# Assessment of Effectiveness of Dispute Review Expert Practice in Ethiopian Federal Road Projects

# Alemu Mosisa, Wubishet Jekale, Tamene Adugna

Abstract— A Dispute Review Expert (DRE) is an experienced industry professional jointly selected by the owner and contractor of a project and in most cases established at the beginning of a construction project. This research work tried to assess the effectiveness of Dispute Review Expert in Ethiopian Federal Road projects.

The findings of these data showed that almost all industry members had a positive attitude concerning the effectiveness of Dispute Review Expert from their experience in their projects. The results of this study showed that about 97.62% of disputes were resolved by DRE recommendations. Qualitative data also indicated DRE recommendations play significant role in resolving disputes and cost minimization.

Generally, DRE has a great role in resolving disputes at different level and there is a need of commitment from both parties to cooperate with DRE to improve the quality of services and minimizing all forms of costs.

*Index Terms*— Disputes, Dispute resolution, Dispute review expert, Effectiveness and Recommendation.

### I. INTRODUCTION

Construction industry can be a very, complex, high risk and multiparty business. Complex construction can likewise often result in complex disputes, which are predominantly arises from the complexity and magnitude of the work [14].

It is preferable to settle disputes as early as possible as the resolution of disputes can be expensive and time-consuming and sometimes causing significant negative impact on a company. When disputes arise, they should firstly be handled in a constructive and collaborative way in order to reach early and effective settlements [3].

Disputes can arise in any construction industry due to several reasons, including design errors, changes, and multiple prime contracting parties, complexity and magnitude of the work, different communication problem site conditions, inadequate planning, defective specifications and financial issues [10].

According to [1] the most significant effect-of claims/disputes on international projects in Ethiopia has been the financial impact. They also state that, in some projects there have been financial claims/disputes reaching up to 200-300% of the project cost. Also, according to [11], who study on claims in Ethiopian international road construction contract, the time extension in average, exceed 117.7% of its

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Tamene Adugna, Civil Engineering, Jimma University/ Engineering/ Jimma University, Jimma, Ethiopia, +251917879220. original contract completion time and the cost compensation increases 34.8% compared to its initial contract value.

### Objective

- Determine the attitudes of industry members concerning the effectiveness of Dispute Review Expert in preventions and resolving disputes.
- Determine whether Dispute Review Expert is successful in resolving disputes.
- Identify whether Dispute Review Expert was the cost effective method of dispute resolution techniques.

## The Attitudes of industry members concerning the Effectiveness of Dispute Review Expert (DRE) in Preventing and Contemporaneously Resolving Disputes.

Dispute Review Experts are not only resolving disputes, they also can act as an impetus towards dispute resolution initiated by the parties themselves [2]. The findings of these data showed 79% of respondent agreed that the presence of DRE in their project reduces the number disputes and 64% of respondents reported that the mere presence of a DRE in construction project may influence the parties to resolve their differences before preparing a presentation and bringing a matter to the DRE.

Unresolved disputes happening during the construction can result in significant out of pocket costs to both the contractor and owner, including legal fees, expert witness costs, and consultant fees [9]. In the context of this study, the respondents were asked about question related to cost effectiveness of Dispute Review Experts. Accordingly, 78% agreed that having DRE in the contract would minimize dispute related costs, while 80% agreed that having DRE reduces the cost of counselling. This shows that since DRE visit the site at least four times per a year, he can assist both parties to resolve their disagreement at site level without a formal hearing, that means indirectly they are saving their time and cost for consulting the other third party. Similarly, in depth interview finding showed that presence DRE had greater role in preventing disputes.

The present study also showed that 66% of respondent agreed that, unresolved disputes result in additional financial costs and fears. And almost all respondents agreed that, hidden financial costs may be incurred by both parties as a result of unresolved disputes. This was summarized in fig.1. According to [9] These hidden financial costs may be the result of the diversion of manpower from new work to prepare for depositions and/or to be witnesses at trial or arbitration, as well as the need to bring an attorney and/or consultant up-with-speed concerning problems with the project and the nature of the work.

