis that there are three main types of dispute handling, preventive, amicable and judgmental. However, the Ethiopian construction projects dispute cases are not matured in these aspects as seen from practice.

When disputes arise between the stakeholders, they attempt to solve the disagreements amicably. Direct negotiation is dominant as cited by the participants of this research work. Some respondents understand the appeal to Ministry of Infrastructure, Design and Construction Supervision Office and the decision process as arbitration. Nevertheless, this course of action is not formal arbitration as stated in section 2.1.5.1.2 of this research.

One of the practices observed is the ad-hoc arbitration conducted between BERTA construction plc and Siemens AG. The disputants agreed to submit their case to a single arbitrator Architect Seifu Birke from SB Consulting firm.

The proceedings and the procedure are included in the case study No. 2 of this thesis. This beginning need to develop and must be common to all construction projects disputes.

4.10 The Ethiopian Civil Code, and Construction Conditions of Contracts,

It may not be necessary to sign an agreement to refer a dispute to a court, because the courts have inherent jurisdiction to hear and resolve disputes. An arbitration clause in an agreement is a foundation for arbitration. If the parties do not agree for arbitration, it is implied that they have agreed to refer the resolution of their dispute to courts, if not resolved amicably. In MoWUD there is no arbitration clause or alternative dispute settlement on clause 67. The disputants' final and binding resort is the MoWUD (MoI's) decision. MoI, Design and Construction Supervision Office advises the parties to settle their disputes "amicably" and as final resort performs adjudication for the parties in dispute.

The other important feature is an arbitrability of the administrative contract. When the national contractors enter a contract agreement for public construction work with public agencies, it is an administrative contract. This implies that they agree to be administered by contract administration of article 3132 of the civil code.

The civil code has both amicable solution process with conciliation as stated in articles 3318 to 3322 and the judgmental procedure with arbitration as in article 3325 to 3346. However, article 315 of the Civil Procedural Code sub article (2) states that Administrative contracts are non-arbitral. On the other hand, article 315 sub article (4) states this procedure applies to the civil code articles 3325 to 3346, without demarcation for either public or private. Michael Gunta elaborates this fact on EACE Bulletin vol.2, No.1 December 2000. "It is surprising to note that the civil procedure code whilst prohibiting arbitrability of disputes in relation to administrative contract (Art. 315 [2] civil procedure code) confirms that its provisions do not affect the provisions of the Civil Code (Art. 3325 – 3346) dealing with arbitration (Art. 315 [4] Civil Procedure Code). The Civil Code on the other hand expressly permits arbitrability of contractual disputes (Art. 3328 Civil Code). There is no indication in the Civil Code of the intent the legislator to exclude disputes in relation to administrative contracts from the domain of arbitrable disputes. It is unclear therefore how the Civil Procedure Code providing for

in arbitrability of disputes arising from administrative contracts could be given effect without affecting the Civil Code that provides for arbitrability of contractual disputes. The confusion surrounding the procedural code and the apparent contradiction between the two codes on the question of arbitrability of disputes relating to administrative contracts invites extensive debate.”

The ERA’ standard specification article 9.9 allows arbitration irrespective of who are the contractors or what type of contract it is. Here again the contract made between a national contractor for road construction works which is clearly public construction is an administrative contract. This implies that, though there is provision for arbitration on the standard specification article 9.9. How is it possible to compromise with Article 315(2) of the Civil Procedure Code?

The controversy of these articles shall be tested in the Ethiopian construction industry and competent interpreters of the law, judges and lawyers shall challenge the proceedings at lawsuit. Subsequently, it requires proper revision of the construction standard condition and the Civil Procedure Code, or further explanation with appropriate description for application to the prevailing construction situation.

FIDIC gives all steps through out the way from Engineer’s decision or judgment then amicable solution and finally arbitration. However, the condition of contract of MoWUD does not give chance for involvement of neutral body either in amicable or judgmental Alternative Dispute Resolution mechanism. The destiny of a contractor is at the mercy of the Engineer and the Minister or his representative. These are in one way or another partisan to the employer, the public authority. Furthermore, at certain projects, such as regional projects, it is impossible to differentiate the public authority who is the client, the consultant and at the same time who acts as third party, the judgmental role.

4.11 The Development of ADR in the Ethiopian Construction Projects

The stakeholders of construction projects treat their disputes at different levels. It does not mean that if there are no institutions or no clause of ADR on conditions of contract there is no mechanism of dispute resolution. On going misunderstanding are resolved amicably on job-site as deemed necessary. Differences of opinions on contract documents are also entertained accordingly. However, when the conflict escalates to unresolved claims, which are disputes, the resolution mechanism is not as easy as it is before its maturity.

4.11.1 Existing Legal Backgrounds

The Civil procedure code and the civil code have provision for the dispute resolution arising between parties as quoted on part two of this thesis. Ethiopian chamber of Commerce has legal mandate for arbitration of business enterprises on proclamations No.148/1978 article 6 sub article 5 and No. 341/2003 article 5 sub article 6, to settle, when the parties so request, by way of arbitration, disputes arising out of business transactions.

- 1) In lieu with this consent on January 26, 2002 Addis Ababa Chamber of Commerce has established Arbitration Institute, with vision to serve the demand of the business community in settling their commercial disputes, including construction disputes by their own appointed, knowledgeable of the subject matter, impartial and independent arbitrators within a short time in a less costly and confidential manner. When this thesis was being prepared, two cases were on pipelines.
- 2) Ethiopian Arbitration and Conciliation Centre is a civic institute established on November 2002. The centre is an independent body providing alternative mechanism for private disputes resolution. The centre has venue for both arbitration and mediation, with facilities including for construction related disputes.

However, from the foregoing discussion we saw on public works and administrative contracts, this situation is not applicable, to both establishments, unless legal amendments or changes are made to the preconditions.

- 3) The Ethiopian Consultants Association has produced draft Arbitration manual in September 2004 and submitted to The Ministry of Infrastructure, Design and Construction Supervision Office. The Construction Contractor's Association of Ethiopia has made its comment and returned to the Office in January 2005. Hence, this is still on process not yet implemented.

- 4) The Ethiopian Roads Authority replaces clause 67 for preventive type ADR, the involvement of Dispute Review Expert. This condition is introduced in assigning the Ministry of Infrastructure, as Dispute Review Advisor to national contractors. This course of action is an exemplary, and needs to be instituted at the national level.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Construction projects in Ethiopia are characterized by problems, such as time overrun, over budgeted, poor functionality, claims, and other project problems. The forgoing survey of this thesis on chapter four and the real situation witnessed these plain facts.

At the outset of any construction project, when goodwill and trust are usually at their high points, the parties will often neglect to record in writing many of the key agreements and understandings reached between them. Later on in the project, when problems start to arise, trust and goodwill often give way to the financial realities of potential construction claims. More often than not, it is not until this latter point in time that the parties will start to thoroughly record events, as well as any agreements and understandings that may have been reached.

Many domestic contractors are reluctant to pursue legitimate construction claims for fear of damaging working relationships and their reputation in the industry. There is no conducive atmosphere from the whole state of affairs. There is no clear fertile ground from the construction policy that initiates to pursue and move towards even legitimate claims. The policy executers do not entertain the queries and handle justifiable claims. The contractors themselves are not strong in formulating valid claims. Hence, the victims prefer to be submissive to such adverse situations even if it does not favour them.

Despite the fact that construction industry, involving domestic contractors, is more than 50 years old in Ethiopia, it is still in the infancy age, growing unfortunately, very slowly both in technical and financial terms. Regret the language, these days construction is not viewed as a profession. If there is, any growth to talk about is the increase in number of starter domestic contractors.

Regardless of non- award of legitimate financial claims, contractors should possess, or learn to possess, two qualities in construction industry: always being time-and money-conscious; using project time and money diligently. In both these cases, consultant's aggressive advice and client's assistance to contractors do play a big role.

The current traditional interaction between consultants and contractor, which reflects adversary situation should be changed to a simple "collaboration between two specialist contributors; the culture of partnering for mutual benefit shall be developed among the stakeholders.

Clients have to consider contractors as their fellow business collaborator, where they have called them to fill the gap they want them in their project set-ups. There shall be mutual understanding in their contract agreement. No one is subordinate to the other, those who made contractual agreement possess equal legal right. This requires the clients to be reasonable in discharging their contractual obligation diligently.

Contractors need to equip themselves as professionally engaged business firm. They should know their right and responsibility in the project they have committed themselves for its execution. They should not try to divert the route and communication with the client and consultant from direct contractual tie up to unnecessary side way business. They have to think of being sustainable in the industry with normal growth, both technically and financially. They have to protect their firm from corruption.

This research reveals and observations enlighten, that the partakers need to make adequate precaution with respect to their duties and responsibilities during inception and implementation of construction projects. The following points are worth to mention,

1. Inadequacy and incompleteness of designs and contract documents are main drawbacks from consultants,
2. ADR methods in Ethiopian construction projects dispute handling is not developed,
3. There is no arbitration clause on Ethiopian construction conditions of contracts,
4. Lack of collaboration between the stakeholders,

5. As there is continuous increment of cost of construction materials, manpower, and fuel; there is no cost escalation index,
6. Insufficiency of completion time, that causes delay due to improper scheduling and poor planning,
7. Public construction projects clients do not entertain legitimate claims,
8. Lack of immediate solution for problems encountered on job site, inefficiency of prompt consultants approval,
9. Lack of expertise and management of contracts,

Unresolved disputes undermine construction projects and hamper their successful completion. The parties simply cannot wait for delayed resolution without harming the project.

