

JIMMA UNIVERSITY
JIMMA INSTITUTE OF TECHNOLOGY
SCHOOL OF CIVIL AND ENVIRONMENTAL ENGINEERING
CONSTRUCTION ENGINEERING AND MANAGEMENT STREAM

**ASSESSMENT OF CONSTRUCTION DISPUTE RESOLUTION IN
ETHIOPIAN SOMALI REGIONAL STATE ROAD PROJECTS: A CASE
STUDY ON ROAD PROJECTS IN THE REGION.**

A Thesis Submitted to the School of Graduate Studies of Jimma University in Partial Fulfillment of the Requirements for the Degree of Master of Science in Civil Engineering (Construction Engineering and Management).

BY:

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May, 2016
Jimma, Ethiopia

DECLARATION

I, hereby declare that this thesis work entitled “ASSESSMENT OF CONSTRUCTION DISPUTE RESOLUTION IN ETHIOPIA SOMALI ROAD CONSTRUCTION INDUSTRY” is my original work and has not been presented by any other person for an award of a degree in this or any other Universities.

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ABSTRACT

The construction industry has been a paradoxical leader in both dispute occurrences and dispute resolution systems for many years. While this may or may not be an enviable position, the industry has managed to develop and adopt many unique ways to address the potential risks of disputes. Additionally, many of these concepts and systems, including partnering, realistic risk allocation, and dispute review boards, and stepped negotiations, have been successfully applied in other industries. However, the justification for implementing these procedures has been based primarily upon contractual requirements, governmental regulation, court order, limited previous experience. Despite being an industry keenly focused on quantitative results, frequently fail to analyze the actual costs associated with dispute occurrences.

This study assessed the construction dispute resolution mechanism in Ethiopian Somali Region Road Construction Industry. It has identified the causes that lead to construction dispute in the road sector; determined the most frequent causes of dispute; and analyzed its current dispute resolution mechanisms.

Multiple methods such as questionnaire, in depth interviews, case documents review, and literature review were the techniques and methods used in collecting and analyzing data on the causes of disputes and the current dispute resolution mechanisms. Closed-ended and open-ended questionnaires as well as interviews were conducted among employers, contractors and consultants and their representatives. The questionnaires were completed by 65 construction participants. Relative Importance Index was used to rank the most frequent causes of dispute.

Results show to have five major categories of disputes which are design-related, contractor-related, owner-related, contract-related, and external factors ranked from first to fifth, respectively. Under each of the major categories, sub-causes of disputes were identified and ranked according to its relative importance. Overall, there were twenty three (23) factors found under all these major categories. The top three causes of dispute were design errors, inadequate/incomplete specification, and quality of design (all are under design-related disputes), respectively; while one of the least factors is fragmented structure of the sector.

The Dispute Resolution Mechanisms currently used in the road construction industry of Somali region are Amicable Settlement (Negotiation), DRE, Arbitration (Litigation), and “others” not disclosed by respondents. ADR is to a certain extent, effectively used in contracts in the construction industry. Negotiation is initially most frequently used in resolving disputes in road construction projects in Somali Region. However, parties cannot resolve the issue through Negotiation thereby resorted to Arbitration (Litigation). Arbitration is the final stage of dispute management in road construction sector and arbitration proceedings resemble to regular court litigation

Various but specific recommendations were forwarded to major construction stakeholders to minimize or avoid disputes. Such as disputes can be reduced by checking that the contract documents are in place. Avoid making general statements, and instead set out a complete list of specifications, drawings, questions and answers, and others that apply to the project.

Key words: *Alternative Dispute Resolution, Arbitration, Causes of Disputes, Dispute Resolution Mechanisms, Mediation, Road Construction, Somali Regional State.*

ABBREVIATIONS

ADR	Alternative Dispute Resolution
AIA	America Institute of Architecture
BaTCODA	Building and Transport Construction Design Authority
CII	Construction Industry Institute
DRA	Dispute Review Advisor
DRB	Dispute Review Board
DRE	Dispute Review Expert
ERA	Ethiopian Roads Authority
FIDIC	Federation International Des IngenieursConseils
IHA	Imperial Highways Authority
MoWUD	Ministry of Works and Urban Development
MOI	Ministry of Infrastructure
SRA	Somali Roads Authority

CHAPTER ONE

INTRODUCTION

1.1. Background

Ethiopia is the fastest-growing, non-oil driven economy among African countries. The country has showed a remarkable growth over the past ten years. The average annual growth GDP is 10.9% (UNDP, 2014). This figure is double of the Sub Sahara Africa and triple of the world average growths indicating that Ethiopia is one of the fastest economic growths in the world (ibid). As a result the contribution of the industry against the GDP is only 3% and this is lower than the sub-Saharan African average which is 6%. The construction industry trend in the past 10 years shows a yearly growth rate of 12.43 and this shows a share of 5.3% of the country's GDP (ECIDP, 2014)(Zinabu and Getachew, 2015).

The construction industry is a complex and competitive environment in which participants with different views, talents and levels of knowledge of the construction process work together. In this complex environment, participants from various professions, each has its own goals and each expects to make the most of its own benefits. In the construction industry, since differences in perceptions among the participants of the projects, conflicts are inevitable. If conflicts are not well managed, they quickly turn into disputes. Disputes are one of the main factors which prevent the successfully completion of the construction project. Thus, it is important to be aware of the causes of disputes in order to complete the construction project in the desired time, budget and quality (Emre and Pinar, 2013).

The construction industry has been a paradoxical leader in both dispute occurrences and dispute resolution systems for many years (Groton 2005; Keil 1999; Michel 1998). While this may or may not be an enviable position, the industry has managed to develop and adopt many unique ways to address the potential risks of disputes (Harmon 2003; Mix 1997; Peña-Mora et al. 2003; Rubin et al. 1999; Zack 1997). Additionally, many of these concepts and systems, including partnering, realistic risk allocation, dispute review boards, and stepped negotiations, have been successfully applied in other industries (Stipanowich and Treacy, 1995). However, the justification for implementing these procedures has been based

primarily upon contractual requirements, governmental regulation, court order, limited previous experience, or basic reactionary instinct and not on measured cost savings.

Despite being an industry keenly focused on quantitative results, parties involved in the purchase or construction of capital projects frequently fail to analyze the actual dispute resolution system & costs associated with dispute occurrences ((Adrian, 1988); Diekmann and Nelson 1985). While, many industry publications and experts have deplored the trend towards increased litigation in the industry (Editorials 1994; Editorials 1997; Editorials 1999; Mays 2003; Michel 1998).

As in any other construction works, road construction contracts are liable to various kinds of disputes. The disputes may be between the client and the contractor, the main contractor and sub-contractor over payment, performance of the contract, delay and disruption of works, design changes, price escalation, quality of works etc. Most disputes are resolved by negotiation between the contracting parties without the involvement of third party. The consulting architect and engineer resolve most disputes that might arise during the progress of the work at site. Some cases however may require the constitution of dispute review expert or board. Still some cases could be referred to an independent adjudicator to seek workable solutions and disputing parties may willfully accept and enforce the decision of the adjudicator. After exhausting the foregoing dispute resolution mechanisms, it may be unavoidable to take the matter to arbitration, often for final and binding award that is enforceable by state courts like any court judgment (Weldegebreal, 2014).

The first section of this paper introduces the proposed framework for the current dispute resolution mechanisms in Ethiopia. The system, based upon concepts developed within the field of construction dispute resolution system, focuses on Causes of dispute identification, and dispute handling (dispute control) system. Existing research and literature will form the basis for both the cause of dispute identification and the dispute handling (control) system components. Particular attention is given to frequent causes of disputes/claims and the typical progression of dispute resolution procedures. Recommendations are given to practitioners who are responsible for managing the capital facility process at several levels, including procurement, project management, legal/contractual, and others. As the findings of this

research point to the fact that resolving disputes once they occur is only half the solution, it is hoped that providing quantitative results on successful means of others. As the findings of this research point to the fact that resolving disputes once they occur is only half the solution, it is hoped that providing quantitative results on successful means of dispute prevention and minimization of causes of dispute may be one method to increase the adoption of preventative and alternative dispute resolution procedures in the future.

1.2 Statement of the problem

The construction industry has been a paradoxical leader in both dispute occurrences and dispute resolution systems for many years (Groton 2005; Keil 1999; Michel 1998). While this may or may not be an enviable position, the industry has managed to develop and adopt many unique ways to address the potential risks of disputes (Harmon 2003; Mix 1997; Peña-Mora et al. 2003; Rubin et al. 1999; Zack 1997).

As the most common and typical project types, construction projects have several characteristics such as specific objects, time limit, financial constraints and economic requirements, special organizational and legal conditions, complexity and systematic characteristics. For that each investment project itself is a complex system (Kuang, 2011) in such case disputes are inevitable.

Additionally, many of these concepts and systems, including partnering, realistic risk allocation, dispute review boards, and stepped negotiations, have been successfully applied in other industries (Stipanowich 1995; Treacy 1995). However, the justification for implementing these procedures has been based primarily upon contractual requirements, governmental regulation, court order, limited previous experience, or basic reactionary instinct and not on measured cost savings. Despite being an industry keenly focused on quantitative results, parties involved in the purchase or construction of capital projects frequently fail to analyze the actual dispute resolution system & costs associated with dispute occurrences (Adrian 1988; Diekmann and Nelson 1985). While, many industry publications and experts have deplored the trend towards increased litigation in the industry (Editorials 1994; Editorials 1997; Editorials 1999; Mays 2003; Michel 1998).

In the context of our country, Ethiopia, dispute is unavoidable as it was stated by different authors (Abera, 2005, Alemu, 2015 and Yohannis, 2014). As in any part of the world

projects, there is also construction disputes in Somali Region State Road Projects. The disputes may be between the client and the contractor, the main contractor and sub-contractor for cases on over payment, performance of the contract, delay and disruption of works, design changes, price escalation, quality of works, etc. Moreover, some road projects in Somali region under disputes were not resolved or it may be resolved but through judgmental resolution method like Litigation which was the most serious and adversarial method of dispute resolution. Alternative Dispute Resolution mechanisms which help to save time and money for the parties in dispute and which maintains relationship between the parties were not fully, developed, and utilized.

Other worlds suffered for litigation created alternatives like DB in FIDIC, MDB-FIDIC and ERA following the world has created alternative real time Dispute Resolution Mechanisms as alternative to minimize litigation through the condition of the contract of ERA Manual 2002 NCT, Section 12. But regions like Somali region road projects are suffering from litigation. As has been identified projects in Somali region failed under design related problems due to inaccessibility of remote areas, either professionalism or has been identified from the most frequent causes of disputes in Somali region. However, this will not let none of the parties to fail under unresolved claim or dispute, the dispute resolution mechanism, applicable and practiced most in the region is litigation apart from negotiation, and as has been seen (in some cases and survey conducted). In some cases contractors had known their rights to arbitrate and inviting clients to arbitrate like in case No.3. However, this Litigation is compared to other alternative dispute resolution mechanisms (Aber,2005), so the researcher has surveyed the interest of the parties for the other dispute resolution mechanisms like DRE to be practiced in the future and all parties showed their agreement and the researcher has showed one good case as example of DRE conducted by ERA and Hunahuda in Somali region. The forwarded recommendation, applicability and suitability of DRE was bestly recommended by (Alemu, 2005).

1.3 Research questions

- What are the causes that lead to construction dispute ?
- What are the most dominant causes of dispute in the road construction industry?

- What are the current dispute resolution mechanisms in the road construction industry in the in Ethiopian Somali region road construction industry?

1.4 Objective

1.4.1 General objective:

The general objective of this research is to assess the construction dispute resolution in Ethiopian Somali Region Road Construction Industry.

1.4.2 Specific objectives:

- To identify the causes that lead to construction disputes in the road sector.
- To determine the most frequent causes of dispute in the road construction of Somali Region.
- To assess the current dispute resolution mechanisms practiced in Ethiopian Somali Region Road Construction Industry .

1.5. Significance of the Study

Generally, this research provides a comprehensive system that emphasizes prevention and collaborative resolution. It creates the potential for added value in construction dispute reduction or prevention and resolution.

Laying down the causes of construction dispute and resolution mechanisms create awareness to construction stakeholders. This will serve as an information and basis for using appropriate construction dispute resolution mechanisms to limit, if not avoided, disputes and thus limits the cost and time required to resolve disputes. It also encourages resolution close to the source of the dispute, involving the parties in a participative and relationship-preserving process.

Specifically, this research will be used to report to Somalia Road Authority to show how Dispute Review Expert works as exercised by Ethiopian Road Authority. This will also be a piece of contribution to Somalia Region, as well as to the construction stakeholders and the community. It will be will be an open information to them on how construction dispute resolution in the region works.

The findings are of value for clients, contractors and consultants. Researchers of similar studies can use this research work for further reference.

1.6. Scope and Delimitation of the Research

This research work is focused on assessing construction dispute resolution in Somali Regional State of Ethiopia.. The scope of the study was limited to cases of road construction projects in Somali Region and only selected road projects with differing construction status such as started but suspended, on going, and substantially completed have been considered.

Five documented cases under dispute had been analyzed through desk study. These had been seen as historical documents and were used as evidence to show the status of dispute resolution in unresolved claims or disputed projects. The selection of projects which were believed to had dispute or unresolved claim was made in consultation with the Contract Administration Department heads.

Whilst documented projects under claims or dispute considered are small in number, it is nevertheless sufficient, in addition to questionnaire survey, to give an overview of the construction dispute resolution which are common in Somali Road Region Projects. Other road projects with no documents shown were assessed through the respondents answer in the questionnaire. Furthermore, the respondents of the questionnaires were limited to clients, contractors, and consultants and their representatives who worked and still working in Ethiopian Somali Region Road Construction Industry.

The limitation encountered in this study was in the retrieval of questionnaires distributed. Difficulty in getting relevant information for these projects are found at Districts and project offices which are not accessible because they are located in remote areas. The other limitation is that some of the open ended questions intended for assessing the current practices have been discarded during analysis due to inadequacy of responses from the respondents.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

Construction disputes happen fairly often; they are a reality on every construction project and could happen at any point in time during the design or construction phase of the project. Construction disputes vary in nature, size and complexity, but they all have a common thread; they are costly both in terms of time and money and are often accompanied with the destruction of individual and good working relationships. Indeed, it is this tendency to destroy relationships and increase time and cost of construction projects, that has provoked a common interest of researchers in different countries to understand the nature of the causes of construction disputes in order to formulate measures to prevent or minimize their occurrence or resolve them swiftly, efficiently and in a cost effective manner if they happen (Assah et al, 2010 :Hall, 2002).

There are confusion among construction professionals about the differences between conflict and dispute, and these terms have been used interchangeably especially in the construction industry (Acharya, et al , 2006). However, according to (Fenn, 1997)sited in (Azhar and Salman, 2014) conflict and dispute are two distinct notations. Conflict exists wherever there is incompatibility of interest. Conflict can be managed, possibly to the extent of preventing a dispute resulting from the conflict. On the other hand, disputes are one of the main factors which prevent the successfully completion of the construction project.

Dispute

A plethora of definitions as to what constitutes a dispute can be found in the normative literature. The terms conflict, claim and dispute are often used interchangeably, but their meanings are very different. Figure 1 identifies the relationship between these terms. Examples of how each of these terms has been defined include:

- Conflict – “serious disagreement and agreement about something important” (Collins, 1995) Willmot and Hocker (1998), on the other hand, provide a detailed definition of conflict as “an expressed struggle between at least two independent parties who perceive incompatible goals, scare resources, and interference from other achieving those goals”.

- Claim “an assertion to the right to remedy, relief, or property ” or a “ failure to fulfill obligations under the contract ”. more simply a claim is a request for compensation for damages incurred by any party in the contract. A claim presents a basis of claims (causes and effects), explains the contractual and legal basis for payment (entitlement), and quantifies the resulting damages. ” (sodhi 1980). Claim “for the assertion of a right to money, property or remedy” Powell -Smith and Stephenson, 1993) Likewise, Semple et al. (1994)define a claim as “a request for compensation for damages incurred by any party to a contract”.
- Dispute “any contract question or controversy that must be settled beyond the jobsite management” (Wayal, 2014).

Methods of Resolution

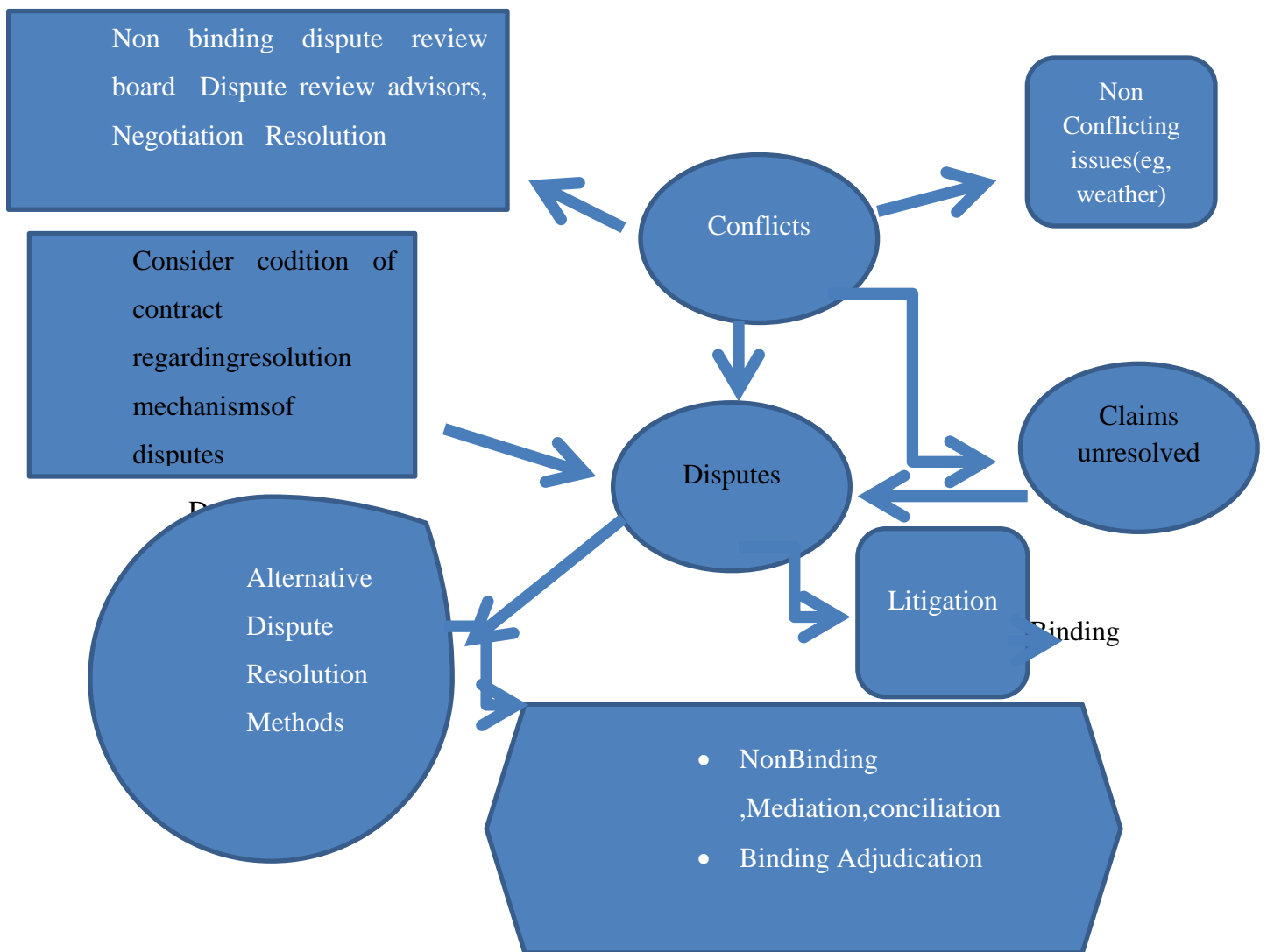


Fig 2.1 Dispute Causation In Construction Projects (Conflict, Claim,Dispute)

Why do construction disputes occur?