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The respondents from interviewees also emphasized that, "Dispute Review Expert prevents Conflict Escalating and Dispute crystallizing by encouraging communication, stimulating partnering and giving early intervention on issues and concerns of both parties". This showed that, in addition to give recommendations on disputed issues, the DRE had also a great role in the avoidance of disputes.



*A*= unresolved disputes result in additional financial costs and concerns

B= Hidden financial costs may be incurred by both parties as a result of unresolved

C= having a DRE would minimize dispute-related costs

D= Having a DRE reduces the cost of outside counsel

E=Having a DRE would reduce the indirect costs of resolving a dispute by having available manpower focused on constructing new projects rather than helping to resolve disputes regarding completed projects

F= DRE Minimize the cost of the industry traditionally arising out of the litigation of disputes

Fig.1. Attitude of stakeholders concerning the cost effectiveness of Dispute Review Expert.

Additionally, the finding of this study reflects that, Conflict reduces job satisfaction among employees agreed with 97% of respondents and 90% agreed that Conflict creates an emotional cost in terms of the deterioration of the relationship between the parties.

# Resolution Success of Dispute Review Expert Recommendation

In this regard, the questionnaire of this study attempted to ask about the DREs recommendations. Accordingly, 89% of the respondent believed that the DRE recommendation was equitable and well-reasoned. While 88%, believed that the recommendation was procedurally fair and logical. And also 91% believed the recommendation was on time. The finding from the case studies also shows, how DRE gives the recommendation by analyzing and interpreting each and every terms of issues with contractual requirements. It was the reason why the recommendation was, equitable, well-reasoned, procedurally fair, Logical and on time.

One interviewee suggested that "DRE recommendation is equitable, well-reasoned, logical and on time. All depends on the ability of the DRE".

Also, 97% of the respondent believed that DRE Recommendations consistent with the terms and conditions of

the contract, while 94% of them believed that it contains a useful information concerning the validity of the claim and all almost respondents believed that, the DRE Recommendation provide useful talking points in resolving the financial impact of a dispute. As all shown in fig. 2. The study conducted by [9] indicated that like mediators, a DRB/E cannot force a settlement. Therefore, its success in resolving disputes may rely on its ability to persuade the parties to accept its recommendation. A DRB panel or its individual members can cultivate the parties' perceptions of its expertise and use this as a form of social power. She also stated that, "the more persuasive the recommendation, the more likely the parties will accept it to resolve the dispute".

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, as it was stated in [6].

To find the Success rate of DRE, an analysis of the DRE hearing process was undertaken by looking at the status of disputes that were actually heard by a DRE during the project construction phase. The results of this analysis would highlight its Effectiveness by measuring its ability to render recommendations that assist in settling claims without further escalation to the third phase of resolution.

According to [12], DRE hearing was assumed to be Effective in Resolving a Dispute if the project participants agreed to a final settlement of the Dispute based on the DRE Recommendation. In the context of this Study, the DRE success rate/ effectiveness ratio for each of the projects in the data sets that had disputes heard by DRE is determined by Eq. (1).

The Percent of DRE success/ effectiveness ratio= Number of disputes settled per project \*100%

Number of dispute heard per project ......Equation (1)

Using Eq. (1) The DRE Effectiveness Ratio was determined for each of the six projects (refer Appendix a). Effectiveness Ratio for all projects were 100%, except project A, which was 85.71%. Accordingly, the average effectiveness ratio was about 97.62%. These results showed that even in the case when a conflict escalates to a dispute that needs to be heard by a DRE for final Recommendation/Resolution, the probability of having this Dispute settled with no further considerations exceeds 97%. All projects that had zero number of Disputes heard per project were excluded from the study.

