

An Assessment of the Effectiveness of Alternative Dispute Resolution Methods

Anup Sauden¹, Surya Chhetri² *

¹Master's Research Scholar, Madan Bhandari Memorial Academy, Uurlabari 3, Morang, Nepal, Engineer, Government of Nepal

²HRM (Research Dept.), Walden University, Minnesota, USA

INFO

***Corresponding Author:**

Surya Chhetri

Walden University, USA

E-mail Id:

surya.chhetri@waldenu.edu

Orcid id:

<https://orcid.org/0009-0000-2360-7938>

Date of submission: **09.01.2023**

Date of Acceptance: **16.03.2023**

DOI:

<https://doi.org/10.5281/zenodo.7885356>

Abstract: This study assesses the effectiveness of Alternative Dispute Resolution (ADR) practices in projects run under the Department of Roads of Nepal government. Secondary data from case studies and primary data from questionnaire and key informant interviews are analysed in view of the decisions regarding the use of ADR in settlement of road project cases. The research uses a descriptive method in the assessment. Out of eight (8) projects, disputes related to four (4) were settled by litigation based on ADR (Adjudication and Arbitration) decision, one was sent for the reformation of arbitration by court/litigation and three (3) were awarded by ADR (Arbitration) but remained pending in the settlement process by litigation till 14 May 2022. Negotiation (i.e. amicable settlement) is the most applied ADR to resolve the disputes followed by Conciliation, Mediation and Adjudication. Arbitration is used as the last stage of ADR due to its high legal value in spite of the high time and cost. The study is significant for professionals to overcome the identified causes effectively to create zero-dispute projects by handling the issues in real time.

Keywords: Alternative Disputes Resolution (ADR), Negotiation, Conciliation, Mediation, Adjudication, Arbitration, Litigation, Claims, Conflicts, Disputes



Journal of Productive Discourse (ISSN: 2990-7535)

Copyright © 2023 The Author(s): **Published by MadanBhandari Memorial College**, distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0)

1. INTRODUCTION

Disputes need no seed to arise, as the saying goes. Contrary to this, it is also said that every effect is an outcome of a cause. This paper discusses the causes of disputes in changing conditions and examines the seeds of dispute to see if they are changing, too.

Roads receive a huge amount of investment as high priority projects in Nepal [1]. Their construction disputes affect the project cost and time, making the tasks to control and manage the effects more challenging [2 & 3]. Depending on the type of contract, skill of employee, and delivery method, the disputes take different forms. The size and nature of disputes depend on the response to the conflicts during the road construction. Each dispute might

raise the expense and alter the season of the undertaking, which can harm the monetary and HR aspects, the nature of work and opportunity cost (Mishra A.K, Mandal L. and Pant, R.R, 2018) [4]. This study focuses on the monetary costs of debates to forestall the venture to be expensive. Additionally, for the debates, their causes, effects and adequacy of the questions, goals and strategies ought to be found. The review of road contracts under the related division or department of the government will help us recognise significant reasons for debates on various sizes of road projects and the powerful methods of settlement rehearsed in the context of Nepal. Worldwide, (ICB) discussion is the most applied ADR to determine the questions followed by settlement and intervention (Mishra, A.K., 2018) [2]. Therefore, this research was conducted on

different types of road projects (ICB and NCB) already settled or pending in the settlement process. The study was done through secondary data (case studies) and primary data (questionnaire) to further our understanding of the practices and effectiveness of dispute management. There are various types of causes according to the nature of work and contract. The research is about finding the major causes of disputes in these road projects.

2. STATEMENT OF THE PROBLEM

From the primary data, obtained from the questionnaire study, out of forty-five (45) causes of disputes, the changes in scope have not had any significant impact on the project performance in terms of time and cost.

And from the analysis of the secondary data obtained from the case study, the major problems arising due to disputes are time overrun and cost overrun. Disputes lead the project to be costly in terms of time, cost, even its quality decline and lost business opportunity, and eventually the failure of the project. The date of settlement was assumed to be 14 May 2022 so the total time lost during this process would be around 37 years and 6 months, which is 4 years 8 months and 7 days on average for

each project. The total amount spent on ADR is 38 lakhs and 5 thousand rupees. The average cost of ADR is around 4 lakhs 76 thousand rupees. This study is significant as it warns the stakeholders of the risks in the absence of proper management of construction disputes in terms of their impacts. It will act as a guiding document for dispute resolution in road construction projects by helping them learn of the practices in the settlement of road construction disputes. This can also help us settle the disputes early on and more effectively.

3. OBJECTIVES

To assess the effectiveness of alternative dispute resolution methods.

4. LITERATURE REVIEW

4.1 Claims in Construction Contract in Nepal:

4.2 Dispute Resolution Methods

Traditionally, parties would enter into litigation, often a costly and long-winded means of resolving a dispute. Over the years, various methods of Alternative Dispute Resolution (ADR) have been introduced into the construction industry as a means to avoid lengthy and expensive litigation.