A combination of environmental and behavioural factors can lead to construction disputes. Projects are usually long-term transactions with high uncertainty and complexity, and it is impossible to resolve every detail and foresee every contingency at the outset. As a result, situations often arise that are not clearly addressed by the contract. The basic factors that drive the development of construction disputes are uncertainty, contractual problems, and behaviour.

A .Uncertainty

Uncertainty is the difference between the amount of information required to do the task and the amount of information available (Galbraith, 1973). The amount of information required depends on the task complexity and the performance requirements, usually measured in time or to a budget. The amount of information available depends on the effectiveness of planning and requires the collection and interpretation of that information for the task.

Uncertainty means that not every detail of a project can be planned before work begins (Laufer, 1991). When uncertainty is high, initial drawings and specification will almost certainly change and the project members will have to work hard to solve problems as work proceeds if disputes are to be avoided.

B Contractual problems

Standard forms of contract clearly prescribe the risks and obligations each party has agreed to take. Such rigid agreements may not be appropriate for long-term transactions carried out under conditions of uncertainty.

It is not uncommon to find amended terms or bespoke contracts that shift the risk and obligations of the parties, often to the party least capable of carrying that risk. Where amended terms or bespoke contracts are used, they may be unclear and ambiguous. As a consequence, differences may arise in the parties' perception of the risk allocation under the contract. Where the parties have agreed to amended or bespoke terms, those conditions take effect in addition to the applicable law of the contract, which is continually evolving and being refined to address new issues (Management, 2015).

Cause of dispute

A number of studies on causes of disputes on construction projects internationally were reviewed. The studies identified various causes of disputes that formed the basis for the questionnaire of this study. The prominent researches are discussed next.

The "weather/cold" categories referred to conditions where extreme weather or cold conditions affected the ability to do work. "Increase in scope" included any design changes, extra work, and errors. As a point of interest, the increase of scope of work was the main cause of dispute in approximately half of the claim reports analyzed. The "weather, increase in scope, included any any design changes, extra works, and errors. As a point of interest, the increase of scope of works was the main cause of dispute ." Semple et al. (1994).

Soekimo et.al, (2007) studied the causes of disputes on construction projects grouped the causes into the following categories:

- External conditions (26.79%);
- Change of drawings document (21.43%);
- Condition of the field (19.64%);
- Change of technical specifications (16.07%);
- Others (e.g., cost estimates, professional ethics and licensing) (16.07%)

(Abera, 2005), Dispute may arise between parties due to managing and controlling of construction contract conditions, specifications and drawings are of these adversarial interests of the parties involved in construction contracts . Where these documents are exhaustively completed and do not invite differences in interpretation, conflicts are managed most effectively. Implementation of construction projects requires attention for resolution or management. And he also showed proceedings of claims when it develops to dispute.

Figure 2.2 below 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 Somali road construction projects stakeholders during the thesis work confirms this statement.

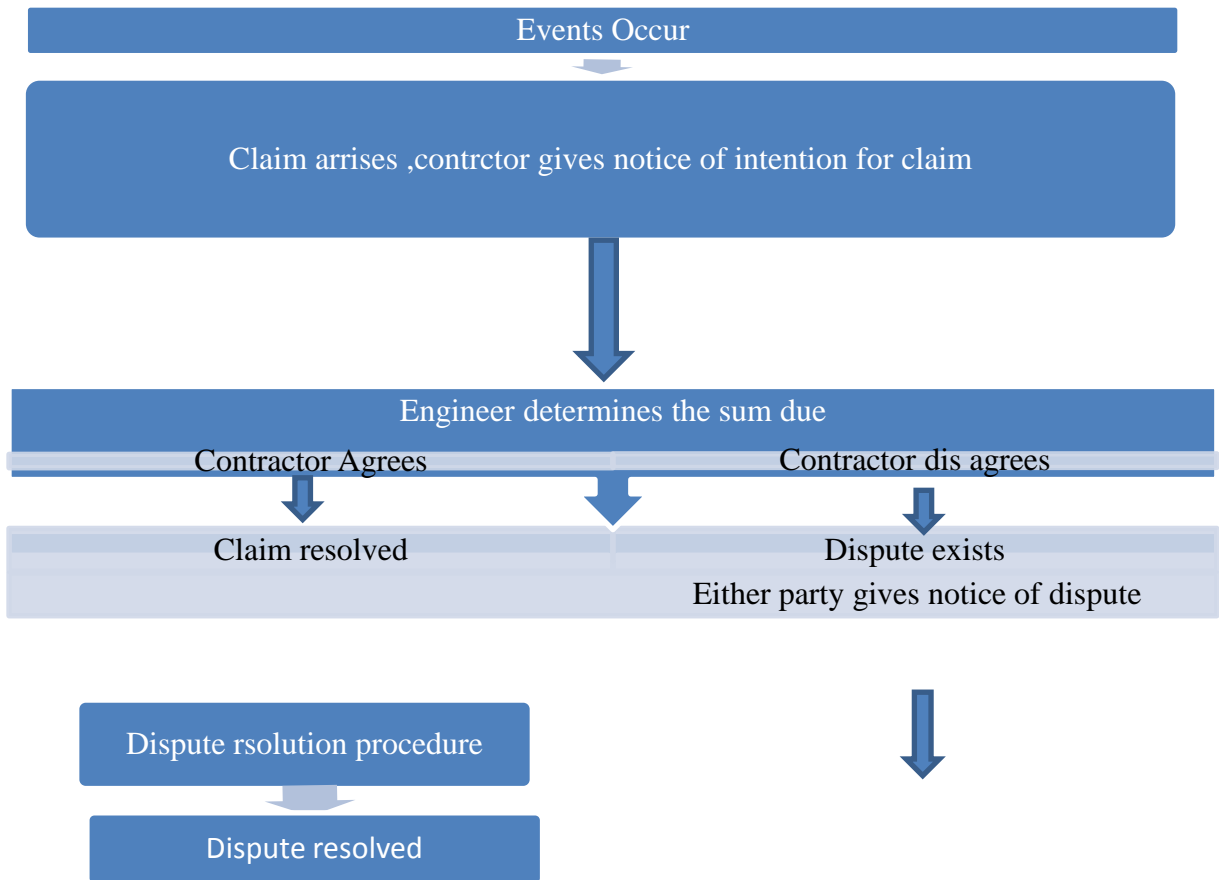


Fig. 2.2 Events claim-dispute range

Also, according to (Emre and Pinar, 2013) the classification, main disputes categories were found as; owner related disputes, contractor related disputes, design related disputes, contract related disputes, human behavior related disputes, project related disputes and external factors. And they concluded that the contractor related disputes and their sub-dispute categories are the most common ones in the construction industry.

The construction industry has traditionally been mired in adversarial relationships between owners and contractors [8]. The priorities of one party are often relegated to second, third, or even lower level priorities for the other side, if at all. “The owner usually wishes to obtain maximum quality, functionality, and capacity at minimum cost. The contractor, while hoping to develop a satisfied client, must in the long run achieve financial goals that are advanced by expending the minimum resources required to meet a minimum scope of work [12].” These

priorities are unsurprisingly at conflict with one another and set the framework for a repetitive cycle of hostilities. Add in unexpected or changed conditions, additional contracting parties (i.e., designers, subcontractors, vendors/material suppliers, etc.), one-time projects, and other variables, there is little doubt to why conflict during the construction process is so prevalent.

Identifying potential conflict items at the onset of a project provides not only a basis for monitoring challenging areas during a project but also an opportunity for preventing these issues from ever becoming the basis for a claim. Many researchers have examined the causes of construction conflict and have identified numerous reasons including: differing site conditions, unrealistic expectations, change of scope, delay, workmanship/quality, weather, and many others [2]. One of the most straight forward categorizations of conflict causes in the construction industry was developed by the CII which identified three logical causal categories – people, process and project [5] In its analysis, CII found that the people factors played the biggest role in project dispute potential, while the process and project attributes played important but less influential roles respectively. While there seems to be little analytical literature focusing on the softer side of construction conflict (people related factors), it is no doubt that people factors have a ripple effect on both field operations and project success. The importance of field personnel resolving conflicts at the lowest possible level must not be underestimated as early resolution allows project operations to continue with minimal distractions and keeps cost and schedule impacts low. , “There is a ‘continental divide of dispute resolution.’ Disputes resolved prior to this line remain at the job site, and settlement is under the control of those directly involved.

Beyond this [point], quantification and entitlement are argued by lawyers or consultants on an issue-by-issue basis. Resolution is neither timely nor cheap and is seldom satisfactory.”[20] Despite the importance of the people related issues, the process related factors appear much more frequently in the literature. In fact, much attention has been given to construction contracts as both a cause and a possible solution for avoiding construction disputes. Construction contracts have been the major focus of academic journals [13], practitioner journals [9], textbooks ([2] and even foreign government initiatives to decrease the amount of disputes, claims, and on projects ([17] Office of Government Commerce

2002). In addition, the role risk plays in the construction industry, as determined in construction contracts, has become an area where purchasers of capital facility construction are beginning to address many causes of conflict.[4] identifies several different project attributes which can be used to help construction parties incorporate both active and passive risk allocation strategies into their contract. This risk assessment and allocation allows all parties to know and calculate their potential exposure into their planning and budgets ([11].

The only area where literature on conflict sources is more prevalent than in the process related factors area is that in which the focus is on project specific features. While these were found to be the least influential on construction disputes in the[5]CII research, their causes are detailed in the literature most frequently. Of particular note are the factors of design complexity, construction complexity and site limitations. In research by both [7], the major source of construction conflict, and hence claims, was a combination of design errors and scope increases, all of which were outside the control of the contractor. While there is some evidence the amount of conflict on construction projects can be reduced([10], there are many who believe that conflict in this industry is inevitable ([6]. As a result, it is necessary to encourage, develop, and utilize various methods of resolving conflict when it does occur.

The current resolution practice of dispute in Ethiopia

From legal aspect and condition of contract(contractual aspect) is as stated in the following section.

Legal aspect of Resolution Dispute in Ethiopia

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

- 1) The Civil Code of 1960;
- 2) Commercial Code of 1960
- 2) Criminal Code of 1960;
- 3) Civil Procedures Code of 1965;
- 4) Criminal Procedures Code of 1965; and
- 5) Commercial Code of 1960

The following are the provisions under the Civil Code of 1960 relating to dispute resolution mechanisms:

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:

a. 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).

b. 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.

C. 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. 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 therefrom.

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.

The doctrine of separability is absent from Ethiopian Civil Code. Art 3330(3) says: “the arbitrator may in no case be required to decide whether the arbitral submission is or is not valid.” The kind of legislative restriction is unclear and makes the independence of the tribunal vague.

Arbitrability of administrative contracts is another unresolved issue in Ethiopian context. In arbitrability of administrative contracts serves as exception to the rule. According to Art 3132 of the Civil Code, administrative contracts are those that serve the general interest of the public or are clearly qualified as such by the contracting parties or could only have been inspired by urgent considerations of general interest extraneous to relations between private individuals.

A dispute is arbitrable if it concerns a subject matter capable of settlement by arbitration. Such kind of arbitrability precludes subjective arbitrability, the capacity of the parties to submit their dispute to a panel; but objective arbitrability that implies the capacity of the

subject matter to be settled by arbitration (the case of arbitrability of administrative contracts is objective arbitrability).

The case of arbitrability of in Ethiopia is open for interpretation, i.e. the arbitrability of administrative contracts. Art. 315(4) says that nothing contained in the Civil Procedure Code (CPC) shall affect Art 3325-3346 of the Civil Code. On the contrary, the provisions of the Civil Code are silent regarding the arbitrability of administrative contracts, although reference to CPC is made that needs to be followed by arbitration. It is vital to keep in mind that the Civil Code does not unequivocally prohibit the arbitrability of administrative contracts. Hence, we ought to rely on case law to determine the arbitrability of administrative contracts.

Thus far, it has been looking into Ethiopian arbitration law before and during the arbitration proceeding. In any jurisdiction, the application of national law will not cease until the award is executed or set aside. Similarly, Ethiopian arbitration law governs arbitration, even after an award is given, by the CPC. Art 318(2) of CPC enjoins arbitral awards to be made in the same form as judgments. The award will be signed and will be handed out to the litigating parties.

Ethiopian arbitration law allows foreign arbitral awards to be recognized in Ethiopia. The title of Book IV, Chapter 2 omits recognition, but only sticks to enforcement of foreign judgments. Though a rarity, certainly a person may only seek recognition of a judgment. It is unclear why the legislature wants to concentrate only on execution of foreign judgments.

In spite of the fact that recognition and enforcement are often read together, they have different legal effect, both domestically and internationally. The difference between recognition and enforcement is that an award may be recognized, without being enforced; but if it is enforced, then it is necessarily recognized by the court which orders enforcement.

As Ethiopia is not part of the New York Convention, we have to rely solely on the law and decisions from national courts. Basically, New York Convention contained provisions for recognizing and enforcing international awards. Due process and public policy grounds can

be used as a refusal for recognizing and enforcing judgments. There are various grounds for refusing to recognize and enforce a foreign arbitral award.

The Federal High Court is legally mandated to appraise the application of recognition and enforcement of foreign arbitral award in accordance with Art 11(2)(c) of Proc. 25/1996. If the foreign arbitral award for which recognition and enforcement is sought satisfies the requirement under the law, it will have legal force and binding effect in Ethiopia, i.e. res judicata effect.

LITIGATION

John Murdech and Will Hughes in “Construction Contract-Law and Management, 3rd edition”, discussed about Litigation and Arbitration. It also laid down their advantages and disadvantages. Hereunder are their discussion about the two Dispute Resolution Mechanisms:

As a general principle, any dispute arising between the parties to a contract may be settled by an action in court. As to which court is appropriate, this will depend upon a number of factors including the size of the dispute, its nature and, in some cases, its location. The size of the dispute is relevant because claims up to a certain financial limit tend to go to a county court. Its nature is important because that will affect which division of the High Court is selected. Thirdly, the location may influence the choice of court since it may be tried locally in the relevant county court or by a circuit judge hearing High Court business.

ARBITRATION OR LITIGATION?

The parties to a dispute are in principle free to choose a method of resolving it. Arbitration and litigation each offer certain advantages. Even where a contract contains a clause stating that disputes shall be settled by arbitration, the parties may agree to ignore this and instead go to court. However, the presence of an arbitration clause in the contract will normally mean that, unless both parties agree otherwise, disputes must be settled by arbitration.

Relative advantages and disadvantages

As to which procedure (arbitration or litigation) would be a more appropriate means of resolving a dispute, no definitive answer can be given, but there are various matters that may be taken into account in any particular case. In briefly noting these factors, one point should be borne in mind. While litigation will follow much the same pattern wherever it takes place, arbitration covers a much wider range of possible procedures. Thus, any comparison between litigation and arbitration inevitably raises the question of what kind of arbitration is being considered. The relative merits of the two forms of dispute resolution, which are described below, are largely based on the assumption of a large-scale construction arbitration involving complex arguments, legal representation and procedures similar to those in court.

Advantages of arbitration

The advantages most commonly claimed for arbitration are that it is cheap, quick, suitable for matters of technical complexity, convenient, private and commercially expedient. These points are discussed below:

- **Cost:** It is often said that arbitration is cheaper than litigation. Unfortunately, while this *can* be true in simple cases, where a short informal procedure (e.g. without legal representation) is used, it tends not to be so in complex construction disputes. Indeed, in such cases, where the procedures adopted are similar to those of a court, arbitration is likely to be the more expensive option. This is because the parties must pay for the arbitrator, the venue, and such other items as a transcript of the proceedings.
- **Speed:** Again, while arbitration in simple cases is likely to be much quicker than litigation, this is dependent upon the parties' willingness to adopt a suitable procedure. If what is required is effectively a trial, then litigation is likely to be quicker, since judges are more ruthless than arbitrators in enforcing the prescribed time limits for the various procedural stages, and in refusing to give extensions of time. This is not to say that arbitrators lack the necessary powers, rather that they do not always have the confidence to apply them.

ADVERSARIAL DISPUTE RESOLUTION

- **Technical complexity:** It may be that, where the legal issues in a case are relatively straightforward, but the factual questions are complicated (e.g. as to detailed matters of design loading), it is better to have the dispute heard by an arbitrator possessing relevant technical qualifications. However, where ‘complexity’ means only to ‘construction industry practice’, this is well understood by the judges of the Technology and Construction Court, who spend most of their time hearing such cases.
- **Convenience:** Arbitration can be arranged to suit the parties (and the arbitrator) and, for example, it may be possible to hold hearings in the evening or at a weekend. Once again, however, this is less of a viable option in a complex case where lawyers and experts are involved.
- **Privacy:** It is not easy to maintain complete confidentiality in large construction arbitrations, if only because so many prominent people within the construction industry and professions will be involved. However, what may quite legitimately be said is that litigation is *officially* in the public domain – the fact that one company is suing another will be known as soon as the writ is issued, and the general public has a right of access to court proceedings. There is likely to be *more* publicity attached to litigation than arbitration.
- **Commercial expediency:** One other matter, which might influence a party in favour of arbitration, is its rather less confrontational nature. This may be important where the parties’ contractual relationship is continuing.

Advantages of litigation

The perceived advantages of litigation include the ability to join third parties in the action, the availability of legal aid, the ability to deal with legal complexities, and a more decisive approach by the decision-maker. These are expanded below:

- **Third parties:** The right to take a dispute to arbitration is conferred, not by law, but by the terms of a contract. In consequence, only the parties to that contract are bound. This means that where, as is commonly the case in construction disputes, more than two parties are involved, they can only be brought into the same arbitration proceedings if *either* they all agree *or* provision is made for this in *all* the relevant contracts. JCT 98 and its accompanying

nominated sub-contracts are drafted with the intention of enabling proceedings to be joined. However, the drafting is complex, and it is by no means certain that it achieves its object.

- **Legal aid:** A private individual involved in a dispute may qualify for legal aid. If so, that person will almost certainly prefer litigation to arbitration, since legal aid is not available for the latter.

- **Legal complexity:** Where a dispute is essentially over a point of law (which includes the meaning to be given to a term of the contract) it is probably better to have it decided by a judge rather than by an arbitrator without legal qualifications. Indeed, where a dispute can be narrowed down to being *only* on a point of law, it may be resolved by an Official Referee on a ‘construction summons’, which is a quick and simple procedure not involving a full-scale court case.

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 immovable. 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.