The result was supported by [5], they state that the Effectiveness ratio of DRB in US construction industry reaches 97%, [8] who study on the Australian construction industry also stated that the Success rate/ Effectiveness ratio of the DRB is about 100% and DRBF Statistical Database 2002 indicates that the success rate of the DRB is about 98%.

This result again emphasizes how DREs recommendation was procedural fairness, equitable, logical, well-reasoned and consistent with the terms and conditions of the contract. The finding from the case studies also indicated how DREs

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recommendation was strong and useful in the resolution of disputes. In the case studies number one, Seventeen issues were referred to DRE from the contractor for final recommendation. Based on the given recommendations, all issues were resolved without escalated to the third phase of (fig. 3).

In particular [12] States that DRB acts as a buffer which absorbs all unresolved disputes from negotiation and prevents their escalation to a higher, more protracted level of resolutions like arbitration and litigation. This was similar for DRE in the context of this study.



A = The DRE recommendation is equitable and well-reasoned

B = The DRE recommendation is logical and on time

C= The DRE recommendation's Procedural Fairness

D= The DRE recommendation is consistent with the terms and conditions of the contract

E= The DRE recommendation contains useful information concerning the validity of the claim

F= The DRE recommendation providing useful talking points in resolving the financial impact of a dispute

Fig. 1.The Attitude of Stakeholders concerning DRE Recommendations.

The Cost Effectiveness of Dispute Review Expert Process The construction process, if made less adversarial, it could become more cost effective for both the owner and the contractor. Fees not spent on defending against arbitration, litigation or other adversarial methodologies could be put to better use on other projects, reducing actual and emotional costs for both client and contractor, also increasing job satisfaction [9].

Finding from questionnaires' showed that 94% of respondent agreed that DRE Minimize the cost of the industry traditionally arising out of the litigation of disputes and 88% agreed that DRE is generally accepted that some form of job site assisted dispute resolution procedure provides the parties with positive, cost-effective and time-sensitive solutions to disputed issues and encourages dispute resolution by consensual means which in turn provide win–win solutions to contracting parties.

The effectiveness ratio/success rate of DRE in the context of this study was 97.62% as calculated (Appendix a). Unresolved disputes occurring during the course of construction can result in significant out-of-pocket costs to both the contractor and owner, including legal fees, expert witness costs, and consultant fees. So for this study since the numbers of unresolved disputes were very small or less than three percent, the DRE was less adversarial and cost effective method for both owner and the contractor. The finding of this study was supported by [13], "Based on the record of DBs worldwide, with about a 99% Effectiveness ratio/ success rate, this represents quite economical protection against the time and cost of becoming embroiled in lengthy, expensive litigation or arbitration".

The DRB/E process appears to be effective in assisting in the dispute resolution, leading to on time completion of projects, reduced cost overruns and prevention of claims. Utilization of DREs on larger projects can serve to motivate greater cooperation between parties resulting in fewer unresolved claims and a reduced litigation potential [7].

According to the response of the interview, "Dispute Review Expert was Effective dispute resolution and/ or privation technique, especially with respect to cost and time, because, early resolution was cost effective and quick". And also he states that," DRE Provides dispute avoidance, which no other methods do".

One of the most significant aspects in considering the expense of a DRE is perhaps the significant difference in time (and therefore costs) between preparing a dispute for a DRE hearing and in assembling the voluminous trial documentation to put before a judge or an arbitrator, costs that are never recovered in full, even by the winning party [2]. Generally the study showed that, having Dispute Review Expert in the contract was a cost Effective method.

According to [4] effectiveness was measured by the reference to Fig. 3, which shows that the prevention process begins when a conflict arises during the construction phase of the project. If both parties agree to solve the conflict within the contract provisions, then the conflict is resolved without any further escalation.