Table 1: The principal stages of dispute resolution

Stage -1	Negotiation	Negotiation
Stage-2	Non-binding techniques and processes	Mediation
		Conciliation
		Neutral Evaluation
		Adjudication (DRB/DB)
Stage-3	Binding techniques and processes	Arbitration
		Expert Determination
		Litigation

4.3 Alternative Dispute Resolution (ADR) Method

The possible ADR processes available to construction disputes are:

4.3.1 Negotiation/Amicable Settlement

Negotiation is the least costly and the most flexible method of dispute resolution, allowing a high degree of control over issues and time factors. According to Fisher (1991), direct negotiation is a common dispute resolution process in which parties themselves, or their representatives, try to resolve the dispute without involving any neutral third party. Negotiation /Amicable settlement is an intermediate stage, where the parties, if they feel it worthwhile, resolve the disputes themselves. It does not require a

third party intervention or involvement and the matter can be discussed and settled between the contracting parties themselves (Sharma, 2002).

The four characteristics of a good negotiated settlement are:

- Fairness
- Efficiency
- Wisdom and
- Stability

When parties participate in negotiations, they shall be transparent and ready for discussions:

- get well prepared on the event, (issue) and allow sufficient time,

- arrange a pre-meeting; both parties make their own reconnaissance,
- identify what is the interest of the other party,
- plan for the negotiation,
- set objectives,
- become realistic,
- find lead negotiator- he/she can be non-site staff or have no chief site experience. He/she is only a commercial person. Expert to make negotiations, he/she needs someone who gives him/her background of the technicality of the event, issue.
- become transparent, thorough, and honest to the lead negotiator. If you are part of the negotiating team, discuss before getting into the matter.
- get each member of the team to know his/her roles and contribution as per his/her specialisation.
- listen well to proposal, give more priority to listening than talking,
- stick to plan.

(Gashaw Yayehyirad, 2004).

4.3.2 Mediation

Mediation is a process of dispute resolution that focuses on effective communication and negotiation skills. The mediator role is to help the parties in communicating and negotiating more effectively, thereby enhancing their ability to reach a decision. Mediation is a mechanism in which a neutral third party meets with the disputants and facilitates negotiation to help the parties come to their own solution (Pretorius 1993, Yuena 2002).

4.3.3 Conciliation

Conciliation is a process similar to mediation except that the conciliator can express an opinion on the merits of the case and is required to recommend a solution if the parties fail to agree (Dighello, 2000; Agarwal, 2001). In this process, parties in dispute reach an agreement with the help of other person or agency, who harmonises the situation to bring the disputants together to reach an agreement (Sharma, 2002).

The Ethiopian Civil Code enumerates the process spectrum for Conciliation, from article 3318 to 3323 as detailed below (Bekele, 2005) [27].

a. Duties of parties

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

b. Duties of conciliator

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

c. Time-limits

1. The conciliator shall carry out his duties within the period of time laid down in the contract or, in the absence of any such limit, within six months from the date of his appointment.
2. During this period, the parties may perform such acts as are necessary to preserve their rights.
3. They may not bring their dispute before the court prior to the expiration of this period unless the conciliator has drawn up a memorandum of non-conciliation.

d. Powers of conciliator

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

e. Conciliator's expenses and remuneration

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

4.3.4 Adjudication

Adjudication is the process in which one or the other party appoints someone who is an expert in the subject to help resolve the dispute. Adjudicator is usually an industry expert who makes technical decisions on the dispute which are generally binding upon parties. This is a process whereby the disputants present their cases to an independent expert who then evaluates the evidence according to the relevant law, rules, contract and practice applied appropriately in the dispute and gives a confidential opinion on the likely outcome of the case if it were to go to court or arbitration (Agarwal, 2001).

4.3.5 Arbitration

Arbitration is the legal alternative dispute resolution technique outside the courts. Parties select the arbitrators and agree to be bound by their decision. Third party imposes the decision, legally binding for both parties. In Nepal's road construction contracts under DoR, the success rate of arbitration (i.e. 21.43%) for resolving contractual disputes is very low. (Mishra & Aithal, 2022)[28].

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

Nepal Council of Arbitration (NEPCA)

Nepal Council of Arbitration (NEPCA) was established as an autonomous and non-profitable organisation for facilitating the settlement of disputes of commercial nature through the development and institutionalisation of a process of arbitration or other alternative means of dispute settlement. Its executive committee, in exercise of the power conferred by Section 26 of the Statute of NEPCA, 2048 (1991) has framed the rules in order to manage the arbitral proceedings.

NEPCA has adopted an arbitral Procedure Rules, 2060 (2003), cited as "NEPCA Rules" in

short. These rules shall come into force from the date of approval (2060/8/22 B.S. corresponding to 8 December 2003) by the Executive Committee of NEPCA.

The parties to any contract have made provisions to submit disputes arising out of the said contract, or there under to NEPCA for settlement, or if an agreement is concluded between the parties, or an understanding is reached between the parties, to refer the disputes arisen under any contract to the council. Such disputes shall be settled pursuant to the provisions as stipulated in these rules. Provided, however, that the parties may, through their written understanding, exclude any provision of these rules in a manner that such provision shall not be applicable in respect to the dispute referred by them. The parties shall not be allowed to exercise the right as per the provision of sub-rule (1) after commencement of arbitral proceedings, i.e. counting of Time Limit, Means of Notice and Method of Initiating Arbitration.