Road Construction Conditions of Contracts (ERA's Settlement of Disputes)

MDB-FIDIC 2006-PPA 2006 and Road Sector Dispute Resolution System

It is well known in construction industry of the road sector that conditions of contract are prepared based on the complexity of the project, the value invested, and investing on it and the applicable laws of the project location base on these criteria as there are two conditions of contract national for domestic contractors and international condition of contract, either of the parties outside the project country. The road sector like ERA uses both NCT and ICT. for dispute resolution system. For NCT conditions of contract the dispute resolution system from preventive (like DRBand,DRE) are used but for the case of arbitration with proceedings conducted in accordance with the laws of the employer's country, SCC clause 67.1(b) (FIDIC 4th) of ERA NCT 2002 for road works does not allow arbitration if the DRE decision is not final and contractually binding. It leads to litigation according to the civil procedure code of 315. Therefore in this section it was the important clause of MDB FIDIC2006 clause 20,PPA2006 (ICB for works) clause 24-26, and SCC clause67 of ERA ICT2002 for road works which focuses on the engineer, DRE, and arbitrator to handle dispute resolution system as role players. The court may come into picture by the operation of the applicable law.

The current condition of contract for ERA in use is GCC and SCC (FIDIC 4th) but ERA in its special condition of contract for dispute management system, has replaced the role of the engineer as a decider dispute review expert (DRE). Which PPA and MDB FIDIC2006 also state that the decision by the engineer is not contractually binding unless parties refer dispute DB with reasonable time and if either party dissatisfied with the engineer decision (PPA) or determination refer the dispute to the adjudicator (PPA) or DB (MDB) to obtain contractually final and binding decision or else both PPA and MDB FIDIC2006 state that the respective clause 25.2 and 20.6 to arbitration if the adjudicator fails to give decision with such reasonable time period or either party is dissatisfied with the adjudicator decision. Then either party may refer the dispute to arbitration. The same is true for DB of MDB FIDIC2006 except optional amicable settlement is exempted by PPA before commencement of arbitration.

The following SCC Clauses Provided by Road Sector ERA For Standard Bidding Documents Section 12 Roadwork Contracts ICB – 2002 Dispute Resolution Procedure Ethiopian Roads Authority

SECTION 12 - DISPUTE RESOLUTION PROCEDURE

Clause 67: Settlement of Disputes (version 2)

SUB-CLAUSE 67.1 (a)

DISPUTES REVIEW EXPERT (DRE)

APPOINTMENT PROCEDURE

1. “The Dispute Review Expert (DRE) shall be a person experienced with the type of construction involved in the Works and with the interpretation of contractual documents and shall be selected by agreement between the Employer and the Contractor. If the DRE is not selected within 28 days of the date of the Letter of Acceptance, then upon the request of either or both parties the DRE shall be selected as soon as practicable by the Appointing Authority specified in the Appendix to Bid.”
2. The DRE shall take up his functions after having signed a DRE’s Declaration of Acceptance (as required by paragraph 12 of Annex A to these Conditions of Particular Application).
3. In the event of death, disability, or resignation of the DRE, the latter shall be replaced by agreement between the Employer and the Contractor. Any replacement made by the parties shall be completed within 28 days after the event giving rise to the need for a replacement. In case of disagreement between the Employer and the Contractor, the DRE shall be designated by the same Appointing Authority specified in the Appendix to Bid.”

SUB-CLAUSE 67.1(b)

DISPUTES RESOLUTION

PROCEDURE BY DRE

1. "If any dispute arises between the Employer and the Contractor in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of the Works or after their completion and whether before or after the repudiation or other termination of the Contract, including any disagreement by either party with any action,

inaction, opinion, instruction, determination, certificate or valuation of the Engineer, the matter in dispute shall, in the first place, be referred to the DRE .

2. The DRE shall give a Recommendation in writing within 56 days of receipt of a notification of a dispute.

3. If the DRE has issued a Recommendation to the Employer and the Contractor within the said 56 days and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor within 14 days after the parties received such Recommendation from the DRE, the Recommendation shall become final and binding upon the Employer and the Contractor.

4. All Recommendations which have become final and binding shall be implemented by the parties forthwith, such implementation to include any relevant action of the Engineer.

5. Whether or not the DRE's Recommendation has become final and binding upon the Employer and the Contractor, a Recommendation shall be admissible as evidence in any subsequent dispute resolution procedure, including any arbitration or litigation having any relation to the dispute to which the Recommendation relates.

6. If the DRE fails to issue his Recommendation within 56 days after he has received the written Request for Recommendation, then either the Employer or the Contractor may, within 14 days after the expiry of the said 56-day period, 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.

7. The arbitration shall be conducted in accordance with the arbitration procedure published by the Appointing Authority specified in the Appendix to Bid.

8. Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the Employer shall give effect forthwith to every decision of the Engineer unless and until shall be revised as a result of the operation of this Sub-Clause 67.1 or, as hereinafter provided, in an arbitral award.

9. The DRE shall be paid by the hour at the rate specified in the Tendering Data and Contract Data, together with reimbursable expenses of the types specified in the Contract Data, and

10. Section 12 Standard Tendering Documents

Dispute Resolution Procedure for Roadwork Contracts NCT – 2001 Page 12-14 Ethiopian Roads Authority cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the DRE."

a) Dispute & the Engineer

The basis to have a dispute, as per Sub-clause 67.1 of the SCC, which is similar to PPA clause 24 and MDB of clause 20.4 is related to the following three alternative factors: It means that the dispute must relate to:

- the Contract; or (i.e., in connection with, or arising out of, the Contract
- the Works; or (i.e., the execution of the Works,)
- the Engineer;

Since the Engineer is the one who administers the Contract & supervises the execution of the Works, much emphasis has, therefore, been given how dispute comes to surface to trigger the machinery of disputes management.

As related to the Engineer as a basis for the existence of a construction dispute, Sub-clause 67.1 of the SCC reads, in part, thus, as follows: including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate, or valuation of the Engineer,...

The Engineer is, for example, the one who gives the first determination (not decision) on claims submitted to it. In the circumstances where claims determined by the Engineer, and dissatisfied or disagreed with any interested contracting party (the contractor or the employer), that disagreement becomes a dispute. Such disagreement, by the employer or the contractor, could be in whole or in part. Such disagreement, which has now been transformed in to dispute, be referred to the next contractual step, to the DRE, for its management

b) The Dispute Review Expert

Similar to clause 25.1 of PPA, and clause 20.4 of MDB FIDIC 2006. The DRE is the first ladder in dispute management system in road construction sector. It is also a unique dispute management system. It exists only in the construction industry. It is, unlike other dispute

resolution mechanisms, a real time dispute resolution mechanism. Under it only one dispute at a time be referred and managed.

The DRE after examining a dispute referred to him/her, gives his/her Recommendation within a contractually agreed period (56 days). This recommendation is binding on the employer & the contractor. The parties are, thus, contractually bound to give effect to such Recommendation.

The Recommendation of the DRE is not final, however. Any dissatisfied party with the Recommendation may initiate arbitration to challenge the Recommendation. To initiate arbitration, such dissatisfied party shall give notice to the other party within 28 days, after receipt of the Recommendation. The notice, therefore, serves as a critical prerequisite to initiate arbitration under the contract.

The Recommendation of the DRE may, however, become final and binding if no notice to commence arbitration has been given by any interested contracting party within such contractually agreed period (28 days up receipt of the Recommendation). The right to arbitration is, therefore conditional.

SUB-CLAUSE 67.2

AMICABLE SETTLEMENT

Sub-Clause 67.2 is deleted without a change in the numbering of the other Sub-Clauses of this Clause 67.

PPA also have no amicable clause but MDB FIDIC clause 20.5 uses this alternative if DB's decision is not final and binding before arbitration

SUB-CLAUSE 67.3

ARBITRATION

Sub-Clause 67.3 is modified to read as follows:

“Any dispute in respect of which the Recommendation, if any, of the DRE has not become final and binding shall be finally settled by arbitration in accordance with the arbitration procedure published by the Appointing Authority specified in the Appendix to Bid.”Neither

party shall be limited in the proceedings before such tribunal to the evidence or arguments put before the DRE for the purpose of obtaining its Board Member from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute."

"Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Engineer, the Contractor and the DRE shall not be altered by reason of the arbitration being conducted during the progress of the Works."

SUB-CLAUSE 67.4

FAILURE TO COMPLY WITH

RECOMMENDATION similar to that of MDB FIDIC 2006 clause 20.7 clause 25 of PPA 2006

Sub-Clause 67.4 is amended to read as follows:

"Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 67.1 and the related Recommendation has become final and binding, either party may, if the other party fails to comply with such recommendation and without prejudice to any other right it may have, refer the failure to arbitration in accordance with Sub-Clause 67.3. The provisions of Sub-Clause 67.1 shall not apply to any such reference."

c) Arbitration

This clause is similar to clause 25 of PPA and 20.6 of MDB FIDIC

Arbitration is the final stage of dispute management in road construction sector. As per Sub-clause 67.4 of the SCC, the arbitral tribunal, if so constituted, shall have full power to open up, review, and revise any decision, opinion, instruction, determination, certificate, or valuation of the Engineer and any Recommendation(s) of the DRE related to the dispute. The parties may introduce new evidence and/or argument in such arbitral proceeding. The DRE may be called up on, before such arbitral proceeding, as a witness.

Settlement of dispute under Civil Code from Articles 3307-3346. The scope of the Ethiopian Civil Code may be limited in this regard, because not all amicable & judgmental forms of dispute resolution systems are recognized. The recognized settlements are Compromise (Negotiation) under Articles 3307-3317, Conciliation under Articles 3318-3324, Arbitration from Articles 3325-3346.

Compromise

Article 3307 of the civil code gives a definition of compromise. “Compromise is a contract whereby the parties, through mutual concessions, terminate an existing dispute or prevent a dispute arising in the future.

- According to this article, during Compromise, there is no third party is participate in the resolution and only mutual understanding of the parties available to terminate it.

Conciliation

When the dispute became complex and hard to terminate by mutual understanding, the civil code also makes available the other amicable settlements called conciliation for the disputed parties.

- According to Article 3318, the parties may appoint a third party (conciliator) with the mission of negotiating and bringing them together. The conciliator is appointed by party’s joint agreement or by third party based on their request. This article also sets the right of the conciliator to accept or refuse the appointment.

Arbitral submission

- Article 3325, definition of arbitral submission

(1)The arbitral submission is the contract whereby the parties to a dispute entrust its solution to a third party, the arbitrator, who undertake 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 flowing there from.

- According to Article 3325 (2) an arbitrator may not have some legal power or jurisdiction to decide on certain matters and in this case the arbitration process needs support of the public justice system for the raised legitimate need.

Adjudication is not yet legally recognized under the Ethiopian law except as provided under the PPA Conditions of Contract

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 reprinted 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 FIDIC, 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.

History and Development of Dispute Resolution Processes

The evolution of modern dispute resolution techniques is mainly accredited to the various techniques developed and implemented by institutions in the United States. The Arbitration Society of America was founded in 1922 by Francis Kellor as the first formal organization to implement dispute resolution services. Two years later another organization, the Arbitration Foundation was formed. With the backing and collaboration of the Arbitration Society the United States Arbitration Act was enacted in 1925. The Act provided the first legally enforceable framework for agreements to arbitrate over any 'controversy'. In 1926 the Arbitration Society and the Arbitration Foundation amalgamated to form the American Arbitration Association (AAA) which has become the prominent driving force for the development of dispute resolution services and guidelines. It is the AAA which provides guidance rules for arbitration clauses and procedures that the American Institute of Architects (AIA) has used arbitration in standard forms of contracts for over the past century (Rick Collins and Kerry London, 2007).

Despite litigations and arbitrations ability to produce a final and binding decision, the construction industry has sought the establishment of informal processes for the quick and effective resolution of disputes. Alternative Dispute Resolution is providing various possibilities in lieu of the costly and time-consuming litigation. ADR is broadly defined as “...any method by which conflicts and disputes are resolved privately and other than through litigation in the public courts.ADR can include both binding and non-binding procedures. The development of a sliding scale of ADR techniques has evolved over the years including a progression from self-deterministic to third part impose methods including negotiation , mediation, conciliation, neutral evaluation, expert determination, adjudication, arbitration and others (Rick Collins and Kerry London, 2007).

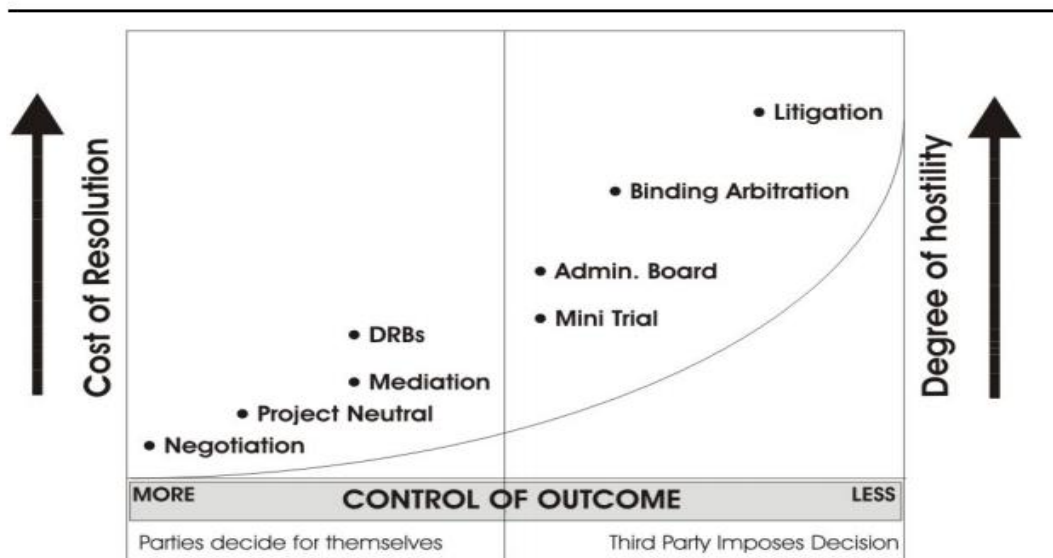


Figure 2.3 : Dispute Resolution Continuum modified from (Rick Collins and Kerry London, 2007)

Settlement of Disputes

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.

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. 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 the above section 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.

ERA's Settlement of Disputes

Resolving disputes out of the conventional court system is quite common in commercial contracts and more so in the construction contracts. The special expertise and technicalities involved in the sector and the exigency of time for the performance of such contracts often necessitate that alternative dispute resolution methods and arbitration to be in place to resolve such disputes. Though road construction contracts entered between the ERA and foreign or local contractors are public works, often financed mainly out of state coffer and that are classified as administrative contracts, disputes arising from such contracts can be submitted to arbitration and other amicable dispute resolution mechanisms. This is because ERA's Director General is provided with an extraordinary power to "settle disputes out of court" upon the specific permission of the Board (Weldegebreal, 2014).

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 Manager 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 within a reasonable time render a written decision. Such decision shall be final and conclusive unless within 30 days 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 (Abera, 2005).

Dispute Control system/ Dispute Management System

Information about the entire jurisdiction of road construction dispute resolution options is beyond the scope of this paper; however, there are many articles ([10] and textbooks ([2] that address these options. Instead, a brief discussion of alternative dispute resolution (ADR) options commonly utilized in the construction industry will be presented from the perspective of finding a better way to resolve inevitable conflict. ADR is broadly defined as any method by which conflicts and disputes are resolved privately and other than through litigation in the public courts ([15]. ADR techniques can include both binding and non-binding procedures. The development of a virtual sliding scale of ADR techniques has evolved over the years including a progression from self-deterministic to third party imposed methods, including negotiation, mediation, conciliation, neutral evaluation, expert determination, adjudication, arbitration, and others (e.g., [14]; [17] dispute resolution procedures with control of the outcome compared to both the escalating dispute costs and hostilities. Anecdotally, dispute resolution techniques that keep control of the dispute in the hands of the parties in disagreement incur fewer costs during the resolution process and keep hostilities to a minimum. While disputes that rely entirely on the determination of a third party (i.e., litigation and binding arbitration) have both higher costs and increased hostilities among parties.

The dispute resolution continuum has been adopted by many practitioners as evidenced by the multitude of contracts that spell out negotiation, mediation, and other non-binding methodologies before pursuing arbitration or litigation in what is believed to be an effort both to limit potential cost escalation and to preclude injured business relationships. Many of the construction industry standard contracts (AIA, AGC, EJCDC and CMAA) still include arbitration as an ADR option; however there is a growing movement to utilize what is perceived as less combative systems that are believed to resolve disputes quicker and more

economically[18]. However, little quantitative data exists to help industry practitioners make decisions about how to correctly design and implement cost effective dispute management systems at the onset of the project. Some authors have encouraged on-site resolution of dispute including the use of stepped negotiations, dispute review boards (DRB), Dispute review expert (DRE) and other ADR options that do not rely upon third party binding decisions as one way to reduce the overall costs and acrimony of dispute resolution[16]. Others have praised the adoption of partnering and the design-build delivery method as other ways to reduce the amount of dispute that could potentially turn into a claim and/or dispute. Nevertheless, a complete conflict management system must also address dispute assessment through both the frequency and the severity of disputes occurrences.

Arbitration and Litigation versus Alternative Dispute Resolution

Compared to 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[19]. However, [3] 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.[3]. 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

RESEARCH METHODOLOGY

3.1. Description of study area

Ethiopia is located in the horn of Africa. It covers an area of about 1.13 million square kilometers and the topography of the country is rugged ranging with an altitude from 125m below sea level to 4,620m above sea level. The country has an elevated central plateau varying between 2,000 and 3,000 meters above sea level.