This research is only a prologue to the Alternative Dispute Resolution Mechanism, where an attempt is made to review the essentials, emanating from the legal background and the practices in the actual situation. More is expected from all for the proper development of the construction industry at large and project management for every project to be successful.

5.2 Recommendations and Proposal for Further Research

It is to be expected in construction that technical difficulties will arise on site and that misunderstandings will occasionally occur on contracts. Clients and the industry should accept this but enter into the contractual relationships in a mutually supportive frame of mind in order to establish the benefits of the goodwill which each brings to such relationships.

The objective of sensible dispute management should be to negotiate and settle a dispute as soon as possible. Negotiation can be, and usually is, the most efficient form of dispute resolution in terms of management's time, costs and preservation of relationships. It has been shown as the preferred route in most disputes. If a settlement cannot be achieved through negotiation, another method or methods of dispute resolution should be considered. Note that it may still be possible or necessary to continue negotiating as part of or alongside other forms of dispute resolution.

Partnering works well to prevent disputes, and Dispute Review Boards, Mediation, and Arbitration have all proved very successful for resolving disputes (Fenn, O'shea and Davies 1998).

1. Possibly the "best" ADR approach for construction projects would be:

- Start with partnering and rely on direct negotiation,
- Use a Dispute Review Board to resolve additional dispute at the construction site during the life of the construction project;
- Use Mediation to resolve conflicts that the Dispute Review Board was not able to solve; and
- Finally, include an Arbitration clause into contract and use arbitration as a last resort.

2. The government shall make an amendment to the civil procedure code article 315, that administrative contracts shall be arbitrable. The confusion shall be clear around the civil procedure and civil codes,

3. Ethiopian Standard Conditions of Contract is an adoption of FIDIC, some clauses of the Standard Conditions of Contract were revised by the government (the government itself being the client of public works) who chose to be an authority to re-asses the evaluation and assessment of claims supposedly made by independent Consultants, making it

certainly partial. Clause 67 requires serious revision. Alternative Dispute Resolution Mechanism has to be included in the Ethiopian Conditions of Contract. The clause to include conciliation (mediation) and proper arbitration.

4. The professional and business firms Associations have to develop the in-progress Arbitration guide line process. The institutions established for Conciliation and Arbitration by civic society and the Addis Ababa Chamber of Commerce shall be well organized to give services ethically and must prove compatible service.
5. Trainings have to be given to Engineers, Architects, and lawyers to conduct ADR venues including arbitration.
6. Keep building up the capacity of graduating engineers, contractors and consultants in the specific areas of consultancy and construction contracts as well as in the professional and ethical obligations inherently presumed in the contract administration. This could be the joint responsibility of government policy makers, construction contractors' associations, consulting firms associations in collaboration with professional associations and academic institutions.
7. Both contractors and consultants attend seriously their tasks and assignments as outlined in the contract document,
8. Keep meticulous documentation of project's progress work force, weather, equipment, correspondence all events on timely bases by the contractor and copy to the consultant timely.
9. Improve the long processes of payment approval and effecting by consultants and clients respectively,
10. Lack of immediate solution for problems encountered during construction shall be improved, handle the case efficiently on job site, if approval from consultant's office or client's involvement is required make it prompt,
11. Detect and avoid hidden individual interest of the site supervisors/ resident engineers, they shall behave ethically and professionally, no ambience of corruption be cultivated,
12. Continuous increment on cost of construction material, manpower and fuel; implement cost escalation index,
13. Insufficiency of completion time that causes delay, be improved, proper time scheduling both in the main contract and either supplementary or variation orders, shall be allocated by consultants and contractors.

- 14.** Low capacity of contractors to fulfil contractual commitments shall be reviewed properly and if capacitating is required shall be addressed properly by government for the comprehensive development of the industry,
- 15.** Lack of expertise and management of contracts shall be augmented through workshops, seminars, trainings, and formal studies,
- 16.** Partiality of consultants to the client shall be corrected, especially where the government projects are carried by the same body acting as client and consultant,
- 17.** Government organizations shall entertain legitimate claims, that is claims properly submitted by the contractor with relevant contract agreement and supporting evidence and approved by consultant of the project,
- 18.** Personal and professional superiority, shall not be manifested on execution of a construction project, there shall not be indication of whatever sort of power manifestation apart from the project objective,
- 19.** Consultants have to furnish professional indemnity insurance for the designs they produce for construction against professional fault as per the requirement of the Ethiopian Civil Code article 2031,
- 20.** Education on human relationship, interpersonal relationship, ethics, negotiating skills, conflict resolution, local and international construction law training, etc

Disputes are an unpleasant fact. In construction, disputes of various sorts occur every day at every project. Participants of construction management should be aware of this. The proper handling of a dispute is at least as important and often more influential on developing and completing a project successfully than construction method and technology. Disputes must therefore be resolved when they arise.

It is hoped that, this paper with other earlier MSc theses researches by Abdissa Dessa and Girmay Kahsay on claims in Ethiopian construction industry (February 2003) and Claims in international projects in Ethiopia (June 2003), respectively have opened the door to claim and dispute/conflict spectrum for the next construction management students, practitioners, project managers, etc. The subject matters covered on earlier researches were mainly on the impact of claim on the public projects due to lack of adequate claim administration. The current research mainly focused on the domestic contractors, local fund and local dispute

resolution proceedings. The comprehensive scenario is that there is lack of claim, conflict/dispute management that requires serious attention.

This is only the beginning of a very complex problem. Subjects such as:

- a)** computation of losses due to unresolved disputes,
- b)** comparison of alternative dispute resolution methods, later on when ADR is in practice,
- c)** fact findings in implementing ADR,
- d)** case studies when the ongoing ADR venues are operational, etc

These and other relevant topics of Alternative Dispute Resolution Methods are not covered in this paper. Researches, discussions and analysis of such problems are recommended for further researches.

References

1. Abbett, R. W., Engineering Contracts and Specifications, fourth edition, USA, 1962
2. Abdissa Dessa, Claims in Ethiopian Construction Industry, MSc thesis, Civil Engineering Department, Addis Ababa University, February 2003.
3. Agarwal, V., (2001) Alternative Dispute Resolution Methods. In: Unitar sub-regional workshop on arbitration and dispute resolution, Harare, 11-15 Sept.2000
4. Albert, D., Parker, P.E., Donald S. Barrie, P.E., Robert M. Snyder, P.E., “ Planning and Estimating Heavy Construction,” McGraw-Hill Book Company, 1984
5. Barrie, D. S., and Boyd, C. P. J., Professional Construction Management, McGraw-Hill Book Company, 2nd Ed., 1984.
6. Botha, H., Conflict in the construction industry, Bellstone training (international) limited, 2000
7. Boulle, L., (1996), Mediation: principles, process, practice. North Ryde, Sydney: Butterworths.
8. Burton, J., Conflict-Dispute Distinction in conflict resolution and prevention, New York, NY. St. Martin’s press, inc.,1990
9. Carsten, K., “ Using conflict in Organizations” SAGE, 1997,
10. Cheung, S., Henry, C, H, S; and Lam, T., (2002) Fundamentals of Alternative Dispute Resolution Process in Construction, *Journal of Construction Engineering and Management*, September/October, Volume 128, Issue 5, 409-417
11. Civil Code of the Empire of Ethiopia, 1960
12. Civil Code Procedure of the Empire of Ethiopia, 165
13. Clarence, W. D., and Robert, d. Y., Contracts, Specification, and Law for Engineers; McGraw-Hill book company, inc, 1958.
14. Costinitino, C.A., and Merchant, C.S., Designing Conflict management system, San Francisco, Jossey-Bass, 1996.
15. Dighello, J. RM., (2000) Dispute Resolution: When does an everyday disagreement develop into a genuine dispute or potential claim. Hartford, United Kingdom: Kelly and Spelly.
16. Douglas, H.Y., Conflict in Dictionary of Conflict Resolution, San Francisco: Jossey-Bass, 1999

17. EACE Annual Bulletin Vol. 2 No. 1 December 2000, Arbitration by Michael Gunta, page 17- 23
18. Epstein, R. C., How construction contracts cause litigation, Greenberg training, new jersey office, 2004
19. Ethiopian Roads Authority, Standard Specifications, 1968
20. Federation International Des Ingenieurs-Conseils (FIDIC), Conditions of Contract for Works of Civil Engineering Construction, fourth edition, 1987
21. Fenn , P., O'shea M., Davies, E., "Dispute Resolution and Conflict Management in Construction, an international review", E & FN Spon, 1998
22. Fenn, P., and Gameson, R., (1992) construction conflict management; proceedings of the 1st International Construction Management Conference. London: E & FN Spon.
23. Fisher, R., and Ury, W., (1991) Getting to Yes: Negotiating Agreement Without Giving, In: Bruce Patton (ed). 2nd edition.
24. Gashaw Yayehyirad, lecture notes, Project management, postgraduate study, Construction Technology and Management, Civil Engineering Department, Addis Ababa University, 2004.
25. Girmay Kahssay, Claims in International Projects in Ethiopia, MSc thesis, Civil Engineering Department, Addis Ababa University, July 2003.
26. Halpin, D. W., and Ronald W. W., *Construction Management*, John Wiley and Sons, 1980.
27. Hartley, P.M., "Consulting Engineering: Constructing the future, Research studies press Ltd., baldock,1941
28. Hibberd, P., and Newman, P., (1999) ADR and Adjudication in construction disputes. London: Blackwell science.
29. Hodgetts, R.M., *Management: Theory, Process and Practice*, W.B. Saunders Co., Philadelphia, PA, 1979.
30. Kerzner, H., *Project Management: A Systems Approach to Planning, Scheduling and Controlling*. 2nd. Ed., Van Nostrand Reinhold, New York, 1984.
31. Levitt, R.E., Logcher, R.D., and Quaddumi,N.H., "Impact of Owner-Engineer Risk Sharing on Design Conservatism," *ASCE Journal of Professional Issues in Engineering*, Vol. 110, 1984, pp. 157-167.
32. Loosemore, M., Crisis Management in Construction Projects, ASCE press,2000