Fig. 2.Conflict/dispute resolution process (modified from [4])

The effectiveness of the DRE process at this level can be measured in retrospect by looking at the number of conflicts that actually escalated to a dispute that required a DRE hearing. Thus, the lower the number of conflicts that escalate to a dispute, the higher the probability is that adopting a DRE encouraged project participants to resolve their issues at this initial phase among themselves. On the other hand, DRE hearing sessions are undertaken whenever all interpret negotiations have been exhausted without successful resolution of the dispute [4].

Again, the events leading to the hearing session and those associated with a particular hearing session are shown also in Fig. 3, as the second phase of the conflict/dispute resolution process. Thus, the end result of a DRE hearing session is a Recommendation rendered by the DRE and communicated to the disputing parties in writing. It is assumed that the higher the rate of settlement of any given dispute based on a DRE recommendation, the more effective the DRE is as an ADR technique because it assisted the parties in resolving their dispute without the need of further escalation to the third phase of resolution (i.e., arbitration or litigation).

It would be noted that on some projects the DRE was not called upon to provide recommendations while in other projects several recommendations were issued. Both situations are indicative of a successful DRE. [4] States that, Prevention of disputes is the first objective, while the second objective is to provide recommendations upon those disputes which do arise to assist the parties to avoid further dispute procedures. Specific details of disputes brought to DREs are presented where possible, however confidentiality reasons limit the amount of detail which can be presented. That is why the two projects A and B are not ok to give their name and detail information's (Appendix a).

One Interviewee from expert states that, the presence of a DRE reduces the number of disputes, "Only if the DRE is permitted to be available throughout the project and encouraged to assist the parties in dispute avoidance". While other expert stated" DRE allows the parties to understand their contractual positions and entitlements at an early stage, before a dispute crystallizes, and often helps them find an acceptable solution". This indicates that, the primary objective of DRE was to avoid Disputes.

## II. CONCLUSION

This research had four primary objectives, which were

achieved through the data collected using survey, Case study and Document Review techniques. The first objective was to determine the attitudes of industry members concerning the effectiveness of Dispute Review Expert in preventing and resolving disputes, the second objective was to determine whether Dispute Review Expert is successful in resolving disputes, the third objective was to Identify whether Dispute Review Expert was the cost effective method of dispute resolution, and the final objective was to assess the barriers that affect the effectiveness Dispute Review Expert in Ethiopian Federal Road Projects.

Based on the results obtained from this research, the following conclusions of the research are drawn:

The findings of these data showed that almost all industry members had a positive attitude about the effectiveness of Dispute Review Expert from their experience of their project and while 88% of the respondent agreed that DRE provides the parties with positive, cost-effective and time-sensitive solutions to disputed issues and encourages dispute resolution by consensual means which in turn provide win–win solutions to contracting parties.

For those projects that had disputes referred to a DRE, the data were analyzed to determine the Effectiveness of the DRE in the resolution of a dispute at the project level without further escalation to arbitration or litigation. Accordingly, it Effectiveness ratio or Success rate was found about 97.62%.

Qualitative data also indicated DRE recommendations play significant role in resolving disputes and cost minimization. This result indicates how DRE is successfully implemented in Ethiopian Federal Road projects.

Generally, even though DRE method of dispute prevention and or resolution is new system in Ethiopian construction industry it was widely used on international competitive bid and local competitive bid projects and it gives positive output.

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Project name	No. dispute referred	No. Recommendation Accepted	No. recommendation Arbitrated	Effectiveness ratio/ success rate (%)	Remark
Mekenajo-Nejo	2	2	0	100	
Nekempte-Meken ajo	4	3	0	100	One has been settled amicably
Gore –gambella	18	18	0	100	
Project A in south regional District	7	6	1	85.71	One case is still on arbitration
Project B in south regional District	3	3	0	100	Other two disputes are with the DRE
Mojo-Ejere-Arerti	1	1	0	100	
Harar-Jijiga	0	0	0	100	
Jimma-Bonga	0	0	0	100	

APPENDIX. A Table: Projects with dispute Referred to Dispute Review Expert

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