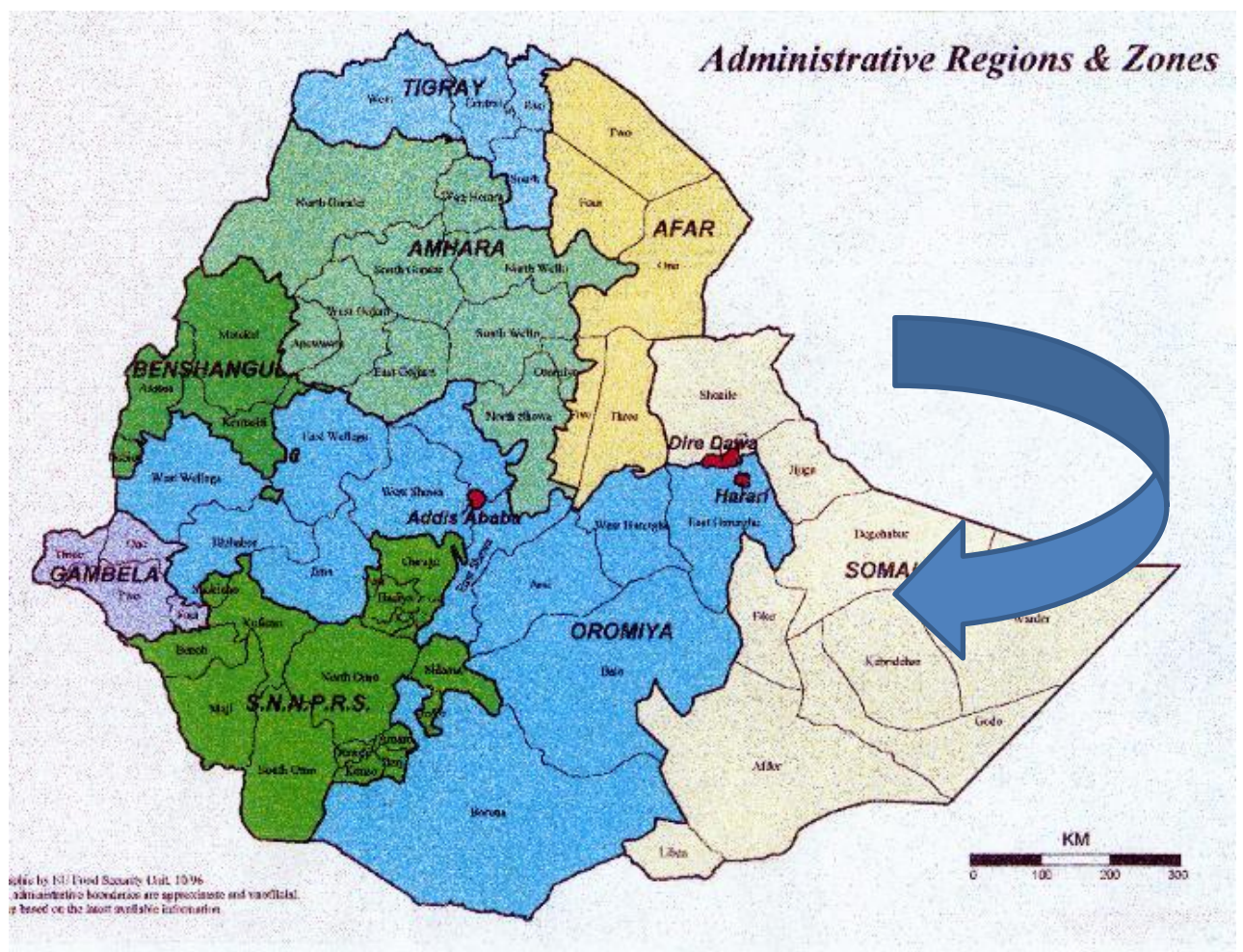


Fig.3.1 Ethiopian map(Ethiopian Map Agency ,EMA)

The general methodology of this study relies largely on the survey questionnaire responses which were collected from the client, contractors and consultants involving in Ethiopian Somali road construction projects. Questionnaire prepared for the survey was formulated by screening and comprehending the relevant literatures in the area of Construction Claims and Disputes. In order to aid the gathering of data through primary source it was vital that a thorough literature review was initially conducted to identify the various causes of disputes in the construction industry from an international perspective. Prior relevant research and books form the major part of secondary data source. The study involves descriptive analysis

3.2 Study Design

Case Study: Case Study Research

The third major approach to qualitative research is case study research (i.e., the detailed account and analysis of one or more cases). Here is the foundational question in case study research: What are the characteristics of this single case or of these comparison cases? A case is a bounded system (e.g., a person, a group, an activity, a process). Because the roots of case study are interdisciplinary, many different concepts and theories can be used to describe and explain the case.

Robert Stake classifies case study research into three types:

Intrinsic case study (where the interest is only in understanding the particulars of the case). Instrumental case study (where the interest is in understanding something more general than the case). Collective case study (where interest is in studying and comparing multiple cases in a single research study). Multiple methods of data collection are often used in case study research (e.g., interviews, observation, documents, and questionnaires). The case study final report should provide a rich (i.e., vivid and detailed) and holistic (i.e., describes the whole and its parts) description of the case and its context.

The scientific research method for this design frame was both qualitative and quantitative. The philosophical approach of the researcher was qualitative, inductive, because the data that was collected from the field was governing the objectives of the research. The researcher's evidence was the data's that have been collected based on the objectives developed above through structured questionnaire, interview and observation with some freedom to elaborate

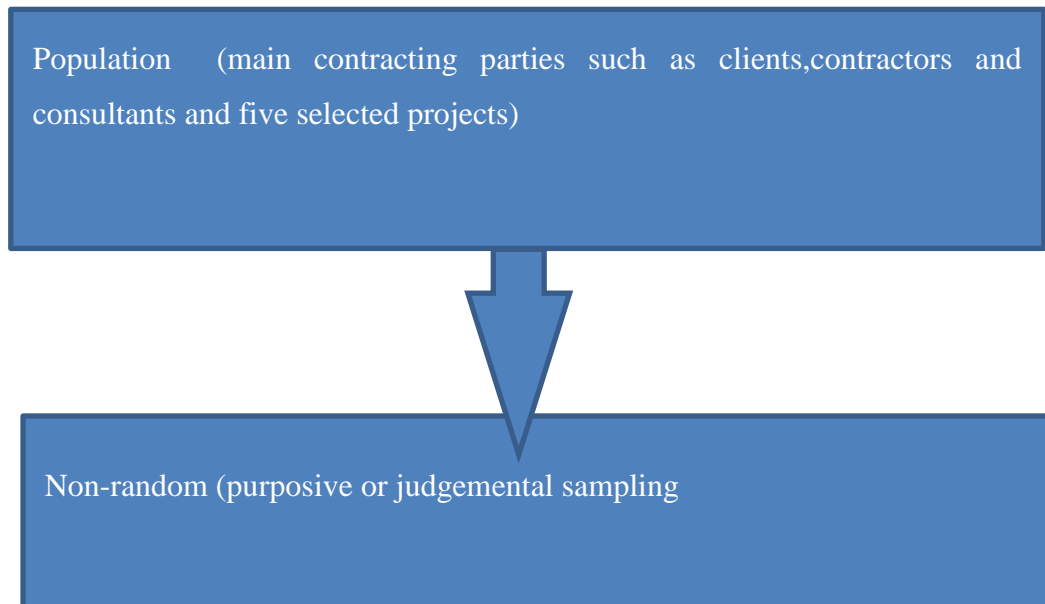
ideas of the participants. The type of analysis used was a Quantitative ,descriptive, content analysis of textual data from the field or graphic representation of Bar chart and qualitative analysis for case study . Study to measure extent, unpredictability of a need or problem and to look at associated factors that were outcome for low dispute resolution. This research study was often guided by questions that were constrained from literature review part.

3.3 Population

The population was the Somal Region Road Construction Industry Stakeholders. Five selected projects were studied. And contractors, clients, and consultants were the sources of the data.

3.4 Sample size and sampling procedure:

The researcher methodology was qualitative, and quantitative procedure followed was as follows:



3.5 Sample Size

With regard to client 24 questionnaires were distributed for owners of selected projects. However, with regard to contractors, 24 questionnaires were distributed to project managers and site engineers. To assess the insights of consultants, 25 questionnaires were also distributed to project coordinators and resident engineers. Generally, a total of 73 questionnaires were distributed for the three parties which were and still engaged in Road Construction of Somali Region.

Judgemental purposive technique was employed to select the relevant sample units deliberately for the problem and interview some stakeholders among respondents.

3.5 Study Variables

3.5.1 Dependent variable

- Dispute Resolution

3.5.2 Independent variables:

The independent variables which were measured and worked to determine their relationship to observe phenomena were selected and listed below:

- ✚ Causes of Disputes
- ✚ Dispute Resolution Mechanisms
- ✚ Contract Agreement
- ✚ Claims
- ✚ Conditions of Contract
- ✚ Project Delivery System
- ✚ Type of Contract

3.6 Data Collection Procedures

The data collection approach adopted for conducting this research includes both primary and secondary sources. Questionnaires, interview, and case studies provided the primary data for this research while reviewing related literatures of various authors form part of the secondary data.

This study has identified the causes that lead the parties of road construction projects to disputes. Questionnaires were distributed to identify the causes of disputes. Dispute Resolution Mechanisms was assessed both through case studies and literature review. The current dispute resolution mechanisms was conducted through perceptions of clients, consultants, and contractors. The participants were requested to allocate marks from 1 to 5 (a 5-point scale). Interviews were also conducted to gather more information about the scope of the study. These different methods of data collection have been used in order that the data or information obtained from one can be supplemented by others whereby the collected data will give multiple evidences.

Questionnaire and interview have been chosen for the most part of this study due to its ability to explore and, acquire lengthy and detailed answers of respondents about the issues at hand by entering “the other person’s perspective” (Patton, 1987). The relevant sample respondents of engineers who had good experience in road sector and some optimal sample was taken from other engineers who had relation with this sector respondents and number of set was limited to that experience, expert and prominent professionals by which a small number of questioner was selected based on a set of criteria. For example, the criteria for the selection of contractors have been developed as the following:

Cheung and Suen (2002) respondents who very experience, knowledgeable, possessed good skills and hold senior managerial positions in the industry were essential, so that their views provided a good. The respondents must have a minimum of ten (5) years experienced in the road construction of Somali Region. This criteria has been used in a study conducted by Cheung and Suen(2002). The respondent had to be at least the managing director or project manager of the company, or other persons such as the contract manager who were involved in the road projects of Somali Regin and familiar with construction contracts. According to reflection in the field of research. It was suggested that the respondent’s legal backgrounds are crucial for the current study. This had been demonstrated in a study conducted by Rameezdeen and Rajapakse(2007) on the readability of contract clauses, where the sampling was based on selection of professionals from the industry who were routinely involved in the road construction of Somali region projects and working with construction contracts. The

respondents had to be working in a company experienced in both civil engineering, works. This was also to limit the scope of the study and to ensure a manageable amount of data; The locality of the chosen contractor was in Jig-Jiga and project sites, since the majority of registered contractors were located in the in this area. Similarly, the purpose of choosing the locality of the contractors was to limit the scope of the study and to ensure a manageable amount of data.

The researcher conducted interview for selected group representatives in addition to questionnaire .For this research samples were more often non-random, purposeful and small in number. Thus, the choice of interviewees for this study were selected through non-probability sampling designs by means of purposive or judgemental sampling.

3.7 Method of Data Analysis

The responses from the 65 questionnaires were subjected to statistical analysis. The contribution of each of the causes dispute and mechanisms of disputes examined and the ranking of the attributes in terms of their criticality as perceived by the respondents was done by use of Relative Importance Index (RII) which was computed using the following equation and the results of the analysis are presented in the next chapter.

$$RII = \frac{\sum W}{A*N} (0 \leq RII \leq 1) \text{ ----- Equation (1)}$$

Where:

W – is the weight given to each factor by the respondents and ranges from 1 to 5, (where “1” is “strongly disagree” and “5” is “strongly agree”);

A – is the highest weight (i.e. 5 in this case) and;

N – is the total number of respondents.

CHAPTER FOUR RESULTS AND DISCUSSION

4.1 General Overview

The study sets out to determine construction dispute resolution in Ethiopian Somali region road construction industry. This chapter analyses the collected data and presents the results of the analysis on the main issues by combining with literature review.

4.2. Study Population

Questionnaire response rate

The structured questionnaire survey is designed to determine the major causes of dispute in construction projects in Ethiopian Somali regional state. Seventy three participants were questioned in the surveyout of which 68 were collected from volunteer respondents. This yields a response rate of 93.11%. Before starting the analysis, the returned questionnaire was checked for their reliability and out of the questionnaires 65 were found to be suitable for data analysis with a valid response rate of 89.05%.

The respondents are categorized into three groups, namely contractors, consultants and clients which, of course, were implementing agencies and financiers. The response rate for the questionnaire survey for the above mentioned contractors, consultants and clients are 95.83, 96% and 87.5%, respectively (Table 4.1). According to Sekaran (2001), a response rate of 30% was acceptable for most studies; therefore, as the response rate of this study was more than what was referred as adequate by Sekaran (2001), the response rate is measured as adequate for the study.

Table 4.1. Validation for the Structured Questionnaire.

Group	Distributed	Returned	Returned in percentage	Valid response	Valid response rate (%)
Contractors	24	23	95.83%	22	91.66%
Consultants	25	24	96%	22	88%
Clients	24	21	87.5%	21	87.5%
Total	73	68	93.11	65	89.05%

The above table 4.1 shows that valid response rate of 91.66% was found by dividing valid response to that of initially distributed questionnaire ie. $22/24 = 91.66\%$ for contractors and others were determined by the same approach for consultants and for clients.

Group of respondents'

This study was conducted through investigation of ideas of the three parties in construction industry; the clients, consultants and contractors. The following table shows percentage for the respondents based on their profession.

Table: 4.2 Selected Group of respondents' for analysis

No.	Profession of respondent	Number of respondents	Percentage
1	Client	22	33.84%
2	Contractor	22	33.84%
3	Consultant	21	32.31%
Total		65	100%

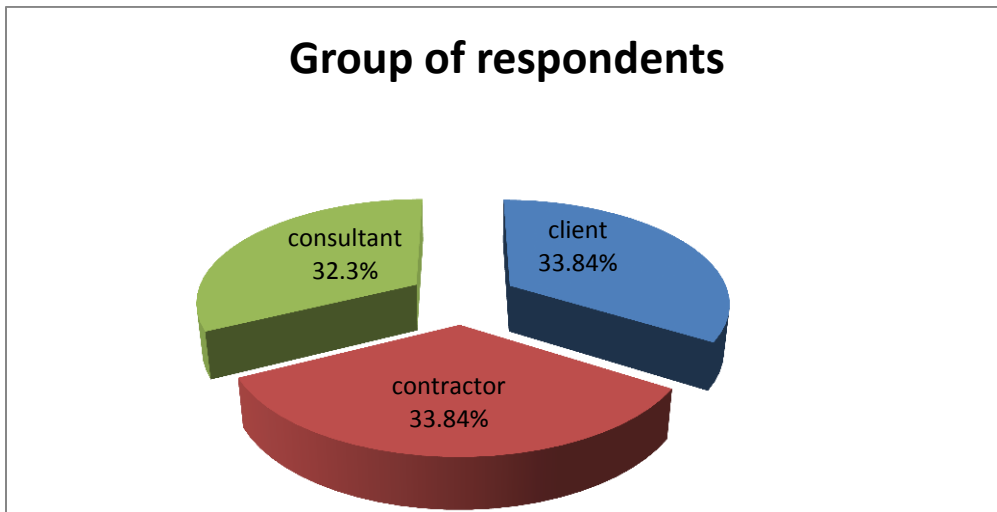


Figure 4.1. Group of Respondennts

Respondents' Experience in Road projects

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 (Abera, 2005). So, it is interesting to note the comprehensive experience of clients, consultants and contractors who gave responses during this research.

Figure below shows the overall experience of the respondents in Somali Region selected Road Construction Project. In the Figure, there were 15.38% of the respondents found to possess a work experience of 5 years and below and 53.84% of the respondents had 6-10 years experience, about 10.77% of respondents had 11-15 years experience and similarly the remaining 20% respondents were found to have a work experience of above 15 years.

Table 4.3 Selected Respondents' for Analysis and their Experience in Road projects

Year of experience	Number of respondent	Percentage
1-5 years	10	15.38%
6-10years	35	53.84%
11-15years	7	10.77%
Above 15 years	13	20%
Total	65	100%

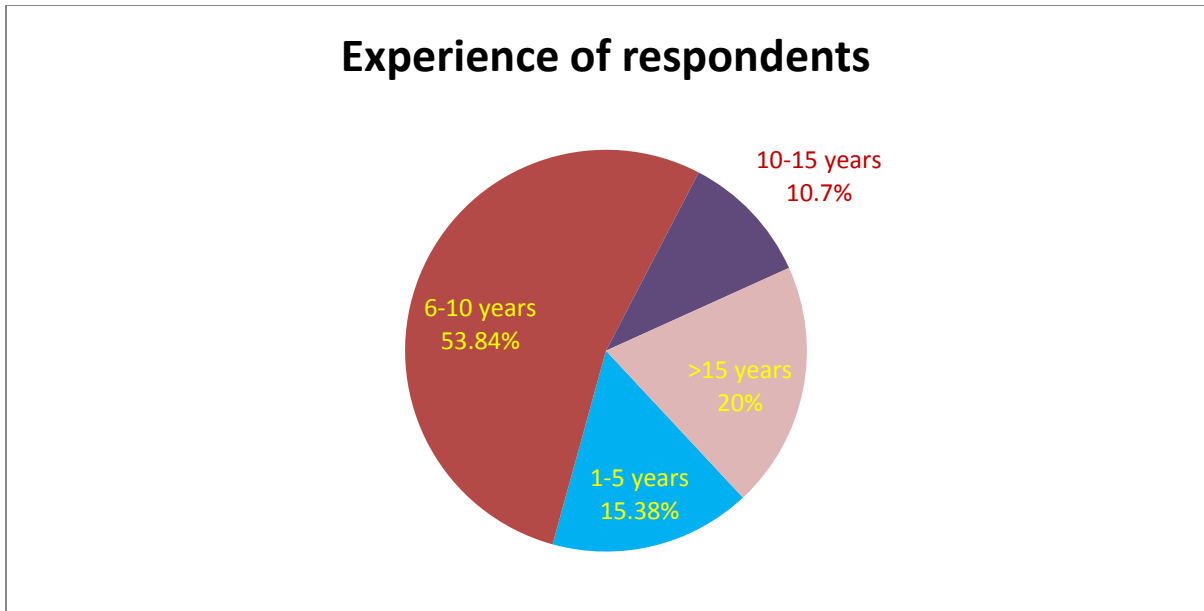


Figure 4.2. Experience of Respondents

4.2. Causes of dispute that lead to road construction in Somali Region .

The questionnaire for this study dealt with the quantification of each of the cause of dispute in terms of frequency of occurrence and severity. The following major categories along with the number of sub-causes for each type of dispute are as follows: 1. Design-related (with 4 sub-causes); 2. Contractor-related (with 6 sub-causes); 3. Owner-related (with 5 sub-causes); 4. Contract-related (4 sub-causes); and 5. External factors (with 4 sub-causes). Sub-causes were shown on the succeeding tables.

Table 4.4 and Figure 4.3 below show the major categories of disputes. The following are enumerated according to its severity.

According to study conducted by (Emre and Pinar 2013) on “An analysis of causes of disputes in the construction industry using an analytical network process” the first ranked factor that cause dispute was owner-related factors. However, causes of disputes in the Road construction of Somali Region as checked for the agreement or disagreement among the three parties (the client, contractors and consultants) in ranking main causes of disputes, the representatives of the parties, like Somali Roads Authority Highway Manager says “we have problems related to design that mostly cause dispute during construction .” The Somali Road

Construction Road Enterprise General Manager also says “the most common problems encountered by us was dispute related to interpretation of design and specification errors.” The Somali Water Works Design and Supervision Enterprise’s representative says “Problems due to Design related are mostly common and since the sites are remote some have with security problem and inaccessibility of the site; some designs are made at the office using softwares as a preliminary design and tried to solve claims before escalating to disputes.” This shows that respondents agreed for Design-Related Problems as the main causes of dispute in Somali Region Road Projects. However notion taken by the consultant/client was seen in the Region. The output of Design-related problem resulted to dispute and Litigation was the Resolution Mechanism used (Case No 1 of Annex2 of this research).