33. McClymont, R., How to Document a Construction Claim, Modular Building Institute, 413 Park Street, Charlottesville, VA 22902 USA, 2003
34. Ministry of Works and Urban Development (MoWUD), Standard Conditions for Contract of Civil Works Projects, December 1994
35. Moolin, F.P., Jr., and McCoy, F.A. "Managing the Alaska Pipeline Project," *Civil Engineering*, November 1981, pp. 51-54.
36. Murray, L., Gallardo,E., Aggarwal S., and Waywitka,R., "Marketing Construction Management Services," *ASCE Journal of Construction Division*, Vol. 107, 1981, pp. 665-677.
37. Pretorius, P., (1993), *Dispute Resolution* (ed). Kenwyn, South Africa: Juta & Co.
38. Project Management Institute, *A Guide to the Project Management Body of Knowledge*, Newtown Square, Pennsylvania, 2000.
39. Rahim, A.M., "Managing Conflict in Organizations," praeger, 1986.
40. Revay, S., *Construction managers and claims consultants*, Revay & associates ltd, vol. 14 No. 2 June 1995
41. Royer, K., "Desk book for construction superintendents," Prentice-Hall,inc., 1967
42. Taschuk, P., and Chambers, S., (1999) *The latest in Dispute Avoidance Techniques*: paper prepared for the construction super conference, January 20 & 21, Edmonton, Alberta Canada.
43. Yuena, H., (2002) *Introduction to Alternative Dispute Resolution and Mediation*, ADR workshop, 2-6 Oct., Hong Kong.

Case Study No.1

Gog- Akobo RR 50 Rural Road Project

Contract termination by Employer & then Litigation

Project: Emergency Recovery Project (ERP) Gog-Akobo RR 50 Rural Road Project

Location: Region 12 Gambella

Client & Engineer: Ethiopian Roads Authority (ERA)

Expatriate Consultant: Delcan International

RPCE(Resident Project Coordinating Engineer)

Local Sub-Consultant: Mulugeta Asfaw- Architects

Contractor: Baro Construction PLC.

With a planning foresight for the expansion of development programs in the various regions of the country for the first time ever in 1993/1994, the government under took the construction of fourteen (14) rural road projects; from among which the Gog-Akobo RR 50 project in region 12 (Gambella) was one of them. The construction of these road projects was also intended to encourage and assist local contractors and consultants to grow in order to tackle larger projects undertaken by foreign contractors.

Indeed, bid bonds and performance bonds were waived and collateral for advance guarantees were also waived and mobilization advance funds were treated under joint accounts.

In 1993/94 the Ethiopian Roads Authority was being re-established and in the processes of being re-organized as it was almost over 90% disbanded during the Derg regime as almost every ministry and government agencies were made to have their own construction branches.

At this juncture, ERA had no contract construction division or engineers to prepare bidding documents or resident engineers to supervise at the construction sites. Because of this reason, expatriate consultants were hired, who in turn were made to hire local consultants. The duty of preparing the contract documents as “turnkey” projects, therefore, fell on to the then

Construction Ministry (under whom ERA operated then) under the direct overseer and sponsorship of the Minister. No feasibility studies were made or were available at this time.

ERA's newly appointed managers barely a few months in office were given the contract documents and proceeded with bidding and awards. For some unknown reasons(s) the pre-bid meeting of contractors and ERA were not allowed to be minuted.

After the bids were opened and analysed Baro Construction PLC refused to sign and thus delayed the joint signing of other contracts for over two weeks as there were omissions of terms and references and only the unit cost per kilometre was taken. With promise of the then General Manger that all be rectified in due course, signed the contract.

For about five months into the construction, the contractor faced the problem of the Resident Engineer and the Designer. (The materials inspector knew and was good on his subject). All of them were hired by the local sub-consultant. After repeated requests ERA sent ERA's chief engineer to asses the situation and to try and solve problems arising mainly on line location, & locally available materials together with the consultant and ERA's District Manager and Superintendents. He made his observations, gave recommendations vis-a- vis the contract documents and specifications with a promise of written follow-ups and left the site on Friday. On the next Monday ERA's G/Manager, the Chief Engineer, Contract Construction Division Head and the Planning & Programming Manger were all thrown into jail; with that the end of a possible smooth running project.

All the same, the contractor continued to correspond with the RPCE and in particular with the Contract Construction Division with copies to the General Manager. Various times again the contractor requested ERA to get involved into the matter and solve the continuing problems but to no avail.

With a period of three years the contractor received one letter of response to all its correspondences with absolutely no references to the problems arising between consultant & contractor.

With the first Resident Engineer and replaced two surveyors in a period of eleven months, construction progress bogged down to about four kilometres only. With next capable Resident Engineer the contractor reached km 65 in 12 months with 59kms totally completed. He too resigned and left the project. Thereafter the site had no Resident Engineer. The Designer was nominated as the RE until the termination of project by the RPCE.

Problem Arising from:

A. Contract

1. Expected pre-bid minutes to make any modifications through the issue of an addendum according to Art. 16.2 were ignored.
2. The letter of award respects the acceptance of the contractors tender and the letter was not included in the contract. (Only the unit rate per kilometre).
3. There was no appendix to the tender and yet “appendix” is acknowledged as part of the tender.
4. There was no stated contract time (this was also deemed to be included in the non-existent appendix)
5. Preliminary project alignment shown on a map sketch serves as no guide route, put aside for the indication of the four control points. The first one of which was established with the help of the contractor 3.5 kms south of the given point later on.
6. The so-called “route corridor” showed only footpaths adjacent to the Gilo River northern bank showed no limits. The location of the route following the given technical parameters and respecting the four control points was the responsibility of the contractor approved by the consultant. Just for the record not one meter of road was possible to be chosen and constructed on the route corridor up to km. 65+000
7. The typical cross-section showed a formation width of 6.00m which automatically constricted the roadway width to 5.70m after placing of the surface course. The contractor nagged to build to an average formation width of 6.60m to end up with 6.00m roadway width.

The RPCE admitted to the error but refused to confirm in writing let alone pay for the difference.

8. Duration period of the contract was excluded from the contract. It leaves no room for liquidated damages.

B. Standard Specifications 1968

1. Article 8.8(2): Contractor informs RPCE well ahead on time as stipulated of changed conditions: Extra works necessitated due to line changes and unfavourable ground conditions. RPCE does not respond in spite of repeated requests in writing but verbally tells the contractor to go ahead follows up all the works conducts the necessary tests through the RE. About a year later RPCE rejects all payments for the extra works and possible time extension there from.
 - a) km. 20 + 640 – km. 21 + 000: RPCE was informed on 23.05.94 and rejection response was in March 1996.
Claim Amount ETB 343, 082.62
 - b) km. 33 + 000 – km. 48 + 140: ditto as above
Claim Amount ETB 3, 085, 614.74
 - c) km. 48 + 140 – km. 54 + 100: ditto as above and line change dictated by RPCE & ERA brought about extra works: Rejection by RPCE April 1988
Claim Amount: ETB 1, 544,173.16
 - d) km. 54 + 100 – km. 56 + 240: Ditto as above: because of the line dictated by ERA
Claim Amount: ETB 625, 888.37

This brings the contractor's claim amount to ETB 5,598,708.90

C. Time Extension:

- a) Requests for time extension is mainly based on the marked delays in approving location lines. For example the first 30kms took fourteen months. Past km. 30 +

000 up to km. 65 + 000, At one point the contractor had to go back on an 8 km. loop as it was impossible to proceed further on ERA's line.

D. Termination of Contract & Implementation:

1. For whatever reasons, ERA was not willing to involve itself in solving the problems arising between the consultant & contractor. This has had disastrous effects on the project and consequently on the contractor.
2. On March 23, 1998, the contractor received the letter of termination from the G/Manger of ERA. This was the time the contractor was continuing trying to involve ERA, the Gambella Region, Office of the Prime Minister & Minister of Construction.
3. The termination letter stated:
 - a) "Baro had failed to complete the works within the time of completion specified under the contract with ERA" and yet the acceptance of the contractor's tender signed on February 24/1994 also contains no mention of contract period. The G/Manager of ERA was not fully aware all along of the contractor being denied due time extension nor did ERA make the slightest effort to correct this discrepancy through an addendum.
 - b) "Baro had in actual fact discontinued the persecution of the works and eventually abandoned the contract". In the first place a contract is never abandoned: a project could be. From the rumours emanating from within ERA that Baro had abandoned the project, ERA has sent a team in February in 1998 to investigate. The team ascertained that all personnel and equipment were on the site and the whole camp operational after which a small payment was released. One month later the contractor received the termination letter.