Table 4.4. Major Catagories of Disputes

No	Causes of dispute	Relative importance Index (RII)	Rank
1.	Design-related factors	0.35	1
2.	Contractor-related factors	0.28	2
3.	Client/owner-related factors	0.27	3
4.	Contract-related factors	0.10	4
5.	External factors	0.04	5

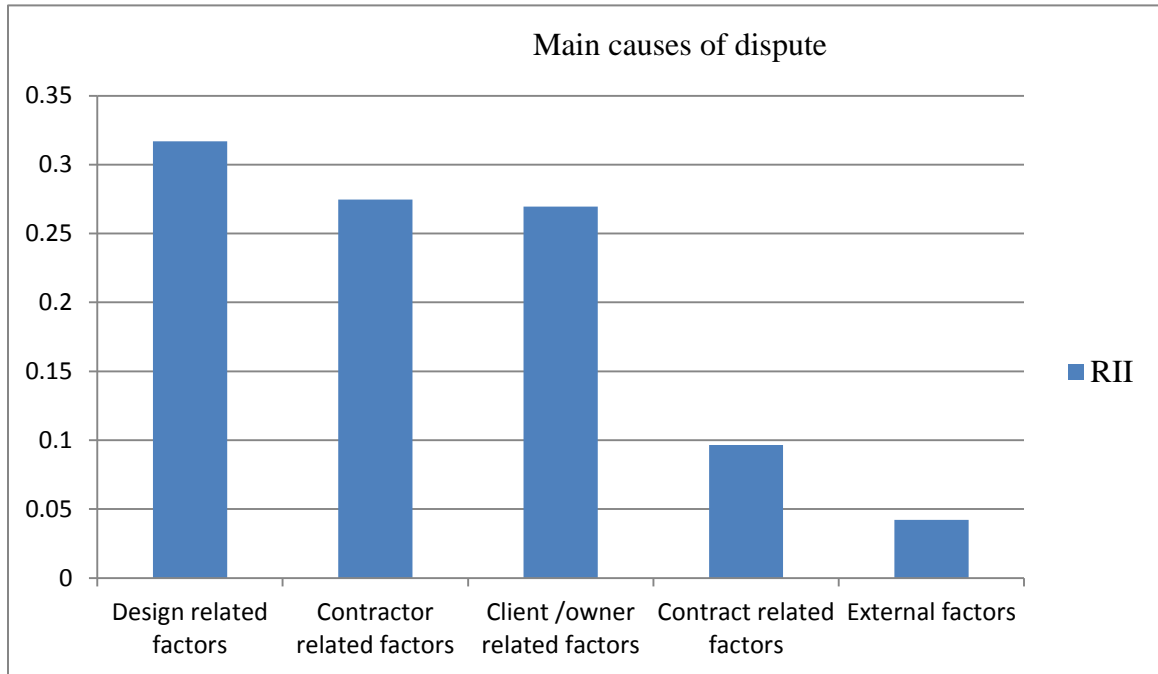


Fig 4.3 :Major categories of causes of disputes

The questionnaire for this study dealt with the quantification of each of the cause of dispute in terms of frequency of occurrence and severity. The following major categories along with the number of sub-causes for each type of dispute are as follows: 1. Design-related (with 4 sub-causes); 2. Contractor-related (with 6 sub-causes); 3. Owner-related (with 5 sub-causes); 4. Contract-related (4sub-causes); and 5. External factors (with 4 sub-causes). Sub-causes were shown on the succeeding tables.

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2. Contractor-related disputes
3. Owner-related disputes
4. Contract-related disputes
5. External factors dsiputes

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4.3.1 Design related causes

Design related factors were ranked as the first by the respondents. The sub categories of the causes of dispute in road construction industry of the study area were also ranked accordingly based on the response from the respondents.

1. Design error
2. Inadequate / incomplete specifications
3. Quality of design
4. Unavailability of information about the project area

Table 4.5 Design related Sub causes

No	Design related Sub causes	Relative importance Index (RII)	Rank
1.	Design errors	0.35	1
2.	Inadequate / incomplete specifications	0.30	2
3.	Quality of design	0.27	3
4.	Availability of information	0.27	3

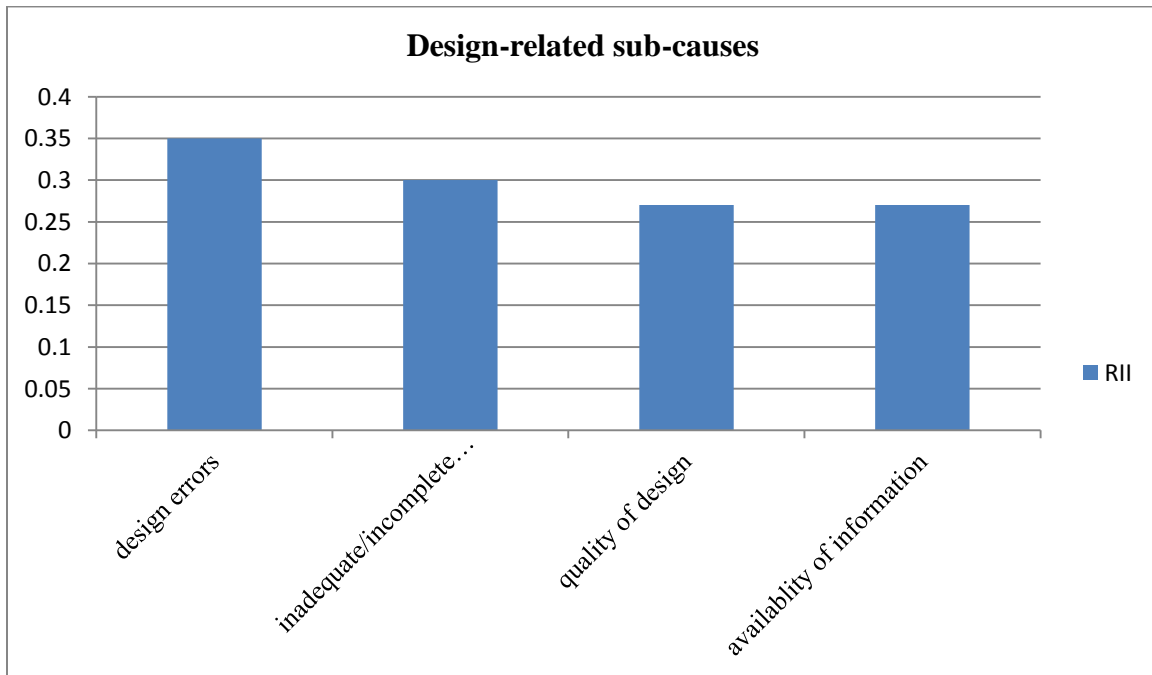


Fig 4.4:Design related Sub causes

As it was summarized from the above figure design error was the top ranked causes of dispute. Errors in design can lead to delays and additional costs that become the subject of disputes. Often no planning or sequencing is given to the release of design information, which then impacts on construction. Equally, the design team sometimes abrogate their responsibilities for the design, leaving the contractor to be drawn into solving any design

deficiencies by carrying out that part of the work itself to try to avoid delays, and, in doing so, innocently assuming the risk for any subsequent design failures.

4.3.2 Contractor-related causes.

Contractor related factors that cause dispute in road construction industry of the study area were ranked accordingly by the respondents as shown in Table 4.6

1. Delays in work progress
2. Time extensions
3. Financial failure of the contractor
4. Tendering
5. Technical inadequacy of the contractor
6. Quality of works

Table 4.6 Contractor -related sub causes

No	Contractor related sub causes	Relative importance Index (RII)	Rank
1.	Delays in work progress	0.25	1
2.	Time extensions	0.25	1
3.	Financial failure of the contractor	0.25	1
4.	Tendering	0.24	2
5.	Technical inadequacy of the contractor	0.24	2
6.	Quality of works	0.24	2

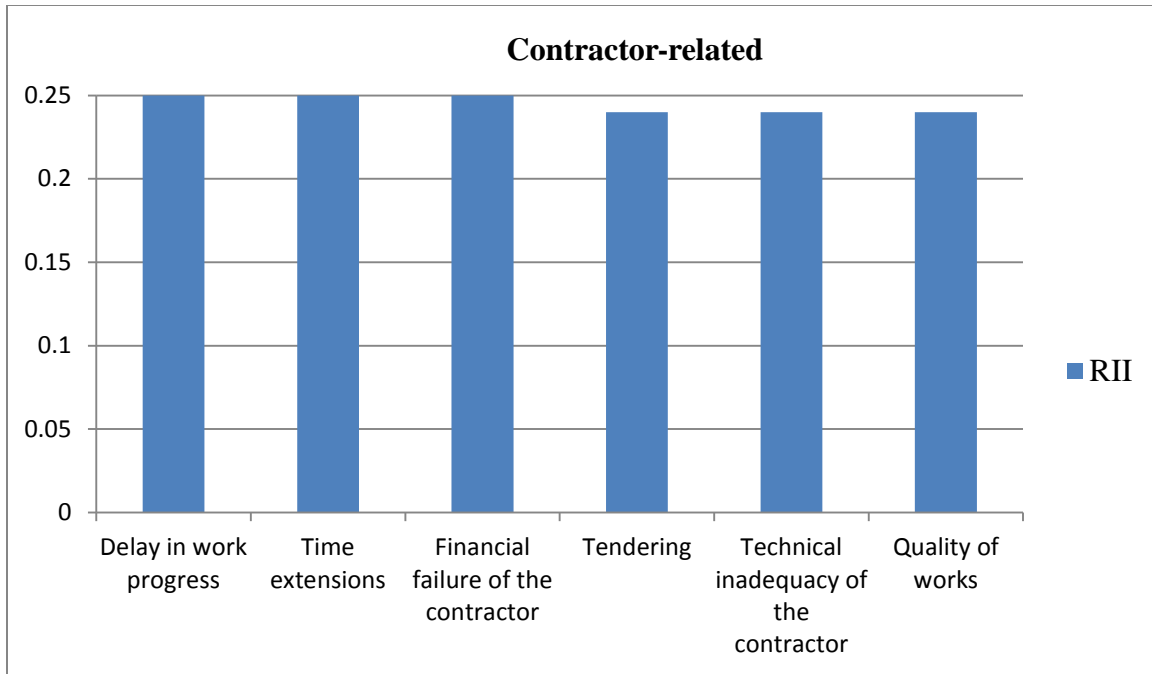


Fig 4.5 :Contractor- related Causes of Disputes

Under the categories of contractor related disputes, delay in work progress was ranked top. Disputes frequently arise in respect of delays and who should bear the responsibility for them. Most construction contracts make provision for extending the time for completion. The sole reason for this is that the owner can keep alive any rights to delay damages recoverable from the contractor. On international construction projects the question of any rights the contractor might have to extend the time for completion was a matter often addressed towards the end of the contract, when an overrun looked likely. From the owner's point of view, this made the examination of the true causes of delay problematical and inevitably led to disputes between the contractor and the owner as to the contractor's proper entitlement.

Under the FIDIC contracts the contractor is now required to give prompt notice of any circumstances that may cause a delay. If the contractor fails to do so, then any rights to extend the time for completion will be lost, both under the contract and at law. This may seem a harsh measure, but a better view is that this approach brings claims to the surface at a

very early stage and gives the recipient an opportunity to examine the cause and effect of any delay properly as and when it arises, so that the owner has some say in what can be done to overcome the delay.

4.3.3 Owner-related causes.

4.3.3 Owner-related sub-causes.

The personality of the Engineer or the Employer’s Representative and their approach to the proper and fair administration of the contract on behalf of the Employer is crucial to avoiding disputes, yet a substantial proportion of disputes have been driven by the Engineer or the Employer’s Representative exercising an uneven hand in deciding differences in favour of the Employer. According to the response from the respondents the top ranked factors that cause the dispute under this category is shown in Table 4.7.

Table 4.7. Owner-related sub causes

No	Owner-related sub causes	Relative importance Index (RII)	Rank
1.	Payment delay	0.23	1
2.	Late giving of possession	0.21	2
3.	Variations initiated by the owner	0.21	2
4.	Unrealistic expectations	0.21	2
5.	Change of scope	0.21	2

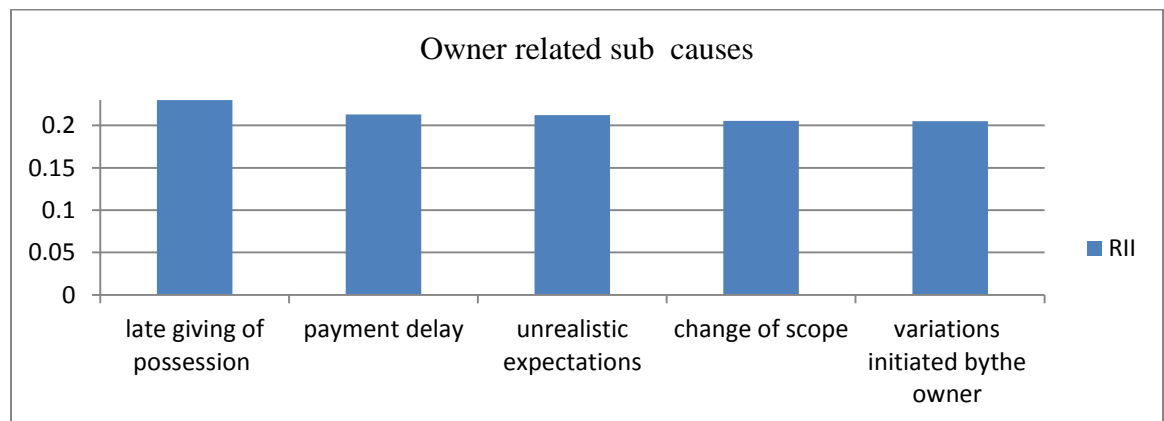


Fig 4.6 Owner related causes of disputes

From the above figure, the top three ranked causes of dispute under owner related were:

1. Payment delay
2. Late giving of possession.
3. Unrealistic expectations

In domestic and international contracts, the Engineer traditionally had an independent and impartial role. This independence or impartiality was often not properly exercised, and in some cases there was clear evidence of bias by the Engineer towards the Employer. This practice was not limited to third world countries but also existed in developed countries.

Under the FIDIC contracts the Engineer no longer has an impartial role but expressly acts for the Employer. This does not prevent the Engineer from taking a professional view on the merits of any difference that may be at issue, but in the event of a dispute the mechanism to resolve such matters quickly by independent means has been achieved by the introduction of a dispute adjudication board

4.3.4 Contract-related causes

The written (or unwritten) contract is what guides the parties' expectations as to payment and performance. The contract must clearly identify the rights and obligations of each player in the process, from developer, to designer, to contractor, to subcontractor and supplier. More problems occur because an incomplete, vague or ambiguous "Scope of Work" in the agreement. A well-written contract that properly analyzes and allocates the risk on the project will often save heartache at the time of completion. According to the response from the respondents the top ranked sub-causes arising from contract-related resulting to disputes is shown in Table 4.8.

Table 4. 8. Contract- related sub-causes

No	Contract related sub causes	Relative importance Index (RII)	Rank
1.	Risk allocation	0.20	1
2.	Different interpretations of the contract provisions	0.20	1
3.	Ambiguities in contract documents	0.2	1
4.	Other contractual problems	0.2	1

The above table showed that contract-related sub-causes were ranked the same in Somali Region because of lack of contract administration in the region.

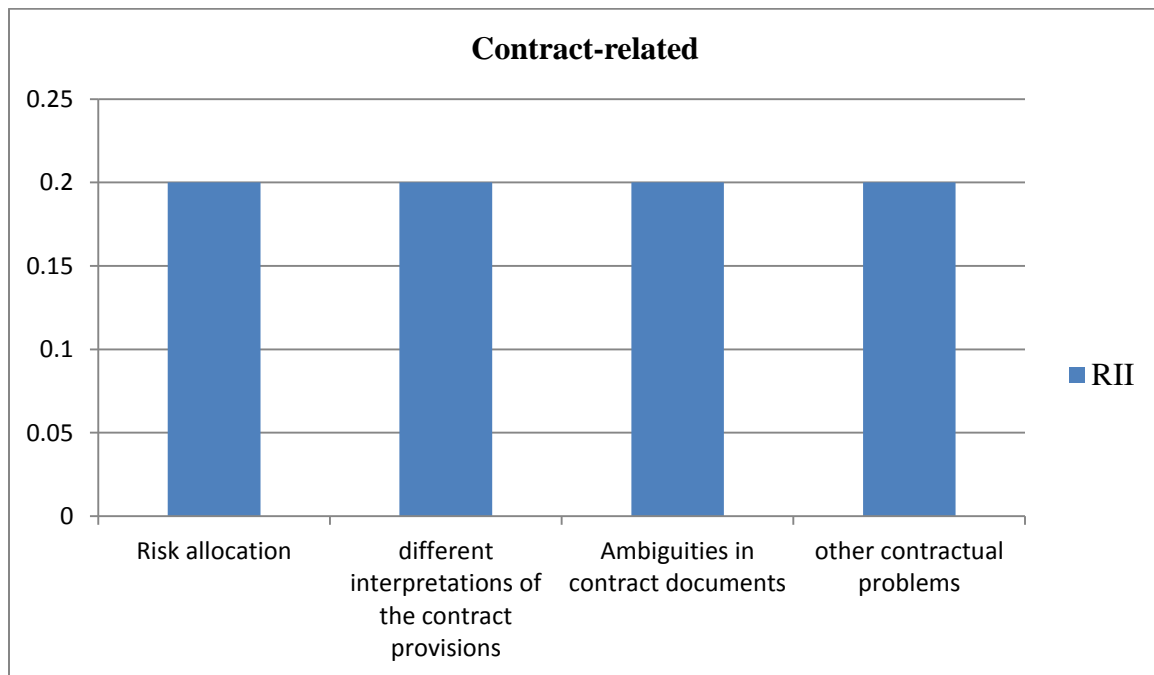


Fig. 4.7 : Contract-related factors

As it was summarized on the above figure Risk allocation was the top ranked cause of dispute. Risks associated with the experience and capacity of the Contractors, low balling, risk allocations, adversarial relations, locations, quality failures, negative cash

flows and accidents under Tender, Contract and Construction related risk type (wubshet, 2008).

4.3.5 External factors

External factors were the least ranked factor that cause dispute in road construction industry of the study area. Under external factor category, the following sub-factors were ranked by the resopndents as shown in Table 4.9.

Table 4.9 : External factors that cause disputes

No	External factors sub-causes	Relative importance Index (RII)	Rank
1.	Weather	0.14	1
2.	Legal and economic factors	0.12	2
3.	Security	0.12	2
4.	Fragmented structure of the sector	0.12	2

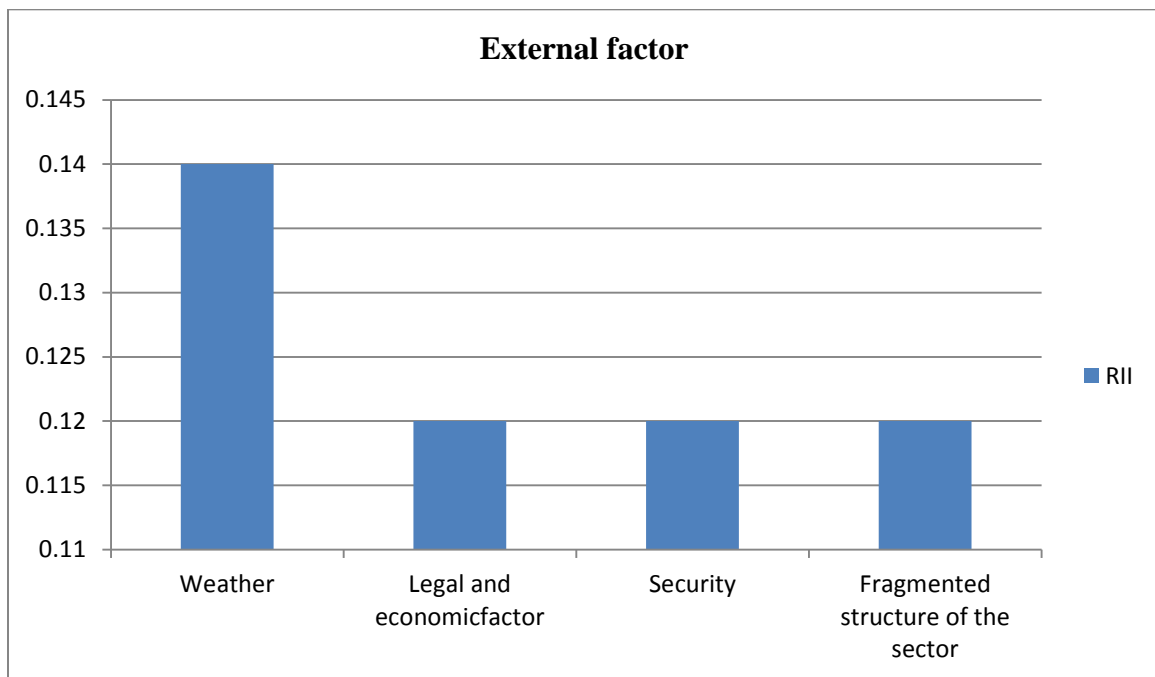


Fig 4.8 : External factors that cause disputes

From the above figure, the top ranked causes of dispute was the weather condition. Anyone who works in the construction industry is sure to know that working in severe weather can be dangerous. High winds and rains are one of the worst culprits and can constitute such a risk that work is often stopped temporarily which can lead to delays and extra expenses for the project as a whole. The workforce will usually have nothing to do during this temporary pause and very often construction machinery and equipment that has been hired at great expense will sit idle until the weather clears and work can return to normal.

The owner of the project will naturally want the building work to be finished as quickly and as cost effectively as possible. Delays due to bad weather can be particularly frustrating as there is absolutely nothing that can be done to avoid these delays, they are just one of the problems that affect the construction process. Delays due to reasons other than weather can often be addressed – a supply chain delay can often be solved with a few phone calls. Delays due to staff sickness can be avoided by hiring temporary workers to cover the absence. If there are several delays on a project, it's likely to come in late and over budget which means that the owner may not realise the expected return on investment (Belog, 2015).

To overcome dispute that comes due to bad wether condition, since 21st Century construction industry needs a 21st Century solution – a way of collecting wind data, providing alerts and providing users with an accurate log of wind conditions that will stand up to the rigours of a downtime dispute. The historical wind information needs to be available to users 24/7 which means that a cloud-based solution is indispensable and it needs to be easily accessible via mobile (with Android and Apple apps) as well as via computers, laptops and tablets.

Table No 4.10 Summary of Factors causing disputes in Road Construction Projects in Somali Region and their RII

No.	Factors causing dispute	RII	Ranking
1	Design errors	0.35	1
2	Inadequate / incomplete specifications	0.30	2
3	Quality of design	0.27	3
4	Availability of information	0.27	3
5	Delays in work progress	0.25	4
6	Time extensions	0.25	4
7	Financial failure of the contractor	0.25	4
8	Tendering	0.24	5
9	Technical inadequacy of the contractor	0.24	5
10	Quality of works	0.24	5
11	Late giving of possession	0.23	6
12	Payment delay	0.21	7
13	Variations initiated by the owner	0.21	7
14	Unrealistic expectations	0.21	7
15	Change of scope	0.21	7
16	Risk allocation	0.20	8
17	Different interpretations of the contract provisions	0.19	9
18	Ambiguities in contract documents	0.19	9
19	Other contractual problems	0.19	9
20	Weather	0.14	10
21	Legal and economic factors	0.12	11
22	Security	0.12	11
23	Fragmented structure of the sector	0.12	11

As have been seen from the above table all of the identified twenty three (23) factors were contributory to disputes in road construction projects in Somali region. Hence, appropriate mitigation measures are mandatory to counteract the disastrous effects of disputes. The perceived effect of each of the 23 factors identified in road construction projects Somali region road construction projects was determined. The overall factors were classified under five (5) major categories. The relative importance indices, rank within the corresponding category and the overall ranks of the identified factors, are presented and discussed in the above tables. The “category” importance indices are furthermore quantified, and a comparison among their relevant importance was carried out. The Relative Importance Indices of all factors for each category was calculated using Eq. (1).

The above figure confirmed that design error under the design-related category was the top-most factor that leads to road construction dispute in Somali Region road projects which was so alarming. Remedial measures through recommendations are laid down in the last part of this research especially on the top-most cause of disputes and other dominant factors causing dispute.

4.3 Current Dispute Resolution Mechanisms in the Road Construction Industry in Ethiopian Somali Regional State.

One of the goals of any construction industry is to avoid claim and or dispute. But since construction project is complex (various stakeholders) dispute is uninevitable. Accordingly the Ethiopian Roads Authority replaces clause 67 for preventive type ADR, the involvement of Dispute Review Expert (DRE).

Resolving disputes out of the conventional court system is quite common in commercial contracts and more so in the construction contracts. The special expertise and technicalities involved in the sector and the exigency of time for the performance of such contracts often necessitate that alternative dispute resolution methods and arbitration to be in place to resolve such disputes. Though road construction contracts entered between the ERA and foreign or local contractors are public works, often financed mainly out of state coffer and that are classified as administrative contracts, disputes arising from such contracts can be submitted to arbitration and other amicable dispute resolution mechanisms. This is because ERA’s

Director General is provided with an extraordinary power to “settle disputes out of court” upon the specific permission of the Board (Weldegebreal, 2014).

According to the interviewee from client’s representative, “dispute prevention was the goal of our road construction industry, that is why we assign an expert at the commencement of the project. If a dispute arises between client and contractor, the hired DRE will give the recommendation.” While another interviewee from contractor’s representative suggest that “for any dispute, ADR like negotiation is the best option since adversarial method of dispute resolution is too costly for both parties.”

The previous studies conducted by Alemu (2015) and Abera (2005) on Effectiveness of Dispute Review Expert in practice in Ethiopian Federal Road Projects and Alternative Dispute Resolution Method in Ethiopian Construction Industry, respectively, suggests that DRE was the effective method of dispute preventive and resolution method for construction industry of developing countries like Ethiopia.

For the question did you practice negotiation, conciliation , arbitral submission etc as Ethiopian civil code, procedure code, when dispute occurs

Table 4.11 Settlement of disputes from civil code and their RII as per Somali Region Road Projects

Dispute Resolution Mechanisms	RII	Rank
Compromise (Negotiation)	0.54	01
conciliation	0.01	03
Arbitral Submission	0.01	03
Litigation	0.44	02

The table above shows the most common dispute resolution mechanism practiced was compromise or negotiation ,beyond that the next most settlement of dispute was Litigation the other conciliation and Arbitral Submission were not practiced more.

4.3.1 Most fit mechanism of Dispute resolution and method of minimization of disputes in Ethiopian Somali Regional State

For the question “Which type of dispute resolution mechanism fits for the road construction industry of Somali ”, almost all respondents agreed that they wish to use ADR like negotiation before DRE, arbitration, or litigation is applied to avoid time and involvement of third party.

What is the consequence of Litigation ? The summary from the respondents was, waste of time and hostility, a cost that is sacrificed for resolution of unnecessary and time-wasting litigation. and this was witnessed through Case 1

Table 4.12 Most practiced Condition of Contract in Somali Road Projects

Condition of Contract?	Client		Consultant		Contractor	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
ERA	22	100%	22	100%	21	100%
Total	22	100	21	100	22	100

From the results gathered through Questionnaire, out of 65 respondents shown in Table 4.12, 22 from Clients, 22 from Contractors and 21 from Consultants all answered that the practiced Conditions of Contract used in Somali road construction projects was the ERA General Conditions of Contract. PPA was one of the Conditions of Contract provided by the government but not practiced in Somali Road projects.

Table4.13 Existence of Dispute Review Expert

DRE?	Client		Consultant		Contractor		Overall Percentage
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Yes	1	4.5%	1	4.5%	1	4.5%	4.5%
No	22	95.5	21	95.5	22	95.5	95.5%
Total	22	100	21	100	22	100	100%

Table 4.12 shows the respondents' response to the question: Does DRE exist in this area? Among the 65 respondents selected for analysis 22 were clients, 21 were consultants and the remaining were contractors. The response of "Yes" consisting of 4.5% was witnessed under Case No. 2. Even though the most practiced road condition of contract as shown in Table 4.11 was ERA condition of contract, DRE under ERA is not mostly applied in Somali region road projects.

This course of action was formal DRE as stated in ERA road projects guidelines (DRE Procedures) of this research. One of the practices observed in the region is the Dispute Review Expert conducted between Hunan Huanda Road and Bridge Corporation and ERA. The disputants agreed to submit their case to a single Dispute Review Expert .

The proceedings and the procedure are included in case study No. 2 of this thesis (Harar-Jijiga road construction project). This beginning together with inclusion of the DRE in the contract agreement and regular visit in the project need to be developed and must be common to all road construction project disputes with considerations to the cost and use of Ethiopian Experts.

Case studies were carried out in disputed projects. The resolution options applied to these projects support the preference of Alternative Dispute Resolution Mechanisms over Litigation. This was witnessed in Case No2.

Normal court tribunals do not perform construction disputes as required. This fact was witnessed in the case study No. 1. When disputes or conflicts occur, stakeholders need to

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

Alternative Dispute Resolution Mechanisms in the construction industry have wide application all over. However, due to the absence of general construction policy, and weak relationship between the stakeholders, Somali region road construction projects suffer from lack of legitimate ADR application. The litigation option does show itself compatible option for dispute resolution as witnessed in some cases. Hence, Alternative Dispute Resolution methods have to be developed in Somali region road construction projects administrations and managements.

Table 4.14 Most practiced Condition of Contract in Somali Road Projects

Condition of Contract?	Client		Consultant		Contractor	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
ERA	22	100%	22	100%	21	100%
Total	22	100	21	100	22	100

From the results gathered through Questionnaire, out of 65 respondents shown in Table 4.13, 22 from Clients, 22 from Contractors and 21 from Consultants all answered that the practiced Conditions of Contract used in Somali road construction projects was the ERA General Conditions of Contract. PPA is one of the Conditions of Contract provided by the government but not practiced in Somali Road projects.

Table 4.15 Case study No.1 and its resolution mechanism

Case No	Cause of dispute for this case	Actual claim	Claimant	Initial Mechanism Used	Final Mechanism (resorted to)	Status of the project
1	Design-related (Design error)	Extension of time and money claim	Contractor	Negotiation	Litigation	Terminated

The table above shows that the cause of dispute was design error. The Resolution mechanism initially employed was Negotiation. But Negotiation did not work, hence resorted to Litigation. The contractor claimed for extension of time and money claim but parties did not agree to the conditions. The case was terminated without completing the project. The contractor claim for extension of time and money claim are nil. Claims are not settled but still pending. The case was terminated without completing the project.

Table 4.16 Case study No.2 and its resolution mechanism

Case No	Cause of dispute for this case	Actual claim	Claimant	Initial Mechanism Used	Final Mechanism (resorted to)	Status of the project
2	External Factor (Change in legislation)	Money claim (Additional Cost)	Contractor	Negotiation	DRE	Completed

Table 4.15 shows that the cause of dispute was Change in Legislation (under the category of external factor). Here, the client was ERA compared to all other cases which is Somali Road Authority. This case was initially underwent Negotiation, however it was finally referred to Dispute Review Expert. The cause of dispute in this case was due to change in legislation. The Contractor here avers that he paid Surtax on all goods imported for the project. And the issues are- “Is the Contractor entitled to reimbursement by the Employer of Surtax Costs paid by the Contractor on goods imported before the enactment of Surtax on 11 April 2007? And is the Contractor entitled to reimbursement by the Employer for any increased Foreign Exchange Costs incurred due to change in legislation?” It is common ground that after the contract base date, Government Regulation No. 133/2007 introduced a Surtax of 10% on all goods imported into Ethiopia, effective 11 April 2007, and that the Contractor is entitled to reimbursement of the resulting additional cost he has properly incurred on goods imported for the sole purpose of the project works.

The above issues arrived to the following resolutions:

Issue No. 1: The Contractor is entitled to reimbursement by the Employer of Surtax Costs paid by the Contractor on goods imported before the enactment of Surtax on 11 April 2007, subject to the following conditions:

- (i) properly documented evidence that such payment was made, and
- (ii) in the case of goods that remained in the country, properly documented evidence that retention of the goods in Ethiopia had been authorized (as required under Chapter 5, Sub-Article 28.5, of Federal Negarit Gazeta No. 18) “by appropriate offices”.

Issue No. 2: The Contractor is not entitled to reimbursement by the Employer for any increased Foreign Exchange Costs incurred due to change in legislation. The DRE was not persuaded by the Contractor’s contention that the changes in legislation as submitted should have made any difference to the need for a second or final customs declaration whenever he requested that goods originally imported under Bond should remain within the country.

Parties acceded to the DRE recommendations and the project was completed. Recommendation has become final and binding upon the Employer and the Contractor..

Table 4.17 Case study No.3 and its resolution mechanism

Case No	Cause of dispute for this case	Actual claim	Claimant	Initial Mechanism Used	Final Mechanism (resorted to)	Status of the project
3	Design-related (Design error)	Extension of time and money claim	Contractor	Negotiation	Arbitration (Litigation)	Suspended for about seven years

The above table shows that the cause of dispute was design error as in case No. 1. The Resolution mechanism initially employed was Negotiation. But Negotiation did not work, hence resorted to Arbitration (Litigation). Contractor's one claim is for extension of time but nil. This claim is still pending. For the contractor's money claim for his impounded equipment & machinery. This another claim is still unresolved. Contractor was refused any and all payments.

The contractor invites the client to go to arbitration but the conditions of contract, ERA's NCT, does not allow arbitration. Even the Ethiopian Civil Code Procedure, Article 315(2) does not allow arbitration of administrative contracts. However under ERA's Settlement of Dispute, 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.

Further, Arbitration is the final stage of dispute management in road construction sector. As per Sub-clause 67.4 of the Special Conditions of Contract (SCC), the arbitral tribunal, if so constituted, shall have full power to open up, review, and revise any decision, opinion, instruction, determination, certificate, or valuation of the Engineer and any Recommendation(s) of the DRE related to the dispute. The parties may introduce new evidence and/or argument in such arbitral proceeding. The DRE may be called upon, before such arbitral proceeding, as a witness.

The project is suspended for about seven years now from March 2002 E.C.

Table 4.18 Case study No. 4 and its resolution mechanism

Case No	Cause of dispute for this case	Actual claim	Claimant	Initial Mechanism Used	Final Mechanism (resorted to)	Status of the project
4	Design-related (Inadequate/ Incomplete design)	Extension of time and money	Contractor	Negotiation	Arbitration (Litigation)	On-going

In this case, the cause of dispute was inadequacy/incompleteness of design. The supervisor of the project did not give approved drawings and specifications and surveying data (BM, GPS data) on time; no detailed engineering drawings and no plans describing the bench mark.

The Consultant approved partially the extension of time, but did not approve compensation. Contractor's claimed for 90 days time extension but only 30 days was granted by the Consultant. The consultant demanded for the contractor's financial claim supporting documents (evidences) and imposed liquidated damages against the contractor for unjustified delay.

The Resolution mechanism initially employed was Negotiation. But Negotiation did not work, hence resorted to Arbitration (Litigation). Project's status is still on-going..

Table 4.19 Case study No. 5 and its resolution mechanism

Case No	Cause of dispute for this case	Actual claim	Claimant	Initial Mechanism Used	Final Mechanism (resorted to)	Status of the project
5	Design-related (Design error)	Extension of time and money claim	Contractor	Negotiation	Arbitration (Litigation)	On-going

Table 4.18 shows that the cause of dispute was design error. The Resolution mechanism initially employed was Negotiation but resorted to Arbitration (Litigation) because the status of the claim could not be resolved through amicable settlement. Contractor's claim for time extension was fully granted; while money claim, there was a partial grant. The case is still on-going.

Table 4.20 Summary of Causes, Claims, Claimant, Resolution Mechanisms and Status of the Disputed Cases in Somali Region Road Projects.

Case No	Cause of dispute for this case	Actual claim	Claimant	Initial Mechanism Used	Final Mechanism (resorted to)	Status of the project
1	Design-related (Design error)	Extension of time and money claim	Contractor	Negotiation	Arbitration (Litigation)	Terminated
2	External Factor (Change in legislation)	Money claim (Additional Cost)	Contractor	Negotiation	DRE	Completed (Resolved)
3	Design-related (Design error)	Extension of time and money claim	Contractor	Negotiation	Arbitration (Litigation)	Suspended for about seven years
4	Design-related (Inadequate/ Incomplete design)	Extension of time and money	Contractor	Negotiation	Arbitration (Litigation)	On-going
5	Design-related (Design error)	Extension of time and money claim	Contractor	Negotiation	Arbitration (Litigation)	On-going

Detailed particulars of the five (5) cases are shown in the Annex part. Somali Raod Authority is the client in all of the five (5) different disputed cases except for Case No. 2 where the Client is ERA (but the project area is within Somali regional state). Contractor in every project is a domestic contractor. Therefore, all of the above disputed cases are classified as

Administrative Contracts. Further, the project delivery system used in all the 5 cases was Design-Bid-Build (DBB).

Consultant in Case No. 2 was originally an International Consultancy Firm and the governing Conditions of Contract was FIDIC. However, the consultant was replaced by a domestic consultant whereby the applicable law applied is the Law of Ethiopia.

From the above summary table, it is clear now that parties make effort to Negotiate for Dispute Resolution. However, despite effort (as well as wish) of the parties to settle the dispute through Negotiation the dispute mechanism has risen to the employment of DRE and worst to Arbitration (Litigation) because of lack of ability of the parties to negotiate and/or the necessity to resolve it through DRE or Arbitration (Litigation).

DRE which is used in case No. 2 is preferred to be used in Somali Region Road projects because it is the Resolution Mechanism followed by ERA. But Arbitration (Litigation), where parties resorted to because of failure in the Negotiation, is not preferred because of the disadvantages created which is either termination, suspension, or late completion of projects. Parties are exposed to time and financial risk which projects cannot be completed as planned. Should parties did not resort to adversarial mechanism, the Arbitration (Litigation), road projects in Somali Region should have neither been terminated, suspended nor delayed.

Most often, design-related factors are the causes of dispute and the contractors' claim is for the extension of time and money claim. Contractor tried to negotiate with the client but the latter refuses to negotiate to the former for one of the reasons which is the change of management on the client's side. Hence, the parties just resorted to Arbitration (Litigation).

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.

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.

Table 4.21 Dispute resolution mechanisms practiced in Somali Region Road Projects (results from respondents’ responses through questionnaire)

Dispute Resolution Mechanisms	RII	Rank
Negotiation	0.54	01
Dispute Review Expert	0.01	03
Arbitration (Litigation)	0.44	02
Others	0.01	03

From the table above, it shows that Negotiation as dispute resolution mechanism was practiced the most which was ranked first. Arbitration (Litigation) was ranked as number two which was the parties second option when negotiation failed. Respondents answered as ”others” as the option. When asked about “others” they did not specify which resolution was used for some reasons which they can not divulged to the researcher.

4.22 Dispute Resolution Practices in Context of Somali Region Road Projects found from Case Studies.

No	Dispute Resolution Mechanism	No of occurrences of the mechanisms used	Percentage of Occurrence	Rank
1	Negotiation	0	0	-
2	Arbitration (Litigation)	4	80%	1
3	DRE	1	20%	2

From the case study, results show in Table 4.20 that Negotiation was initially used but failed thus resorted to Arbitration (Litigation). Arbitration (Litigation) therefore ranked 1st with a percentage of 80%. It becomes the most practiced dispute resolution mechanism in Somali region road projects. DRE ranked the second with 20% of occurrence.