To the bitter end until it was becoming absolutely impossible the contractor kept on construction on the line prescribed by ERA, contrary to the contract agreement being denied payments for works supervised and accepted until termination.

- c) "In flagrant breach of contract". According to Article 8.11 of the standard Specifications the contractor had received no such notice from the Consultant or ERA at all. The G/Manager's letter does not indicate under which article of the contract agreement claimed to have the contractor "in flagrant breach of contract".

Implementation:

- a) Baro went a step further as called for in the Standard Specification on matters of dispute settlement Article 9.9 to ERA never responded. ERA's G/Manager has failed to respond to in over 400 days instead of the prescribed 30. Baro referred the matter to the Board of Directors through ERA's G/Manager as called for it got reserved there. Baro then asked for the next step, i.e. arbitration. ERA completely refused in writing. (At this time there was a court case on the impounding of Baro's assets in Region 12 by ERA's order.)
- b) Implementation of the contract at the termination was totally ignored. If ERA had found the contractor in flagrant breach of contract and had terminated the contract as empowered by the Standard Specification it should have undertaken the continuation of the construction of the project as dictated. It did attempt no such thing.

ERA's General Manager, in his letter to the Gambella National Regional Government had the contractor's assets construction equipment and camp impounded without a court order, leaving the contractor completely paralysed.

Being totally handicapped, ERA not willing to come to amicable solution, the contractor had no choice but start a litigation process on the impounding of the contractor's assets in Hmale 1990. Baro never went to court at the termination of the contract because of its claims, or for whatever reason as what was stipulated in Article 9.9 of the Standard Specifications "Dispute Settlement" was not fully exploited.

The Federal High Court ordered the release of the Contractor's assets in April 2000, while assets purchased with mobilization money worth some ETB 5, 000,000. - is still rotting away and being vandalized because of the troubles in Region 12.

At the writing of this paper, April 2005, the case is still at the Federal High Court.

On Megabit 15, 1997 a fourth judge to see the case, the court ordered ERA to go into arbitration and they are going through the ground works for discussions.

I. Particulars of the Project under case study

Project: Emergency Recovery Project (ERP) Gog- Akobo RR- 50 Rural Road Project

Location: Region 12 – Gambella

Client: Ethiopian Roads Authority (ERA)

Financer: Ethiopian Government

User: Public

Consultant: DELCAN International (Canada)

Contractor: Baro Construction PLC,

Supervisor: Mulugeta Asfaw- Architects- (Sub Consultant)

Type/bases of contract: Turnkey – (Design and Build)

Main Contract Amount: ETB 45, 500,000.-

Total contract amount: ETB 45, 500, 000.-

Final Project amount: *unknown (project terminated)*

Main contract time: Not given in contract

Total contract time: (presumed 1080 days)

Commencement date according to contract: April 1994

Actual commencement date: April 1994

Completion date according to contract: -

Actual completion date: Project terminated by ERA

Total actual completion time: Project terminated by ERA

II. Disputes incidence between Client/Consultant and Contractor

Claim No. 1

1.1 Reason: Extra works @ km 21: ERA and Consultant were informed according to Art. 8.8

(2) standard specification of 1968, extra works undertaken under supervision,

1.2 Consequences: ERA and consultant refused payment & inform rejection of claimed time

and cost two years later, (05/94 – 03/96)

1.3 Claimed amount in time: 35 days

1.4 Claimed amount, financial: ETB 343, 082.62

1.5 Other: line approval took 14 months (0+000 – 30+000)

1.6 How the claim was treated: Not settled

1.7 Granted extension of time: Nil

1.8 Compensation of Cost: Nil

Claim No. 2

2.1 Reason: Extra works, km. 33+000 – km. 48+140, no response to claims by consultant until rejection a year later.

2.2 Consequences: Not being paid the contractor began to impair liquidity,

2.3 Claim amount in time: 110 days

2.4 Claimed amount in cost: ETB 3,085, 614.74

2.5 Other: ERA kept on dictating line location against the contract- thus ensued extra works,

2.6 How the claim was treated: Not Settled, still pending,

2.7 Granted extension of time: Nil

2.8 Compensation of Cost: Nil

2.9 Other: According to contract, contractor was to locate the line between given control points ERA took this over. This ensued extra works,

Claim No. 3

3.1 Reason: the construction route had to go back on an 8km. loop backwards into swampy areas away from the contractor's line,

3.2 Consequences: extra works –loss of time

3.3 Claimed amount in time: 70 days

3.4 Claimed amount in cost: ETB 2,170, 061.53

3.5 Other: This brought the claimed cost to ETB 5,598, 708.90

3.6 How the claim was treated: Not settled

3.7 Granted extension of time: Nil

3.8 Compensation of cost: Nil

3.9 Other: No resident Engineer for 14 months at the end,

Claim No. 4

- 4.1** Reason: After termination of contract by ERA, contractor's equipment & machinery were impounded at Pugnawido camp Gambella,
- 4.2** Consequences: Contractor was refused any and all payments, completely paralysed,
- 4.3** Claimed amount in time: none
- 4.4** Claimed amount in cost: ETB 14, 033,162. 86
- 4.5** How the claim was treated: High court ordered release of contractor's own equipment & machinery
- 4.6** Granted extension of time: -
- 4.7** Compensation of Cost: -
- 4.8** Other: Equipment & camp bought from mobilization fund still rotting in Gambella.

Summary of the Claim, and dispute/ conflict out come,

After six years and eight months High Court litigation, the court ordered ERA to go into Arbitration.

The conditions of contract, ERA's standard specification of 1968 article 9.9 allows arbitration. However the Ethiopian civil code procedure article 315(2) does not allow arbitration of administrative contracts.

Therefore, when the court orders the parties to go to arbitration it is not clear on what basis it becomes effective. Where to arbitrate and who takes the responsibility of arbitrating, that is who will be the Arbitrator?

This case study reveals that construction disputes do not get court verdict efficiently. It is essential to look for Out-of-Court professional ruling even when disputes escalate to judgmental options.

Case Study No. 2

Contract for Civil Works BERTA Construction PLC and Siemens AG Dept.

ATD 1s 5D at Addis Ababa Air Port

Contract Termination by Employer and then Arbitration

ARBITRATOR:

Seifu Birke, Representing SB Consult, Consulting Architects & Engineers

1. Background of the case

Ethiopian Civil Aviation Authority & Siemens AG entered into an agreement for the execution of works under package III of the Addis Ababa Airport.

Siemens AG employed Berta Construction PLC and signed a sub-contract agreement for the construction of the civil works under Package III on the principle of Design and Construct. The construction works consisted of various buildings and outdoor works within the Addis Ababa Airport area and at Gwassa site.

Letter of agreement dated March 14/2000 was signed between Siemens & Berta which indicated that the cost of the project as:

- Birr 16,170,000 as a total value
- Birr 4,830, 000 for off-shore delivery

This letter states that, the two contracts to be signed in the future will supersede this agreement.

A sub-contract agreement was entered between Siemens & Berta on March 30/2000 which covered only the amount of birr 16,170,000.-

The project was not completed in accordance with the schedule. The schedule has been revised a number of times. Correspondences had been going on between the two parties in connection with work delay, design problem & related issues.

Siemens cancelled and terminated the contract in two separate sections before completion of the works. The cancellations and terminations are:

- Cancellation of Gawassa area works by letter Ref. T95D-79004/AC2B381 of October 31/2001, before completion of works.
- Termination of the subcontract with Berta by Siemens dated December 31/2001.

Following the termination of December 31, 2001, the two parties (Siemens & Berta) discussed the issue and signed a memorandum of Agreement on the 2nd of January 2002 submitting to settle their differences by Arbitration. The two parties appointed Seifu Birke representing SB Consult to be the sole arbitrator.

The Agreement for Arbitration was signed between Siemens and Berta on the one hand and SB Consult on the other hand on March 25/2002.

2. Claimant and defendant and reference to parties

In representing the case both Berta and Siemens have appeared as claimants. As it has not been possible to see the claims of each independent of the other, and as the basis of claims are the same issues, both have been taken as claimants and defendants. The reference to the parties in dispute is hereinafter.

“Berta” for Berta Construction PLC

“Siemens” for Siemens AG

The reference to Berta & Siemens applies to the organizations and their counsellors.

3. Correspondences

All correspondences between the parties in dispute were made only through the arbitrator. Any correspondence addressed to the arbitrator by one party was transmitted to the other for response or as record document.

4. Sequence of activities in the arbitral proceeding

Both Siemens & Berta have been presenting their claims, defence, statements, counter responses and other correspondences in writing except:

- The hearing of witness presented by Berta.
- Final oral presentation that the two parties in dispute made, both of which were at the tribunal before the arbitrator.

Similarly the correspondences between the parties and the arbitrator were as well in writing. The sequences of activities of the proceeding from the start to the date of final award are recorded.