Table 4.19 shows that Negotiation is the most common resolution mechanisms used in Somali region road construction industry; while Table 4.20 shows that Arbitration (Litigation) is the most commonly practiced resolution mechanism. The differing result shows different level of understanding and knowledge of the parties as to the nature of claim and the actual status of disputed case. That where claim could not be resolved through Negotiation considering the nature of claim, it has to resort to Arbitration which is the final stage of dispute management in road construction sector.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

This research has three primary objectives, which were achieved through the data collected using Survey, Case study and Document Review techniques. The first objective was to determine the causes that lead to construction dispute; second, to identify the most frequent causes of dispute; and third, to assess the current dispute resolution mechanisms in Ethiopian Somali region road construction industry .

The main causes of dispute in the construction industry were determined with a comprehensive literature review. Then, the causes of dispute derived from the literature were classified into main categories. In the broader scope of Literature review and according to the classification, main disputes categories were found as: owner-related disputes, contractor-related disputes, design-related disputes, contract-related disputes, human behavior related disputes, project related disputes and external factors. All these disputes categories have their own sub-dispute causes. Based on the results obtained from this research, the following conclusions of the research were drawn according to the response of the respondents.

From the many categories of dispute found in Literature Review, only five (5) major categories were determined as causing dispute in Road Construction Industry of Ethiopian Somali Region. Analysis through Relative Importance Index was carried out in identifying the frequency of occurrence of the disputes. Hereunder are the five major categories which were ranked 1st to 5th , respectively.

1. Design-related disputes
2. Contractor-related disputes
3. Owner-related disputes
4. Contract-related disputes
5. External factors

There are twenty three (23) factors causing disputes in road construction projects in Somali region. All of the identified causes of disputes in Somali Region road construction projects resulted to time delay and cost overrun. The relative importance indices, rank within the corresponding category and the overall ranks of the identified factors were presented and discussed. Design-related category with sub-factors: Design errors, Inadequate/incomplete specifications and Quality design were ranked as top three; while one of the least factors is fragmented structure of the sector.

Design-related category is the top- most factor that leads to road construction dispute in Somali Region road projects which is so alarming. Nevertheless, regardless of the ranking, all identified causes of dispute must be employed with remedial measures. Hence, recommendations are laid down in the last part of this research.

Disputes 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. There are different methods of Dispute Resolution Methods in the road construction industry of Somali region. These are Amicable Settlement (Negotiation), DRE, Arbitration (Litigation) and “others” not specified by respondents. Some parties went to Arbitration (litigation) which is judgmental form of dispute resolution and adversarial. The majority of respondents preferred the inclusion of ADR as the priority in resolving dispute before litigation because of the number of advantages it will give to the parties.

ADR is to a certain extent, effectively used in contracts in the construction industry. Negotiation is initially most frequently used method in resolving disputes in road construction projects in Somali Region. However, parties cannot resolve the issue through Negotiation thereby resorted to Arbitration (Litigation). Arbitration is the final stage of dispute management in road construction sector. Other jurisdictions treats Arbitration and Litigation differently, however in the case of Ethiopia, arbitration proceedings resemble to regular court litigation. According to Art 3345 of the Civil Code and 317(1) of Civil Procedure Code, the procedure to be followed by arbitration tribunals is the same as ordinary

court litigation. It went on to add: “but this does not mean that arbitration needs to follow rigid court procedure or non flexible litigation style.

Results from respondents’ responses through questionnaire show that the most commonly used dispute resolution mechanism was Negotiation; while from the analysis of case studies, Arbitration ranked the first. The differing result shows different level of understanding and lack of knowledge of the parties as to the nature of claim and the actual status of disputed case. That where claim could not be resolved through Negotiation considering the nature of claim, it has to resort to Arbitration (Litigation) which is the final stage of dispute management in road construction sector. Also, lack of ability of the parties to negotiate will result to adversarial resolution mechanism. The majority of construction participants has a moderate knowledge of ADR methods and experiences the methods as not being flexible and somewhat too complex.

Through data analysis it was generated that waste of time and hostility is a cost to be sacrificed for resolution of unnecessary and time wasting litigation as the consequence of unresolved dispute. For the question “Which type of dispute resolution mechanism fits for the road construction industry”, almost all responded that they wish to use ADR, like negotiation before arbitration (litigation) to avoid time and involvement of third parties.

In the case studies, it was determined that had the parties use ADR as the resolution method, projects should not have been terminated, suspended nor delayed. Projects in Road Construction Industry of Ethiopian Somali Region suffered from a lack of legitimate ADR application. The litigation option does not show itself compatible option for dispute resolution as assessed. Further, Somali regional state was not following the actual DRE System as formal method used by ERA yet the ERA’s Standard Specification treats the settlement of disputes mainly for road construction projects.

5.2. Recommendations

Generally the following recommendations are addressed to all of the major construction stakeholders to minimize or avoid disputes:

- Errors in design can lead to delays and additional costs that become the subject of disputes. And the design teams may abrogate their responsibilities for the design, leaving the contractor to be drawn into solving design deficiencies. Disputes can be reduced by checking that the contract documents are in place. This can be considered in two stages: preparing the tender documents and then preparation of the contract documents. Avoid making general statements, and instead set out a complete list of specifications, drawings, questions and answers, and others that apply to the project.
- Delays due to bad weather can be particularly frustrating as there is absolutely nothing that can be done to avoid these delays. Several delays on the project caused by bad weather likely to come in late and over-budget which means the owner may not realize the expected return on investments. To overcome dispute that comes due to bad weather condition, alertness in collecting wind data, providing alerts and providing users with an accurate log of wind conditions that will stand up to the rigours of a downtime dispute have to be observed.
- The litigation option does not show itself compatible option for dispute resolution as assessed. Hence, Alternative Dispute Resolution methods have to be developed in Somali road construction projects administrations and managements to minimize termination and suspension of the road projects as well as hostility and waste of time and to be more economical in resolving disputes. ADR should be applied first before litigation which is the last resort.
- Expert determination is a creature of contract. The parties agree by contract to refer a dispute to a third party who will then decide that particular issue. Somali regional state should then practice and develop DRE system as used by Ethiopian Road Authority.
- Parties should be well-informed about Alternative Dispute Resolution Methods for them to properly appreciate the pros of applying it to avoid dispute escalation.

More specifically, hereunder are the recommendations to the two main contracting parties in a construction projects, to wit:

Recommendations to be forwarded to the Client:

- The assessment and award, if any, of an extension of time is the responsibility of the architect, contract administrator or employer's agent under the road contract. A chartered surveyor could fulfil the role of contract administrator or employer's agent. However the surveyor should consider whether the progress reports are accurate or perhaps optimistic. If delay is occurring then what are the chances objectively for an extension of time to avoid liquidated damages claim.
- Variations are often expected to be initiated by the client. Client should furnish a fully defined project scope. If the changes of scope of work will escalate contractor's responsibility, client should willingly compensate the contractor as the contractor openly and willingly accomplishes the work. Or clients should be made aware of potential disputes and problems arising from change of scope of work in a project so that they can take the necessary action and intervene if required to avoid the problem escalation.
- The client should ensure that the contractor to be awarded the contract has the necessary competencies and resources to carry out the construction project. Contractors should not be awarded the job in which they lack technical expertise. It has to ensure that the contractor has the necessary experience before bidding stage.
- Delay in site delivery and payments are delay factors causing disputes. Site should be delivered to the contractor as soon as possible after project is awarded. Approval of design documents should not be delayed, since it could delay the progress of work. Progress payments should be made on time to contractor in order to finance the work.

Recommendations to be forwarded to the Contractors:

- Contractor should give prompt notice to any circumstances that may cause a delay to the client or his representative. This approach brings claims to the surface at a very early stage so that the owner has some say in what can be done to overcome the delay. Hence, disputes will not arise because claims are timely resolved.
- Contractor's tender should not only contain all of the technical work-related documents, such as drawing and specifications, but it should also set out the contract

details such as completion dates, insurances, full text of any purpose-written amendments to the contract, full text of any ancillary documents such as bonds, guarantees. To avoid assumption of risk for any design failures, contractor needs to have the opportunity to consider these documents when calculating a price and developing the design solution and so these documents will need to be included at tender stage.

- There is sometimes confusion between work in progress on site and defects. The contractor should fix any defects which stipulated in to the provision of the contract, with those breaches simply being a ‘temporary disconformity’ rather than a ‘permanent disconformity’ in the works. If substantial defects appear to be an issue then they should be carefully valued, especially towards the end of the project period.

Recommendations to be forwarded to the Consultants:

Consultants should

Design-related category is the top- most factor that leads to road construction dispute in Somali Region road projects which is so alarming. Nevertheless, regardless of the ranking, all identified causes of dispute must be employed with remedial measures. Hence, recommendations are laid down in the last part of this below.

Consultants during preparation of drawings and specifications should clearly prepare the detail engineering drawings, and specify all supplementary clarifications for the drawing so that contractors do their works smoothly their works and to minimize causes arising from design errors.

Consultants should provide qualified design so that failure during construction and escalation of causes to disputes be minimized.

Consultants should visit the site before preparing preliminary designs so that the change in ground situations (Project area) may not cause variation of works or change of scope of works and that might lead contractors and clients to disagreements that may escalate to dispute.

REFERENCES

- Abera, B. (2005). Assessment of Alternative Dispute Resolution Methods in the Ethiopian Construction Projects. Addis Ababa university.**
- Acharya, N.K., Lee, Y.D., & Im, H.M. . (2006). Conflicting factors in construction projects: Korean perspective. *Journal of Engineering, Construction and Architectural Management.*, 543-566.
- Adrian, J. (1988). *Construction Claims: A Quantitative Approach.*, Prentice-Hall, Inc.
- Alemu, M. (2015). Assessment of Effectiveness of Dispute Review Expert Practice in Ethiopian Federal Road Projects. *International Journal of Engineering and Technical Research (IJETR)*, 15-19.
- Agarwal, V., (2001). Alternative Dispute Resolution Methods. In: Unitar sub-regional workshop on arbitration and dispute resolution, Harare, 11-15 Sept.2000
- Assah-Kissiedu, M., Fugar, F.D.K, and Badu, E. (2010). Triggers of Disputes within the Ghanaian Construction Industry. *Journal of Construction*, 3.
- A.M.Odeh,H.T.Battaineh/*International Journal of project Management* 20(2002) 67-73
- Azhar, Rizwan U. Farooqui and Salman. (2014). Key Causes of Disputes in the Pakistani Construction Industry– Assessment of Trends from the Viewpoint of Contractors. *ASC Annual International Conference Proceedings*. Auburn: Associated Schools of Construction.
- Belog. (2015, December 07). *Safer cranes and safe from claims*. Retrieved from <http://www.windcrane.com/blogs/blog/79154049-safer-cranes-and-safe-from-claims>
- Blumenfeld, A. (2005). "Equitable Risk Allocation." CII Annual Conference - Leadership of Tomorrow: Bridging the Gap, Grapevine, TX, 68-88.
- Construction Industry Institute. (1995). Disputes Potential Index (SP23-3), The Construction Industry Institute, Austin, TX.

Cheung, S., and Suen, H. (2002). "A multi-attribute utility model for dispute resolution strategy selection." *Construction Management and Economics*, 20(7), 557-568.

Cheryl, Semple. Francis T. Hartman, and George Jergeas.(1994). *Construction Claims And Disputes: Causes And Cost/Time OverRRuns*.

Diekmann, G., and Abdul-Hadi. (1994). *DPI – Dispute Potential Index: A Study into the Predictability of Contract Disputes (SD-101)*, The Construction Industry Institute,Austin, TX.

Emre Cakmak and Pinar Irlayici Cakmak. (2013). An analysis of causes of disputes in the construction industry using analytical network process. (pp. 183 – 187). Istanbul: ScienceDirect.

Fenn, P. (1997). Conflict and dispute in construction. *Construction Management and Economics*, 513-518.

Frano, A. (1996). "Guarding Against Litigation." *Journal of Management in Engineering*, 12(4), 28-32.

Groton, J. P. (1997). "Alternative Dispute Resolution in the Construction Industry." *Dispute Resolution Journal*, 52(3), 48-57.

Groton, J. P. (2005). "How to Keep Your Project Out of Litigation, Arbitration, and Even Mediation." CII Annual Conference - Leadership of Tomorrow: Bridging the Gap,

Hall, J. (2002). Ineffective communication: Common Causes of Construction Disputes. *Alliance's Advisory Council Legal Notes*.

Howard, W. E., Bell, L. C., and McCormick, R. E. (1997). "Economic principles of contractor compensation." *Journal of Management in Engineering*, 13(5), 81-89.

Jergeas, G. F., and Hartman, F. T. (1994). "Contractor' Construction-Claims Avoidance." *Journal of Construction Engineering and Management*, 120(3), 553-560.

KUANG, Z. (2011). Application of Risk Management in Construction Period. *VIA UNIVERSITY COLLEGE*

Kellogg, J. C. (1999). "The Contract Disputes Resolution Continuum." Kellogg News, Summer 1999, 1-5.

Kovach, K. K. (2004). Mediation: Principles and Practice, Thomson West, St. Paul, MN.dr

Management, C. o. (2015, November 17). *Construction disputes*. Retrieved from <https://www.ucem.ac.uk/>

Mix, D. M. (1997). "ADR in the Construction Industry: Continuing the Development of a More Efficient Dispute Resolution Mechanism." 12 Ohio St. J. on Disp. Resol. 463.

Office of Government Commerce. (2002). Dispute Resolution Guidance, Office of Government Commerce, Norwich, NR7 OHS.

Powell-Smith, V. and Stephenson, D. (1993). Civil Engineering Claims. Oxford, UK: Blackwell Science.

Rick Collins and Kerry London. (2007). *Dispute Avoidance and Resolution*. Brisbane, AUSTRALIA: Icon.Net Pty Ltd.

Soekirno, P. (2007). The Disputes in the Construction Project in . *ITB* .

Stipanowich, T. J. (1996). "Beyond Arbitration: Innovation and Evolution in the United States Construction Industry." 31 Wake Forest L. Rev. 65.

Sodhi, D. S (1980). The Canadian law dictionary. Law & Bussiness publications (Canada) Inc. Don Mills, Ontario, Canada.

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.

Vorster, M. C. (1993). Dispute Prevention and Resolution (SD-95), The Construction Industry Institute, Austin, TX.

Wayal, M. S. (2014). Dispute Causation In Construction Projects. *IOSR Journal of Mechanical & Civil Engineering*, 54-58.

Weldegebreal, Y. (2014). *To ward local dispute resolution mechanism*. Addis Ababa.

wubshet, J. (2008). Risk Management for Construction Projects. *EACE Journal*, 1-12.

Zinabu Tebeje and Getachew Teka. (2015). Causes of Contractor Cost Overrun in Construction Projects: The Case of Ethiopian Construction Sector. *International Journal of Business and Economics Research*, 180-191.

Michael, T. (). Arbitration in Ethiopian Law

John Murdech and Will Hughes.(). Construction Contract-Law and Management, 3rd edition,

Annex

Case study 1 Mezegaja bridge(litigation)

I. Particulars of the Project under case study

Project: Heavy vehicle Jig-Jiga-Bed-Ass Road Project

Location: Region 5– Jig-Jiga

Client: Somali Roads Authority (SRA)

Financer: Ethiopian Government

User: Public

Consultant: Somali Design and supervision Enterprise

Contractor: Abdilhi General construction Plc.,

Supervisor: Somali Design and supervision Enterprise

Type/bases of contract: Design Bid and Build (DBB)

Main Contract Amount: ETB 77,600,000.-

Total contract amount: ETB 77,600,000.-

Final Project amount: unknown (project terminated)

Main contract time: 14 months

Total contract time: (presumed ----- days)

Commencement date according to contract: April 2003

Actual commencement date: April 2003

Completion date according to contract: -

Actual completion date: Project terminated by SRA

Total actual completion time: Project terminated by SRA

II. Disputes incidence between Client/Consultant and Contractor

Claim No. 1

1.1 Reason: the High fill and retaining structure to embankment had to be executed . 1km.Widening of the existing road to two way at the junction of the main and the link road to meet at the end of the approach road away from the contractor's width,

1.2 Consequences: extra works –loss of time

1.3 Claimed amount in time: 70 days

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

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

1.6 How the claim was treated: Not settled , still pending,

1.7 Granted extension of time: Nil

1.8 Compensation of cost: Nil

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

Claim No. 2

2.1 Reason: After Termination of contract by SRA, contractor's equipment & machinery were impounded at Jigjiga police station, further the General manager and project manager to jail.

2.2 Consequences: Contractor was refused any and all payments, completely paralysed,

2.3 Claimed amount in time: none

2.4 Claimed amount in cost: ETB 14, 033,162. 86

2.5 How the claim was treated: High court JigJiga ordered release of contractor's own equipment &machinery

2.6 Granted extension of time: -

2.7 Compensation of Cost: -

2.8 Other: Equipment & camp bought from mobilization fund still rotting in Police station.

Summary of the Claim, and dispute/ conflict out come,After five years and eight months High Court litigation, the court ordered ERA to go into Arbitration.

ERA's NCT conditions of contract, clause 67 does not allows arbitration.

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, 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 3 Dawa Bridge()

I. Particulars of the Project under case study

Project: Heavy vehicle Filtu-Dawa River Bridge-Moyale Road Project,Construction of Dawa River Bridge

Location: Region 5 – Somali Region Melka-Willa

Client: Somali Roads Authority (SRA)

Financer: Ethiopian Government

User: Public

Consultant: Tornado consulting engineers Plc.

Contractor: Macro General construction Plc.,

Supervisor: Tornado consulting engineers Plc.

Type/bases of contract: Design Bid and Build (DBB)

Main Contract Amount: ETB 100,000,000.-

Total contract amount: ETB 100,000,000.-

Final Project amount: unknown (project Suspended)

Main contract time: 18 months

Total contract time: (presumed ---- days)

Commencement date according to contract: March 2002

Actual commencement date: March 2002

Completion date according to contract: -

Actual completion date: Projectsuspended by SRA

Total actual completion time: Projectsuspended by SRA

II. Disputes incidence between Client/Consultant and Contractor

Claim No. 1

1.1 Reason: the construction route had to be re aligned 10km. go through rock and mountainous areas away from the contractor's line,

1. Consequences: extra works –loss of time

1.3 Claimed amount in time: 70 days

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

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

1.6 How the claim was treated: Not settled , still pending,

1.7 Granted extension of time: Nil

1.8 Compensation of cost: Nil

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

Claim No. 2

2.1 Reason: After Suspension of contract by SRA, contractor's equipment & machinery were impounded at Melka-Willa Kebele.

2.2 Consequences: Contractor was refused any and all payments, completely paralysed,

2.3 Claimed amount in time: none

2.4 Claimed amount in cost: ETB 14, 033,162. 86

2.5 How the claim was treated: Not resolved.

2.6 Granted extension of time: -

2.7 Compensation of Cost: -

2.8 Other: Equipment & camp bought from mobilization fund still rotting in Melka- Willa Kebele.

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

After seven years and eight months The Contractor has invited, the client SRA to go into Arbitration.

The conditions of contract, ERA's NCT Does not allow arbitration.

Even the Ethiopian civil code procedure article 315(2) does not allow arbitration of administrative contracts.