5. Claims

- a) Siemens states that, it terminated the contract on the grounds that “Berta failed to meet its contractual commitments despite repeated warnings & financial support by Siemens”. Siemens claims compensation of loss in accordance with the contract & reimbursement of arbitration expenses to the date of completion of works & Arbitration.
- b) Berta denies this by stating that, it had notified Siemens that, the termination was illegal & contrary to the provisions of the agreement. It had immediately after receipt of the notice, instituted court action for suspension of the termination. (Berta argues that Siemens was forced into Arbitration by the court injunction while this is denied by Siemens. No clear evidence is presented by both parties on this).
- c) According to Berta the termination has no factual, contractual or legal grounds. Berta therefore claims payment of all outstanding payments for executed works & materials supplied, balance of off-shore procurement, rental cost of machinery detained by Siemens at the time of termination and costs to Berta resulting from the termination

6. Issues

Both Berta and Siemens have submitted claims, defence & counter response statements as Claimants & Defendants. The issues that are basic and need ruling are summarised below

6.1 Contract Amount

Berta & Siemens do not agree on the contract amount. The contract amount is Birr 16,170,000 only according to Siemens while according to Berta it includes an additional sum of Birr 4,830,000 for off-shore procurement. The agreement dated March 14/2000 states that “this letter is binding on both parties until both sub-contract agreements are signed in Addis Ababa”. Only one sub contract Agreement for Birr 16,700,000 was signed later. Siemens also occasionally refers to “recovery of costs from the off-shore component” in its correspondences. The issue to be resolved is:

- a) Is this agreement of March 14/2000 valid, as it has not been replaced by an agreement to cover the 4, 830,000?*
- b) Which is the correct value?*

6.2 Completion Time

There is a big difference between the two parties on the start & completion dates of the works. The following are the highlights of the differences.

- a) Siemens states that, the milestone dates set in the schedule are in accordance with the schedule attached to the minutes of March 28/2000. Berta denies this and states that this is only a draft. Berta in-fact states that “Milestone dates, were entered only on October 02/2001 and not any previous dates, and all revisions of schedules prior to this date were not showing mandatory completion dates.
- b) Siemens argues that, the first schedule drawn out and attached to the minutes of March 28/ 2000 is binding.
- c) Berta presents as additional argument, that it has been repeatedly held up by Siemens, by
 - Delaying site handover
 - Long process of design approval
 - Design changes after submission by Berta
 - Forcing Berta to work under difficult weather conditions as a result of delay in design, specialized contractor, and etc approval.

The issue raised from this is

Which is the contractually binding date for completion of works? The first schedule attached to the minutes of March 28, 2000 or the schedule revised by the Minutes of October 3/2001.

6.3 Delay in works

The other area of difference is the delay in the works. The following are the major differences:-

- a) Siemens argues that, Berta has delayed the work, despite repeated warnings. The quality of work was also under that required by the specification. Siemens had offered various assistances particularly financing the project upfront by material purchase. The situation has not improved despite this. The work has suffered substantial delay and, as a result, damage to Siemens.

The argument has not been accepted by Berta on the ground that:

- There was no milestone date before the date set by the meeting of October 02/2001. According to Berta all other revisions, milestone dates, etc set before the above date were not obligatory.
- The hand over of the works sites to Berta by Siemens had substantial delay thus affecting work schedule.
- Work was unnecessarily held up because the design approval process was very long. Most of the reasons for rejecting submissions were futile and unreasonable. The design had to go back and forth for reasons not acceptable to Berta, as the excuses given were usually minor or negligible.
- Siemens was making basic design changes after drawings were approved or even work executed in some cases. This had both time & cost impact.

- Berta was forced to work under difficult weather conditions as a result of delay in approval of design.

In conclusion Berta argues that, the delay is caused by Siemens and that Berta has suffered damages as result.

- b) According to Siemens, Berta was not capable of producing designs approvable by the Client's Engineer. Repeated back & forth checking was needed before approval of drawings was obtained. Siemens therefore challenges the capability of Berta to design and execute the works.

The response to this by Berta is as stated as above in a)

The issues raised from these are.

- *Whether the work has been delayed or not?*
- *If delayed, who is accountable for the delay?*

6.4 Termination

According to Berta, Siemens served "Notice of Termination dated December 03/2001 while Berta was performing its contractual obligations in compliance with the terms & conditions of the sub-contract. This termination, according to Berta has no legal, factual or contractual basis and is therefore challenged.

Siemens argued that Berta failed:

- To commence the design and secure approval for execution of fence works as required by the Main Contract.
- To submit a detailed work program in time
- To complete the whole & sections of the works with the time for completion as provided in the contract.
- To maintain the required rate of progress to guarantee the timely completion of works, and despite repeated instructions, to revise its plan of operation.
- To correct design defects despite requests by the Employer.

- Maintain competent personnel, goods & other things & services required for the design, execution, completions and defect remedy of works.

Siemens includes by stating that, it was left with no option but serve notice of termination as a result of Berta's non-performance and breach of contract. Its serving notice of termination is therefore, within the provisions of the contract & law (Article 1771 & 2620 of the Civil Code of Ethiopia & Clause 5.2 of the conditions of the Main Contract)

The issue raised from this is:

Whether the termination is legal, contractual or factual and which party is liable for the consequences arising there from

6.5 Termination at Gwassa Site

According to Berta, the out door works in Gwassa were cancelled by Siemens letter dated October 31/2001, contrary to the provisions of clause 15.5 of the conditions of contract. The cancellation of the works was after clearing, grading, & levelling of the road works and the fencing works was completed.

This has been challenged by Siemens, in the counter response as Berta, having them no executed.

The issue raised from this is:

Whether the cancellation is contractual and which party is liable for the consequences arising there from?

6.6 Pile Foundation

Berta claims that, the change of diameter of pile from 600mm to 800mm by Siemens was not justified. In addition Berta was forced to cancel the sub-contract agreement with PFWWDE, which it had already signed due to the change in diameter.

Siemens in its defence statement argues that, the change in pile diameter was not claimed by Berta but due to incompetent design (by Berta) and failure in the selection of a qualified sub-contractor for the works.

The issues raised from these are:

- *Whether Siemens' denial of approval of PFWWDE as the piles subcontractor is technically and contractually correct?*
- *Whether the use of 800mm diameter pile to replace 600mm as envisaged in the contract technically sound?*
- *Whether Berta or Siemens would be accountable for the cost difference arising out of the two changes?*

The Arbitrator has made clarification questions on the claims, defences and issues raised by both parties.

The parties in dispute have presented their arguments on all issues raised and clarification questions posed by the Arbitrator.

After the two sides have submitted all what they have for the claims and responses. The Arbitrator has done analysis of arguments, witness, statements and expert opinions.

7. Rulings and Awards

7.1 Bases of Rulings and Awards

- a) The analysis of the written & oral arguments, witness statements and expert opinions as presented by both parties.
- b) The claims, counter claims submitted by Berta & Siemens each being Claimant and Defendant (Respondent)

This ruling & award is made in addition to the Interim Award issued to both parties covered by letter BS/011/03 dated May 23/2003

7.2 Category of conclusive summary issues considered for decision and award

The following are the conclusive summary of issues considered for decision and forming the basis of award.

1. What is the Sub-contract amount?
2. Has the work been delayed? Is the termination at Gwassa & the final termination of December 3/2003 contractually correct?
3. Was the desire to use Bauer Midroc as the piling sub contractor and constructing the 800mm pile only correct?

7.3 Rulings

7.3.1 Contract Amount

- a) On the basis of the analysis, the arbitrator has decided that, the total contract amount is Birr 21,000,000.00 (16,170,000 + 4,830,000) as claimed by Berta and not Birr 16,170,000.00 as alleged by Siemens. Berta is therefore entitled to the claimed outstanding payment resulting from the difference between the two sums, less any payments lawfully made by Siemens on behalf of Berta before the termination of the contract.
- b) Cost Distribution

For the Purpose of cost distribution of Project components the schedule of payments is revised schedule agreed between the two parties which takes effect as of March 2001 is shown in Certificate No. 6

7.3.2 Delay of Works & Termination

- a) The Project has been delayed in relation to the initial agreed time and revisions thereof. The responsibility for the delay rests with Berta as Siemens has done all its capability to urge Berta to improve progress and catch up with the schedule. Siemens is therefore entitled to be compensated for damage it suffered, which damage claim is lawful in as far as it is within the provisions of contract.
- b) The termination of work at Gwassa site by Siemens can not be under clause 11.4, but under 15.5. The entitlement of Berta as a result of this termination is as provided under clause 19.6 of the conditions of contract if claim has been filed accordingly.
- c) The termination of the contract by letter of December 3/2001 is neither contractually nor procedurally correct as termination due to delay in completion before applying maximum liquidated damage is prevented by sub-article 8.7 of the particular conditions of contract.

7.3.3 Termination of Gwassa Site

Siemens has not substantiated any argument against Berta's claim that, it is terminated under Article 15.5 of the conditions of contract, which disallows termination, to execute the job by itself or get the execution by others. Although the deficiency in work has not been contested by Berta, Siemens has not applied clause 7.6. The decision of the arbitrator on the matter is:

- That the termination is not procedural and consistent with clause 11.4 as cited by Siemens.
- Termination is pursuant to clause 15.5 as cited by Berta.
- Siemens should have not terminated the job to give it to another contractor (as stated by Siemens) contrary to the contract provision.

- Berta is entitled to the claim as long as the claim is consistent with clause 19.6 of the conditions of contract.

7.3.4 Pile Foundation

- a) Siemens objection to the employment of PFWWUDE as the piling subcontractor to Berta is correct on the ground that PFWWUDE has distorted facts in responding to queries posed to determine its capability. Berta therefore is not entitled to any extra costs incurred as a result of employing Bauer Midroc both in the added cost paid to Bauer and incidental costs, thereof.
- b) The expert employed by the arbitrator has indicated that, the use of 800mm diameter outside the tower is not justified. The claim that the use of 800mm pile was correct for all as argued by Siemens is therefore not accepted. The use of 800mm piles under the tower has not been doubted by the expert although the use of 600mm diameter piles would have been possible with increased numbers. The 800mm piles under the tower are therefore accepted.

In conclusion:

- The entitlement of Berta is only the difference in cost between the 600mm piles as laid out by AMCE under the actual cost of the 800mm piles under the light building as cast by Bauer Midroc. No indirect costs not directly applicable to unit length of piles shall be distributed approximately.

7.4 Monetary Awards

Consequent to the ruling in above and the claims and counter claims submitted by the parties, the arbitrator has ordered the following financial claims & compensations to be paid as indicated below.

1. on the Contract Amount:

Siemens is to pay Berta the outstanding balance of the Procurement of off-shore materials as indicated in Berta's Claim "materials to be produced from abroad" which is: **Birr 3, 9751, 516.00**

2 On outstanding value of executed works:

Berta owes Siemens the balance amount obtained from the Calculation being the sum of: **(Birr 1,737,172.68)**

3. Cost of construction of materials & equipment retained by Siemens

Siemens is to pay Berta for materials and equipment it retained, the cost of which is as worked out in Berta's claim under "Cost valuation of equipment retained by Siemens" which is: **Birr 2,493,710.00**

4. Rental of machinery & equipment

Siemens shall pay Berta the following sums for rental of equipment.

4.1 For the period of December 05/2001 to September 22/2003: **Birr 2,080,576.00**

4.2 For the period of September 11/2002 to May 22/2003: **Birr 1,874,312.00**

Summary

Siemens shall pay Berta the following net sum obtained after deducting what is due to Siemens under 2 above which sum is: ***Birr 8,682,941.32***

(Eight Million Six Hundred Eighty two thousand Nine Hundred Forty one birr and 32 cents)

- 5 The above is the net sum payable to Berta by Siemens and is to bear no interest to the date of award.
6. Each party (both Siemens & Berta) is to bear its own attorney's fee, arbitration costs and other expenses related to the process of the initiation and settlement of Dispute by Arbitration.

The above is done and concluded on the 11th day of November 2003.

Full Name: - Seifu Birke

Representing: - SB Consult

Siemens has refused to pay the monetary award. However, the case was brought to Federal High Court and it was enforced by law.

From the these two contract terminations by the employer for the Baro case the matter was proceeded to court where after 6years and 8 months the case is referred back to Arbitration and the Berta's case with Siemens was concluded by arbitration within less than 2 years with irreversible out come.

We can get best lesson from these case studies that Arbitration is much preferred than litigation and moreover, the other ADR solutions shall be tested too, for their efficiency.

Case Study No.3

Tekeze Hydro Power Project Lot 1A Site Access Road

Dispute on Claim for Financial and Extension of Time

I. Particulars of the project under study

Project: Tekeze Hydro Power Project Lot 1A Site Access Road

Location: Tigay Region, Aber Gale

Client: Ethiopian Electric Power Corporation (EEPCO)

Financer: Ethiopian government

User: Public

Consultant: HARZA Engineering Company International L.P

Contractor: BERTA Construction PLC

Supervisor: HARZA engineering in cooperation with National Engineers

Type/ base of contract: Turnkey

Main Contract Amount: ETB 34,150,000.-

Variations order amount: ETB 1, 882,855.-

Total contract amount: ETB 36,032,855.-

Final project Amount: ETB 40,137,596.-

Main contract time: 331 calendar days

Variations order time: 21 calendar days

Total contract time: 352 calendar days

Commencement date according to contract: August 17, 2000

Actual commencement date: August 17, 2000

Completion date according to contract: July 13, 2001

Actual completion date March 8, 2002

Total actual completion time: 568 calendar days

II. Dispute incidence between Client/Consultant and Contractor

Claim No. 1

- 1.1 Reason:** The initially assumed route corridor was not feasible; hence, the contractor has to establish the route corridor,
- 1.2 Consequences:** it demanded more time and idle machineries and equipments, so the contractor presented his claim to the consultant,
- 1.3 Claimed amount in time:** 26 days
- 1.4 Claimed amount financially:** ETB 2,668, 472.01
- 1.5 How the claim was treated:** The consultant approved the claim
- 1.6 Granted extension of time:** 26 days
- 1.7 Granted financial amount:** ETB 2,668,472.01

Claim No. 2

- 2.1 Reason:** After the corridor was selected, the contractor has to produce both geometric and structural designs after which the consultant has to approve,
- 2.2 Consequences:** The claim was submitted to the consultant,
- 2.3 Claimed amount in time:** 77days
- 2.4 Claimed amount in cost:** ETB 7,700,000.-
- 2.5 How the claim was treated:** the consultant did not accept the claim
- 2.6 Granted extension of time:** Nil
- 2.7 Compensation of cost:** Nil

Claim No. 3

- 3.1 Reason:** Right of way problem and adverse weather condition, mainly the land owners compensations for crop, vegetations and houses were not settled by the employer,
- 3.2 Consequences:** The claim is presented to the consultant
- 3.3 Claimed amount in time:** 113 days
- 3.4 Claimed amount in cost:** ETB 6,500,000.-
- 3.5 How the claim was treated:** the consultant did not accept the claim
- 3.6 Granted extension of time:** Nil
- 3.7 Compensation of cost:** Nil

Claim No. 4

- 4.1 Reason: Shortage of fuel for equipments and machineries,
- 4.2 Consequences: The contractor submitted claim to the consultant
- 4.3 Claimed amount in time: 18 days
- 4.4 Claimed amount in cost: ETB 180,000.-
- 4.5 How the claim was treated: the consultant did not accept the claim
- 4.6 Granted extension of time: Nil
- 4.7 Granted compensation of cost: Nil

Claim No. 5

- 5.1 Reason: Delay due to disruption of works, force majeure;
Basic reason is that the route was used without compensation by client and the Contractor was taken as hostile by the local peoples. Blocking of roads, demolishing of constructed roads, etc.
- 5.2 Consequence: the contractor claimed for the disruption,
- 5.3 Claimed extension of time: 107 days,
- 5.4 Claimed compensation of cost: ETB 20,495,759.-
- 5.5 How the claim was treated: Partially accepted by the consultant,
- 5.6 Granted extension of time: 14 days
- 5.7 Granted compensation of cost: 1, 436,869.20

Summary

The contractor has submitted total of:

Extension of time (EOT): 362 days

Compensation of cost: ETB 29, 453, 173.-

The Consultant has approved a total of;

Extension of time (EOT): 40 days

Compensation of cost: ETB 4,104,735.08

The consultant has prepared counter claim for the delay an amount of ETB 2,486, 170.-

Finally the consultant has approved and sent to the client for additional payment of:

ETB 5,987,590.08 including variations:

Net due sum to the contractor after deducting the counter claim is **ETB 3,501,419.15**

The client did not accept the whole claim. The dispute is not settled while this paper is being prepared.

The contractor did not pursue to any other Alternative Dispute Resolution venue. The basis of contract condition is FIDIC. But the fund is from Ethiopian government where it implies administrative contract and non arbitrability of the dispute.

If the client refuses to pay what the consultant approved for the contractor, the last resort would be court appeal. Court appeal is not preferred at any extent:

Because:

1. The initial pleading to the court itself requires cost for application,
2. No one knows how long it will take to conclude the case,
3. No one can anticipate the out come,
4. Moreover the litigation track leaves bad image to a construction firm, particularly at present Ethiopian's Construction Client's attitude towards once asking his legitimate right through legal means.

Such disputes would be entertained appropriately if we introduce The Alternative Dispute Resolution Methods. Particularly Arbitration is remedy for clear and approved claim by consultant and refused by the client; because the Claimants and Respondents submittal of their case is mainly based on the facts analysed by professional evidences during ascertaining the claims.

Case Study No. 4

***Branch Office and Store for Merchandise Whole & Import Trade Enterprise
at Girawa***

Dispute on Claim for Financial and Extension of Time

I. Particulars of the project under study

Project: Branch Office and Store Construction

Location: Girawa, Harar

Client: Merchandise Whole & Import Trade Enterprise (MEWIT)

Financer: Merchandise Whole & Import Trade Enterprise

User: The Client

Consultant: Construction Design Share Company, (BDE)

Contractor: Dawid Ibrahim Contractor

Supervisor: The Consultant

Type/ base of contract: Measurement (Unit price)

Main Contract Amount: ETB 838, 759.50

Variations order amount: ETB 226,462.18

Total contract amount: ETB 1,065,221.68

Final project Amount: ETB 1,079,563.07

Main contract time: 270 days

Variations order time: 23 calendar days

Total contract time: 293 calendar days

Commencement date according to contract: 27-07-81 Eth. Cal.