Therefore, when the contractor invites the client to go to arbitration it is not clear on what basis it becomes effective. Where to arbitrate and who takes the responsibility of arbitrating, 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 4 moyale ley -(Udet –chilanko)

I. Particulars of the Project under case study

Project: Moyale –Ley-Chilanko Road Construction Project

Location: Region 5 – Somali Region Dawa Zone

Client: Somali Roads Authority (SRA)

Financer: Ethiopian Government

User: Public

Consultant: Somali design and supervisionEnterprise.

Contractor: Big-Bang General construction Plc.,

Supervisor: Somali design and supervision Enterprise.

Type/bases of contract:Design Bid and Build (DBB)

Main Contract Amount: ETB 144,000,000.-

Total contract amount: ETB 144,000,000.-

Final Project amount: unknown (onging)

Main contract time: 24 months

Total contract time: (presumed ---- days)

Commencement date according to contract: March 2007

Actual commencement date: March 2007

Completion date according to contract: -

Actual completion date: ongoing

Total actual completion time: ongoing

II. Dispute incidence between Client/Consultant and Contractor

Claim No. 1

1.1 Reason: Incomplete design (of remaining 30km after completion of the completed design of 30km)

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

a. after completion of 30km supervisor did not give approved drawings and spec and surveying data (BM, GPS data) on time because the design was to be corrected.

b. To construct the road no detail eng'g drawings and no plans describing the bench mark,

c. Due to change of General manager of the Road Authority

1.3 Claimed amount in time: 90 days

1.4 Claimed amount financially: ETB 3,319,348.78

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: 30 days

1.7 Unjustified delay by the consultant: 20 days

1.8 Granted financial amount: ETB Nil

1.9 The consultant imposed liquidated damage for unjustified delay 10% of contract price:

ETB 111,941.478

1.10 The Contractor applied to project coordinator buearo 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.

1.10 The Contractor applied to the project coordination office of the region 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 No5

I. Particulars of the Project under case study

Project: Fafan Bridge

Location: Region 5 – Somali Region Kebri Dahar

Client: Somali Roads Authority (SRA)

Financer: Ethiopian Government

User: Public

Consultant: Tornado consulting engineers Plc.

Contractor: Liyu construction plc.,

Supervisor: Tornado consulting engineers Plc.

Type/bases of contract: Design Bid and Build (DBB)

Main Contract Amount: ETB 60,000,000.-

Total contract amount: ETB 60,000,000.-

Final Project amount: unknown (on going)

Main contract time: 13 months

Total contract time: (presumed ---- days)

Commencement date according to contract: may 2007

Actual commencement date: may 2007

Completion date according to contract: - june 2008

Actual completion date: ongoing

Total actual completion time: on going

Claim No.1 Fafan Bridge

1.1 Reason: Extra works, Fafan Bridge, no response to claims by consultant until Partial approval 6 months later.

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

1.3 Claim amount in time: 110 days

Time Granted 110 days

1.4 Claimed amount in cost: ETB 10,058, 676.48

Cost approved : ETB 3,537,342.73

1.5 Other: SRA kept on dictating the bridge against the contract- thus ensued extra works,

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

1.7 Granted extension of time: Nil

1.8 Compensation of Cost: Nil

1.9 Other: According to contract, contractor was to locate the line between given control points SRA took this over. This ensued extra works,(the major cause of Dispute)

Case Study No2

Harar – Jijiga Road Upgrading Project

Referral to the Dispute Review Expert of Dispute No. 01 (Additional Cost for Change in Legislation) between

Hunan Huanda Road and Bridge Corporation
(the Referring Party)

and

Ethiopian Roads Authority

(the Responding Party)

RECOMMENDATIONS OF DISPUTE REVIEW EXPERT

5 July 2015

Colin A Marshall BSc (Hons) DipArb CEng FICE FIHT FCIArb

Dispute Review Expert

159 The Close

Salisbury SP1 2EY

England

I. INTRODUCTION

A. The Parties to the Contract

(1) The Employer:

Ethiopian Roads Authority

Ras Abebe Aregay Street

PO Box 1770

Addis Ababa

Ethiopia

(2) The Contractor:

Hunan Huanda Road and Bridge Corporation

No. 2 Taujiashan, East Bayi Road

Changsha City

Hunan Province

P.R. China

B. Identification of the Contract and Dispute Review Expert

The Referring Party, Hunan Huanda Road and Bridge Corporation (HHRBC), entered into a contract on 16 December 2005 with the Responding Party, the Ethiopian Roads Authority (ERA), for the construction of Harar – Jijiga Road Upgrading Project.

The Engineer under the Contract was originally the consultancy firm of Roughton International, but they were replaced by Arts-Tech Consultant PLC.

The Conditions governing the Contract comprise the FIDIC1 Conditions of Contract for Works of Civil Engineering Construction, Fourth Edition 1987, reprinted in 1992 with further amendments, as modified by the Conditions of Contract Part II: Conditions of Particular Application (“CPA”).

The applicable law is the Law of Ethiopia.

The Contract provides for the appointment of a Dispute Review Expert (DRE). By tripartite agreement between the Parties and myself, Colin Arthur Marshall, I was appointed as the DRE for the Contract.

II. BACKGROUND TO THE DISPUTE

By letter dated 26 April 2015 the Contractor referred four issues to me that were said to be in dispute between the Parties. The letter and supporting documents were received by me on 3 May 2015.

The issues in the reference were headed as follows:

1. Claim to change price adjustment weightings
2. Claim for mobilization and demobilization
3. Claim for the Prolongation Cost
4. Additional Cost Incurred for Change in Legislation, with sub-heads:
 - change in calculation of taxes, for which the Contractor has claimed payment in the sum of ETB 30,173,515.30

- introduction of Sur Tax, for which the Contractor has claimed payment in the sum of ETB 25,831,130.90

However, by email dated 19 May 2015, as confirmed by letter dated 20 May 2015, the Contractor advised that after a series of amicable discussions with the Employer he had agreed to withdraw the first three disputed issues from the referral (i.e. Nos 1-3 above), and that only the fourth issue “Additional Cost Incurred for Change in Legislation” was to be determined by the DRE.

In accordance with a timetable I had proposed by email dated 4 May 2015 to the Parties for further submissions, these were duly received as follows

- ❖ Employer’s Response - dated 22 May 2015
- ❖ Contractor’s Rebuttal to Employer’s Response – dated 27 May 2015
- ❖ Employer’s Response to Contractor’s Rebuttal – date 4 June 2015

The Parties had also agreed to my proposal that a Hearing be held on the reference, and this was convened at the Hilton Hotel in Addis Ababa on 10 June 2015.

After the Hearing had been concluded, I sent an email to the Parties on the same day, in which I summarised the next procedural steps as follows:

1. The Employer and the Contractor will submit Position Summaries to the DRE (not cc the other Party) within 14 days of the Hearing, i.e. by 24 June 2015. I shall then copy to each of the other Parties when both Summaries have been received.

2. The DRE is to then formulate Recommendations on the following principal issues:

(i) Surtax – Is the Contractor entitled to reimbursement by the Employer of Surtax Costs paid by the Contractor on goods imported before the enactment of Surtax on 11 April 2007?

(ii) Foreign Exchange Costs – Is the Contractor entitled to reimbursement by the Employer for any increased Cost incurred due to change in legislation?

For (ii), the Contractor will submit to the DRE (cc the Employer) by Friday 19 June 2015 any further evidence to support his assertion that before the change in legislation, taxes and duties

were to be paid based upon the initial customs declaration at the time of importation, at the prevailing FX rates – not based upon a second declaration at the time the goods were declared to be staying in Ethiopia. He would also submit any evidence to show that the goods were permitted to stay in the country.

3. Quantum to be determined between the Parties based upon the DRE's Recommendations on the merits as in 1. above. If any differences remain that cannot be resolved, the Parties would have the option of referring them to the DRE, or to close the issues.

For this evaluation, the Contractor will submit supporting documentary evidence (clearly indexed) to the Employer within seven days of receiving the DRE's Recommendations. The Employer would then review within 14 days, during which time the Contractor would be available to help resolve any queries from the Employer.

In the same email I also noted that having originally received the Referral documents on 3 May 2015, the 56 days period allowed for issue of my Recommendations was due to expire on 28 June 2015. As the Parties had requested a 14 days period after the Hearing for submission of their final Position Summaries, rather than the 7 days previously agreed, I proposed that the deadline for issuing the Recommendations be extended by 7 days, i.e. to 5 July 2015. I subsequently received the agreement of the Parties to this extension via emails on 11 June (Employer) and 12 June 2015 (Contractor).

The final Position Summaries were duly received on 24 June 2015, and I copied each one to the other Party.

As noted above, after withdrawal of other matters by the Contractor, the two issues on which he now seeks a Recommendation are as follows:

Issue No.1

Is the Contractor entitled to reimbursement by the Employer of Surtax Costs paid by the Contractor on goods imported before the enactment of Surtax on 11 April 2007?

Issue No. 2

Is the Contractor entitled to reimbursement by the Employer for any increased Foreign Exchange Costs incurred due to change in legislation?

**I, HAVING SEEN THE EVIDENCE AND CONSIDERED THE SUBMISSIONS,
PUBLISH THESE MY RECOMMENDATIONS**

Issue No.1

Is the Contractor entitled to reimbursement by the Employer of Surtax Costs paid by the Contractor on goods imported before the enactment of Surtax on 11 April 2007?

In the Conditions of Particular Application, Sub-Clause 70.8 (Subsequent Legislation) provides as follows:

If, after the date 28 days prior to the latest date for submission of bids for the Contract there occur in the Country in which the Works are being or are to be executed changes to any National or State Statute, Ordinance, Decree or other Law or any regulation or by-law of any local or other duly constituted authority, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or by-law which causes additional or reduced cost to the Contractor, other than under the preceding Sub-Clauses of this Clause, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be added to or deducted from the Contract Price and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same shall already have taken into account in the indexing of any inputs to the Price Adjustment Formulae in accordance with the provisions of Sub-Clauses 70.1 to 70.7.

This is reinforced by Sub-Clause 73.5 (Increases in Taxes in Duties), which states that the net increase of cost to the Contractor in carrying out the Works due to the imposition of new taxes by the Government shall be paid to the Contractor.

It is common ground that after the contract base date, Government Regulation No. 133/2007 introduced a Surtax of 10% on all goods imported into Ethiopia, effective 11 April 2007, and that the Contractor is entitled to reimbursement of the resulting additional cost he has properly incurred on goods imported for the sole purpose of the project works.

While the Employer has expressed certain conditions with regard to the assessment of quantum, which is now outside the scope of this reference, the specific issue before me here

is whether any Surtax was incurred and is properly reimbursable in respect of goods imported before the enactment of the new legislation.

The Contractor avers that he paid Surtax on all goods imported for the project, as those brought in before the legislation were all brought in under a Customs Bond. He states that if the tax had been paid against a customs declaration at the time of importation, there would have been no Surtax payable pre-legislation, but as a second declaration was required at the time payment was actually made – which was after the legislation – Surtax was charged by the Customs Authority on the goods imported before 11 April 2007.

At the Hearing, the Employer expressed doubt that Customs would insist on backdating – and if they had, the Contractor should seek reimbursement from that Authority, not from the Employer.

However, I note that the CPA sub-clauses quoted above, i.e. Sub-Clauses 70.8 and 73.5, contain no qualification as to which government agency imposes additional taxation – it is only a question of whether a change in legislation etc. “caused additional ... cost to the Contractor ... in the execution of the Contract.”

Accordingly, I **find that the Contractor is entitled to reimbursement by the Employer of Surtax Costs paid by the Contractor on goods imported before the enactment of Surtax on 11 April 2007, subject to the following conditions:**

- (i) properly documented evidence that such payment was made, and
- (ii) in the case of goods that remained in the country, properly documented evidence that retention of the goods in Ethiopia had been authorized (as required under Chapter 5, Sub-Article 28.5, of Federal Negarit Gazeta No. 18) “by appropriate offices”,

and I so Hold.

Issue No. 2

Is the Contractor entitled to reimbursement by the Employer for any increased Foreign Exchange Costs incurred due to change in legislation?

Under Issue No.1, it will have been seen that my findings hinged on how the Surtax legislation was actually applied by the Customs Authority, rather than what may be understood from a reading of the legislation itself.

The position with regard to exchange rates is similar. I am not persuaded by the Contractor's contention that the changes in legislation as submitted should have made any difference to the need for a second or final customs declaration whenever he requested that goods originally imported under Bond should remain within the country.

Thus at the conclusion at the Hearing on 10 June 2015 the Contractor was invited to submit any further available evidence – e.g. from the Customs Authority – to prove that there had actually been a change in the way that the exchange rates were determined and applied before and after the changes in legislation. In other words, that before the new legislation, the exchange rate applied for assessing the amount payable had been the rate at the time the goods were imported; whereas the exchange rate applied for payment after the new legislation was the rate at the time of the second or final customs declaration. No such further evidence has been submitted to demonstrate this, and that an increase in Cost was actually incurred.

Accordingly, I do not find that the Contractor's case for reimbursement by the Employer for any increased Foreign Exchange Costs incurred due to change in legislation has been proven, and I so Hold.

(I would also record that at the Hearing the Employer had requested that evidence should be provided to show that the goods were permitted to remain in the country. As with Issue No. 1, this would have been a condition to be met for entitlement, if I had otherwise concluded that such an entitlement had been proven.)

DRE RECOMMENDATIONS

Having given full consideration to all matters and evidence put before me and for the reasons stated in the narrative above, I hereby **RECOMMEND AS FOLLOWS:**

Issue No.1

The Contractor is entitled to reimbursement by the Employer of Surtax Costs paid by the Contractor on goods imported before the enactment of Surtax on 11 April 2007, subject to conditions (i) and (ii) listed under Issue No. 1 above.

Issue No. 2

The Contractor is not entitled to reimbursement by the Employer for any increased Foreign Exchange Costs incurred due to change in legislation.

Made and published 5 July 2015

Colin Arthur Marshall

Dispute Review Expert

Table 5.2 Distribution of questionnaires

No.	Stake holders (participants)	Distributed in Number	Returned in number	Returned In %
1				
2				
3				

JIMMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING
MSC PROGRAMME IN CONSTRUCTION ENGINEERING AND MANAGEMENT
Assessment of A Dispute Resolution Methods in The Ethiopian Somali Road Construction Projects

I. Objective

The objective of this research is, through a case study, to identify the Causes of disputes in Somali road Construction projects, with respect to public construction and domestic contractors. Identification of dispute resolution mechanisms, What are the current Dispute Resolution mechanisms ? What are the outcomes of these disputes? 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 The researcher 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 Dispute Resolution Methods in the construction industry. What about Somali Road construction projects? What experience do you have? How and what can we develop?

With the above highlights 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.

Attitude of partaker in the construction of road ,

Name _____

Profession _____

Company name _____

Job title _____

Experience _____

1) What experience do you have, and how do you identify as dispute in Somali road construction Projects between parties? _____ -

2)What are the out come or impacts of dispute/conflict?

i) to the client

i)tothecontractor_____

ii) to the consultant

3)What are your experiences, how disputes/conflicts are resolved?

Project_____

How was the problem settled? _____

Project_____

4) When disputes and conflicts are inevitable, what methods of dispute resolution you recommend? Why?

Dispute/Conflict

Occurrence_____

Method of resolution_____

Reason

5) Please comment or remark on the Somali Region Road Construction Projects, dispute/conflict resolution:

Clients/public

authority_____

Consulting

firms_____

Contracting

Firms_____

Q1 Negotiation? yes

Q2 which Resolution mechanisms practiced more frequently in road construction of your project area other than negotiation please rank as per liker's 5 point scale from resolution mechanisms stated from literature in the table

Q3 DRE? Almost no this shows that this concept is written in ERA of condition for road construction projects even though they use ERA condition of contract was not mostly applied so this practicing of DRE should continue as per condition of contract?

Q4 which condition of contract use for road construction in your project area , Almost ERA

Q5 did you practice mediation, conciliation , arbitral submission etc as Ethiopian civil code, procedure code, or as per other ligatures. Other stems are not practiced of legal system but new it seems that the concept of arbitration between parties is merging this was seen in one of the case studies

Your over all comment-----

Causes

Q1 the following was the main causes of disputes stated in the literature (source) amongst listed in the table which other most frequently happen please give (mark1-5 from lowest to the highest

Q2 of frequency of happening) the following are the sub- causes of disputes from the sub-causes of disputers of main causes, table1 is sub- causes of disputes main cause design related: table 2, contractor : table 3, owner- related, tabel4, contract- reacted, table5, External your over all comment

From literature identified dispute resolution mechanisms' which do u prefer, tabular just prepare like common causes, the common disputer resolution mechanisms practiced by the common practice in soli region identified using Rii scale, the common was Negotiation

MAIN CATEGORIES OF CAUSES OF DISPUTE IN ROAD CONSTRUCTION INDUSTRIES please rank in the order of importance

Main Categories	Sub-categories
Owner related(3)	1. variations initiated by the owner
	2. change of scope
	3. late giving of possession
	4. unrealistic expectations
	5. payment delays
	if other

Contractor related(2)	1. delays in work progress
	2. time extensions
	3. financial failure of the contractor
	4. technical inadequacy of the contractor
	5. tendering
	6. quality of work
	if other

Design related(1)	1. design errors
	2. inadequate / incomplete specifications
	3. quality of design
	4. availability of information
	if other

JIMMA UNIVERSITY

JIMMA INSTITUTE OF TECHNOLOGY

CIVIL ENGINEERING DEPARTMENT

**MSC PROGRAMME IN CONSTRUCTION ENGINEERING AND
MANAGEMENT**

Your research

Title.....

Guide line for case study (Source: Dispute Resolution Board Foundation Manual (DRBF) (2007))

Project name.....

1. Brief information of the case

Client.....

Consultant.....

Contractor.....

Financier.....

Project Cost: Estimate.....

 Bid.....

 Final.....

Type/basesofcontract.....

Contract Period.....

DateofSigningof Contract.....

DateofCommencement(accordingtothecontract).....

Actualcommencement date.....

ContractualDate of Completion.....

Projectstatusupto

now.....

2. Causes of disputes

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3. Dispute or Claim statement:

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4. Case analysis and conclusion:

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The following table consists possible causes of dispute construction projects identified from literatures. Based on your experience, among the following lists (1-23) please indicate the most frequent cause of dispute (Each under its main category)in your area Somali Regional state Road construction sector as ranked from 1-5 (when 5 represents very high while 1 is never) by marking (√) under each preferences. Please also specify possible measures to be taken in order to minimize effect causes of dispute.

N O	D	Causes of that lead to construction Dispute	please indicate the most frequent causes of disputes ranked from 1-5 by marking (√) under each preferences					Please enumerate possible remedial measures to be taken to minimize the effect of causes of construction dispute.
			1	2	3	4	5	
1	E	design errors						
2	S	inadequate / incomplete specifications						
3	I	quality of design						
4	N	availability of information						
5	C	delays in work progress						
6	O	time extensions						
7	N	financial failure of the contractor						
8		Tendering						
9		technical inadequacy of the contractor						
10		quality of works						
11		late giving of possession						
12		payment delay						
13		variations initiated by the						

		owner						
14		unrealistic expectations						
15		change of scope						
16		Risk allocation						
17		different interpretations of the contract provisions						
18		Ambiguities in contract documents						
19		other contractual problems						
20		Weather						
21		Legal and economic factors						
22		Security						
23		Fragmented structure of the sector						