Actual commencement date: 27-07-81 Eth. Cal

Completion date according to contract: 22-04-82 Eth. Cal

Actual completion date: 14-05-88 Eth. Cal

Total actual completion time: 2482 days 6 years and 8 months

II. Dispute incidence between Client/Consultant and Contractor

Claim No. 1

1.1 Reason: Incomplete design and Security problem,

1.2 Consequences: the contractor submitted to the consultant stating the details of his claim,

- a. after foundation was excavated supervisor did not approve on time
- b. To construct retaining wall no plans describing the bench mark,
- c. Due to change of government,

1.3 Claimed amount in time: 2161 days

1.4 Claimed amount financially: ETB 1,119,414.78

1.5 How the claim was treated: The Consultant approved partially the extension of time, but did not approve compensation. The consultant demanded for the contractor's financial claim supporting documents (evidences)

1.6 Granted extension of time: 1627 days

1.7 Unjustified delay by the consultant: 534 days

1.8 Granted financial amount: ETB Nil

1.9 The consultant imposed liquidated damage for unjustified delay 10% of contract price:
ETB 108, 749.93

1.10 The Contractor applied to the Ministry of Infrastructure to review the dispute,

The case was on process to resolve the dispute amicably, though not yet implemented, when this thesis was being prepared.

Findings on this case study,

The contractor submitted financial claim without tangible supporting documents. The consultant repeatedly asked to submit his evidences but it was not possible. Hence, when claims are presented it is mandatory to support the events with relevant facts to make it considerable and legitimate claim.

Case Study No. 5

Construction of Dire Dawa Air Port Rehabilitation

Dispute on financial Claim

I. Particulars of the project under study

Project: Dire-Dawa Air Port Rehabilitation Project

Location: Dire-Dawa

Client: Ethiopian Civil Aviation Authority/ Ethiopian Airports Enterprise

User: Public

Consultant: Transport Construction Design Share Company

Contractor: Geom. Luigi Varnero Construction Pvt. Ltd. Co.

Supervisor: The Consultant

Main Contract Amount: ETB 30,696,001.50

Final project Amount: ETB 29,836,724.64

Main contract time: 361 Calendar days

Commencement date according to contract: August 05, 2002

Actual commencement date: August 05, 2002

Completion date according to contract: July 31, 2003 and revised November 19, 2003

Actual completion date: September 25, 2003

II. Dispute incidence between Client/Consultant and Contractor

The first selected quarry site, before being approved by the Consultant was tested and re-tested as per contract specification and Ethiopian Roads Authority standard specification and found properly in compliance with requirement prescribed in the specification.

Whereas the client insisted with the Engineer for the selection of a new quarry without any proper ground:

Whereas the Engineer, despite the technical result of the tests ordered the contractor to stop work in the quarry with his letter TSCDSC/MG-D1/616 dated 25/10/2002 (expressing doubts that never resulted from the tests):

Whereas the client has apparently the right to change, modify, or otherwise procure modification to the contractor either or not technically groundless, provide he bears the derived costs, delays and the like of his wishes, subsequent to his decision:

Whereas ERA is utilizing the same material for the same purpose of Asphalt Concrete for the road:

Whereas the contractor has tried his best to minimize such damages as requested by the general conditions and has concentrated his efforts to expedite before the program time other activities in the best interest of the project.

“Now therefore, we here by submit our official claim for delay and financial lost suffered by us due to this decision”.

With the above preamble due to the change of the quarry site by the client the work by the contractor was suspended so that the contractor requested both time extension claim and financial claim.

1. Time extension for the project:

1.1 Stoppage date	25.10.02	
ordered to proceed	01.01.03	88 days
1.2 Time for production of 1800m3		
of already produced gravel,		25 days
1.3 Dismantling and repositioning of		
the two crushers		40 days
Total number of days requested for extension of contract		153 calendar days
Furthermore, production of stone will commence after the following activities		
a) Paperwork to obtain quarry rights from Jijiga		8 days
b) Establishment (opening and clearing) of quarry		
and security permits		7 days
		15 days

2. Demand for reimbursement of costs and damages b as follows:

2.1 Dismounting, remounting and transportation of crushers

(including ramp, concrete base, etc) ETB 150,000.-

2.2 Idle of big crusher (88+40) = 128 days x ETB 3000/day = ETB 384,000.

2.3 Idle of small crusher, (49+40) = 89days x ETB 2000/day = ETB 178,000.

2.4 Idle of excavator FH EX 235 with jack hammer

(88+15) = 103 days x ETB 1200/day = ETB 144,200.

2.5 Idle time of excavator FH EX 255

(88+15) = 103 x ETB 1200/ day = ETB 123,600.

2.6 Idle of excavator FH 220 (49+15) = 64 days x ETB1100/day ETB 70,400.

2.7 Idle of compressor including rock drilling equipment

(88+15)= 103 days x ETB 200/day = ETB 20,600.

2.8 Direct labour cost (88 days) ETB 33,000.

Total amount ETB **1,103,800.**

3. General expenses for on the site for the extension of 153 days

Value of contract ETB 30, 696,001.50

Interest costs (11%) and overheads (excluding profit) 10% ETB 5,327,405.22

Duration of contract calendar days 361

Indirect costs and overheads per day: 5,327,405.22/361= ETB 14,757.36

Total cost for 153 days extension: ETB **2,257,876.08**

Total financial claim submitted by the contractor ETB **3,361, 676.08**

Later on based on time extension approved by the consultant:

Claimed extension of time by contractor was adjusted to: 111 days

Financial claim was adjusted to:

1. Reimbursement of costs and damages: ETB 1,103,800.-

2. General expenses for extension of 111 days: ETB 1,638,066.90

Total contractor's revised financial claim ETB **2,741,866.90**

Consultant's response:

The consultant recommends 111 days extension of time, which was accepted by the contractor,

The financial claim was calculated and recommended by the consultant as follows:

1. Salary during the suspension and re-assembling period:	ETB 102,836.84
2. Equipment cost during the re-assembling period:	ETB 189,218.08
3. Material cost to construct ramp for crusher:	<u>ETB 43,039.00</u>
Total financial claim recalculated and approved by the consultant	ETB 335, 099.92

Reasons by the consultant for rejection of financial claim for equipment and acceptance for the workers,

Assumptions:

- All equipments, which were idle during the suspension period, would have been idle, even if they were elsewhere off the project, there was no work to be engaged:
- Salaries for employees, who were getting payment for being present at the project expecting the work to resume soon, are considered to be compensated:

The contractor has accepted the consultant's adjustment of operators and drivers salary but the consultant's total rejection of equipments idle time was compensation was not accepted.

The consultant requested the Ministry of Infrastructure for the approval of the claim granted as per clause 2 of Standard Conditions of Contract. The time extension 111days is accepted leaving the financial claim for further correspondence.

Ministry of Infrastructure wrote letter to the consultant requiring the following to be explained with supporting documents:

1. The work was stopped by the client or the consultant,
2. When the work was stopped were the machineries on the site?
3. When the bid was finalized which quarry site was approved & then why it was changed?

Findings from this case study:

1. The consultant being with the client should have exhaustively investigate and finalize the source of construction materials, before processing and awarding the contract. Even if after award of the contract, tests for all potential quarry sites and approval should have been prior to mass production by the contractor.
2. Inconsistent approval by the consultant, while approving operators and drivers salary, not accepting idle time of the equipments. The reasons for rejecting the equipments idle time compensation is that, “domestic contractors if they do not have other works, the equipment will be idle” does not sound. Had the contractor be foreign contractor how would the consultant entertain the case?
3. The submitted claim by the contractor is relatively organized compared from other observations in the Ethiopian domestic contractors.

Remarks:

1. The dispute originated from change of the quarry site would have been avoided, had the project introduced partnering from the offset comprising Client, Consultant and Contractor for timely action of any changes prior to advancement of immense works.
2. The introduction of Dispute Review Advisor for the whole course of project would be remedy for bringing together the consultant and contractor’s justification of the proposed claim.
3. The presence of Arbitration will guarantee for the contractor, otherwise if the decision making body, the Ministry of Infrastructure follows the foot step of the consultant, the final option will be litigation which is not apparently feasible solution for construction projects.
4. Therefore, the introduction of Alternative Dispute Resolution Mechanisms in the Ethiopian Construction Project is highly recommended.

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FACULTY OF TECHNOLOGY
DEPARTMENT OF CIVIL ENGINEERING
MSC PROGRAMME IN CONSTRUCTION TECHNOLOGY AND MANAGEMENT
Assessment of Alternative Dispute Resolution Methods
in the Ethiopian Construction Projects**

I. Objective

The objective of this research is, through a case study, to identify the existing practice of disputes/conflicts resolution methods in the Ethiopian Construction projects, with respect to public construction and domestic contractors. What are the existing Alternative Dispute Resolution techniques? What are the outcomes of these disputes and conflicts? And finally recommend compatible methods.

In general it is understood that disputes/conflicts are inevitable due to the incompatibility of interest between those who take part in the construction process, the non-exhaustiveness of the construction document, actual working condition, and related factors. However, how do we get better the relationship and manage the disputes/conflicts not to escalate to adverse outcome and resolve the case at hand? There are different methods of Alternative Dispute Resolution Methods in the construction industry. What about the Ethiopian situation? What experience do we have? How and what can we develop?

With the above high lights those who involve in the construction industry are kindly requested to contribute to this research work. The result of this survey is intended to serve only for academic purpose. The name of professionals and institutions participated will be recorded confidentially.

Thank you in advance for your willingness to fill the questionnaires and returning them back on time.

II. Opinion of participants in the sector,

1. *Name* _____
2. *Profession* _____
3. *Organization* _____
4. *Current Job title* _____
5. *Experience* _____ *as* _____
_____ *as* _____
_____ *as* _____

6. What experience do you have, and identify as dispute/conflict in construction projects?

i. between Client and Consultant,

- a. _____

- b. _____

- c. _____

- d. _____

- e. _____

ii. between client and contractor,

- a. _____

- b. _____

- c. _____

- d. _____

- e. _____

iii. between consultant and contractor,

- a. _____

- b. _____

- c. _____

- d. _____

- e. _____

iv. between client and financier (who provides the fund)

a. _____

b. _____

c. _____

v. between client and public authorities,

a. _____

b. _____

c. _____

vi. between consultant and public authorities,

a. _____

b. _____

c. _____

vii. between contractor and public authorities

a. _____

b. _____

c. _____

vii. between contractor and financial institutions (insurance, bank)

a. _____

b. _____

c. _____

7. What are the consequences or impacts of dispute/conflict?

a. to the client

i. _____

ii. _____

iii. _____

b. to the consultant

i _____

ii _____

iii _____

c. to the contractor

i. _____

ii _____

iii. _____

d. to the public authorities

i. _____

ii. _____

iii. _____

e. to financial institutions

i. _____

ii. _____

iii. _____

8. What are your experiences, how disputes/conflicts are resolved?

Project _____

How was the problem settled? _____

Project _____

How was the problem settled? _____

Project _____

How was the problem settled? _____

9. When disputes and conflicts are inevitable, what alternative methods of resolution you recommend? Why?

Dispute/Conflict Occurrence _____

Method _____

Reason _____

Dispute/Conflict Occurrence _____

Method _____

Reason _____

Dispute/Conflict Occurrence _____

Method _____

Reason _____

10. Your overall remark on the Ethiopian Construction Projects, dispute/conflict resolution or management and expected role of:

Individual Professionals

Academic Institutions

Professional Associations

Consulting firms

Contracting Firms

Financial Institutions

Government Organizations

Consultants' Associations

Contractors' Associations

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I. Particulars of the project under case study:

Project: _____

Location: _____

Client: _____

Financier: _____

User: _____

Consultant: _____

Contractor: _____

Supervisor: _____

Sub contractor/s: _____

Type/bases of contract: _____

Main Contract amount: _____

Supplementary contract amount: _____

Variation orders amount: _____

Total contract amount: _____

Final project amount: _____

Main Contract time: _____

Supplementary contract time: _____

Variation orders time: _____

Total contract time: _____

Commencement date according to contract: _____

Actual Commencement date: _____

Completion date according to contract: _____

Actual completion date: _____

Total Completion Actual Time: _____

II. Dispute incidence between Client/Consultant and Contractor

1. Reason/s _____

Consequences: _____

Claimed amount in time _____

Claimed amount in cost _____

Other _____

How was the claim treated: _____

Granted extension of time _____

Compensation of cost _____

Other _____

2. Reason/s _____

Consequences: _____

Claimed amount in time _____

Claimed amount in cost _____

Other _____

How was the claim treated: _____

Granted extension of time _____

Compensation of cost _____

Other _____

3. Reason/s _____

Consequences: _____

Claimed amount in time _____

Claimed amount in cost _____

Other _____

How was the claim treated: _____

Granted extension of time _____

Compensation of cost _____

Other _____

4. Reason/s _____

Consequences: _____

Claimed amount in time _____

Claimed amount in cost _____

Other _____

How was the claim treated: _____

Granted extension of time _____

Compensation of cost _____

Other _____

5. Reason/s _____

Consequences: _____

Claimed amount in time _____

Claimed amount in cost _____

Other _____

How was the claim treated: _____

Granted extension of time _____

Compensation of cost _____

Other _____

6. Reason/s _____

Consequences: _____

Claimed amount in time _____

Claimed amount in cost _____

Other _____

How was the claim treated: _____

Granted extension of time _____

Compensation of cost _____

Other _____

II Disputes/Conflicts incidence between Client/Consultant and Contractor

Reason/s by the contractor _____

Claimed amount in time _____

Claimed amount in cost _____

Other _____

Consultant's response _____

Contractor's reaction _____

Client's interference _____

What conclusion was made by the decision maker? _____

How was it settled: _____

Granted extension of time _____

Compensation of cost _____

Other _____

Client's reaction to the decision _____

Contractor's reaction to the decision _____

Consultant's attitude after the final decision _____

Further proceedings: _____

Consequences of the dispute resolution/decision made to:

1. The client _____

2. The consultant _____

3. The contractor _____

4. Others who were involved (if any) _____

Questionnaires to Contractors on Alternative Dispute Resolution Method in Ethiopian Construction Projects,

Preamble

These questionnaires are for assessment of Alternative Dispute Resolution Methods in the Ethiopian construction Projects related to public construction and domestic contractors.

Those who involve in the Ethiopian construction Industry are kindly requested to contribute to this research work. The result of this survey is intended to serve only for academic purpose. The name of institutions participated will be recorded confidentially.

Thank you in advance for your willingness to fill the questionnaires and returning them back on time.

1. Name of the firm _____ 2. Year established _____

3. Category and class _____ 4. Address _____

5. Who are your clients?

Public Private Non governmental Organization Others _____

6. How many projects you have undertaken for the last fifteen years? _____

7. How many projects were completed before or on time? _____

8. How many projects were completed with the contract price? _____

9. Did you have site diary file or site book for records? Yes No some times

10. Did you ask claim for compensation of cost due to your firm?

Yes, always yes, some times No

11. Did you ask claim for time extension?

Yes, always yes, some times No

12. How many projects you have claimed for cost? _____ For time? _____

13. Did the consultant accept your claim? Yes No Yes partially

14. How many claims were accepted by consultant as you requested for time? _____ for cost? _____

15. How many claims were accepted by client as approved by the consultant for time? _____ for cost? _____

16. How many claims were accepted by client partially after consultant's approval for time? _____ what percentage? _____

17. How many claims were accepted by client partially after consultant's approval for cost? _____ what percentage? _____

18. How many claims were not accepted totally for cost?_____for time?_____

19. What was your action for rejected claims?_____

20. Were you penalized for liquidated damage for unjustified delay? Yes No

21. If yes, what percentage of the contract amount?_____

22. Did you proceed for Alternative Dispute Resolution method? Yes No

22.1 If yes, what method? Negotiation Mediation Arbitration Litigation

Other specify_____

22.2 What was the out come? Please state briefly_____

22.3 If no, please state the reason for not proceeding to ADR? _____

22. What was the consequence of unresolved dispute to your firm? _____

23. What was the cause for the claim? Late possession of site , related with variation ,
related with measurement , employers breach of contract , contractors breach of contract ,
related with late provision of drawings , related with contract document ,
third party , force majeure , price escalation , disruption, others please specify

24. Your over all comment on claim proceeding and dispute resolution methods in the
Ethiopian construction projects,_____

25. Please use the separate form attached for particular project under noticeable conflict, claim
and dispute for particular attention.

Questionnaires for Consultants on Alternative Dispute Resolution Method in Ethiopian Construction Projects,

Preamble

These questionnaires are for assessment of Alternative Dispute Resolution Methods in the Ethiopian construction Projects related to public construction and domestic contractors.

Those who involve in the Ethiopian construction Industry are kindly requested to contribute to this research work. The result of this survey is intended to serve only for academic purpose. The name of institutions participated will be recorded confidentially.

Thank you in advance for your willingness to fill the questionnaires and returning them back on time.

1. Name of the firm _____ 2. Year established _____

3. Category and class _____ 4. Address _____

5. Who are your clients?

Public Private Non governmental Organization Others

6. What type of consulting service do you give?

Design only Supervision only Design and supervision Management

Others please specify _____

7. What type of supervision do you use? Resident regular with fixed period periodic randomly other please specify _____

8. How many projects your firm has supervised for the last ten years? _____

9. Did you apply partnering on the project for preventing potential dispute? Yes No

10. Did contractors prepare and submit their claim for compensation, regularly and properly? Yes yes, some times No

11. Did you approve claims for time extension by the contractor? Yes No

11.1. If no, why not? Please give reasons _____

12. Did you approve claims for cost compensation by the contractor? Yes No

12.1 If no, why not? Please give reasons _____

13. Did the clients accept your approved time extension? Yes, always yes, some times

Yes, most of the times yes, hardly No

13.1 If no specify the reason_____

—

14. Did the clients accept your approved cost compensation? Yes, always yes, some times
yes, most of the times yes, hardly No

14.1 If no specify the reason_____

—

15. What action did take when the client did not accept your approval of either time extension
or cost compensation?_____

—

16. Did you advise reference of the matter to Alternative Dispute Resolution Method? Yes ,
No Why?_____

16.1. If no, why not? Please give reasons_____

—

17. If the dispute is to be referred to Alternative Dispute Resolution Method, which one do
you recommend? Why? Negotiation Mediation Arbitration Litigation other
specify_____

Reason _____

—

18. Have you ever used ADR to solve disputes? Yes No

18.1 If yes, what was your role? _____

—

18. 2 what was the out come? _____

—

19. What is the consequence of unresolved dispute? Please briefly give your suggestion

—

20. Please give your comment on the Standard Condition of Contract for Local contractors
Clause 67 on dispute settlement._____

—

Please use additional paper if required,

SIGNED DECLARATION SHEET

This Thesis is my original work, and has not been presented for a degree in any other university and that all sources of material used for the Thesis have been dually acknowledged.

Candidate

Name _____

Signature _____