Method of Initiating Arbitration

If an agreement pertaining to arbitration or provision pertaining to arbitration of any agreement or written understanding of the parties makes provision for reference of the dispute to the council, the claimant or both the parties jointly may commence arbitral proceedings by giving a written notice of request to the council. A sum of NRs. 1000/- (one thousand) as the fee for application shall be required to be deposited with the council setting out the following matters in the notice of request as referred to in sub-rule (1): -

- Name and address of the disputant parties,
- Nature and subject of dispute,
- Request made for arbitration,
- Estimated amount of claim,
- Remedy sought,
- Number of arbitrators agreed upon between the parties, if so agreed,
- The required qualification of arbitrator, if so specified,
- If separate agreement or understanding is reached on arbitration, such agreement or understanding and if there is no such agreement or understanding, provision of the agreement pertaining to arbitration under which the arbitral proceedings is commenced,

- Contract under which the dispute has arisen,
- If the agreement does not specify number of arbitrator/s, a proposal on the matter whether the arbitration shall be conducted by a sole arbitrator or by more than one arbitrator.

Summary of claim may also be included in the request as referred to in sub-rule (1) in addition to the matters set forth in sub-rule (2). Party who has filed the notice of request pursuant to sub-rule (1) shall be required to give the information of such notice of request to the other party.

If notice of request is filed by either party pursuant to sub-rule (1), the council shall give written information to the other party and ask for reaction thereof.

Appointment of Arbitrator

a) Composition of the Arbitral Tribunal

If the number of arbitrators is not specified in the agreement or the parties fail to reach an agreement on the number of arbitrators, the dispute shall be heard and settled by a sole arbitrator. However, taking into account the nature and gravity of the dispute, the council may decide to form a tribunal consisting of 3 (three) arbitrators.

b) Personal Details of Arbitrator

Where a person is proposed for appointment as an arbitrator, the proposer shall give such information as his/her full name, address, past and present professional position, qualification, and experience pertaining to arbitration. If the council appoints an arbitrator, the council shall also give such information to both the parties.

c) Method for Appointment of the Arbitrator by the Council

Upon receipt of request from either or both the parties to dispute for appointment of arbitrator pursuant to these rules, the council shall appoint independent and impartial arbitrators from amongst the Panel of Arbitrators maintained by the council. While making appointment of arbitrator pursuant to sub-rule following procedures shall be followed: The council shall provide a list containing names of at least three arbitrators to both the parties.

Pursuant to sub-rule 1 (a), each party shall prepare its list of priority by deleting the names of the arbitrators it objects and by numbering the other names in the order of priority and return it to the council within 7 (seven) days.

Pursuant to sub-rule 1 (b), after the expiry of the time-limit the council shall appoint the person as arbitrator, within seven (7) days, whose name is ranked in the first place in the list so returned by the party.

If arbitrators could not be appointed pursuant to sub-rule (c), the council shall appoint arbitrators from its Panel of Arbitrators, keeping into account the nature and gravity of the dispute and qualification and impartiality of the arbitrators being appointed therein.

While making appointment of the arbitrator pursuant to rule 12, sub-rules (4) and (5), the council shall follow the procedures as prescribed in sub-rule (2) herein.

Parties requesting for appointment of the arbitrator pursuant to sub-rule (1) shall be required to deposit a sum of NRs. 5,000/- (five thousand) with the council.

4.3.6 Expert Determination

Expert determination is a private process involving an independent expert with inquisitorial powers, who gives a binding decision.

In expert determination, the parties agree to be bound by the decision of an expert in the field of the dispute. This process can be useful where the dispute is about a technical matter. The expert will commonly be given powers to investigate the background of the dispute himself, rather than just relying on the evidence the parties choose to present.

4.3.7 Litigation

The court system renders a judgment or decision based on relevant law and the facts. Litigation (used when all other venues failed) is a dispute resolution method that is inquisitorial and adversarial, where by the disputant initiates legal action against the other party by going to court (Agarwal 2001). It is costly and more time is required for results and it may not do justice to the parties. It is also used when parties cannot agree to the ADR process.

Table 2: Rank to common method of ADR

2020 Rank	2019 Rank	Most common methods of alternative dispute resolution
1	1	Party-to-party negotiation
2	2	Mediation

3	*	Adjudication (contract or ad hoc)
---	---	-----------------------------------

(Source: Global Construction Disputes Report 2021)

keeping most of the parts of the earlier methods the same, such as case projects, respondents and questionnaire, to ensure their validity and reliability. Methods were adopted from the approach used by Sauden et al, 2022 followed by Mishra *et al.*, 2022.

5. METHODOLOGY

In this research, the researchers have extended an earlier research conducted by themselves with a view to obtaining the solution to the problem as a pragmatic philosophy of research,

5.1 Research Flow

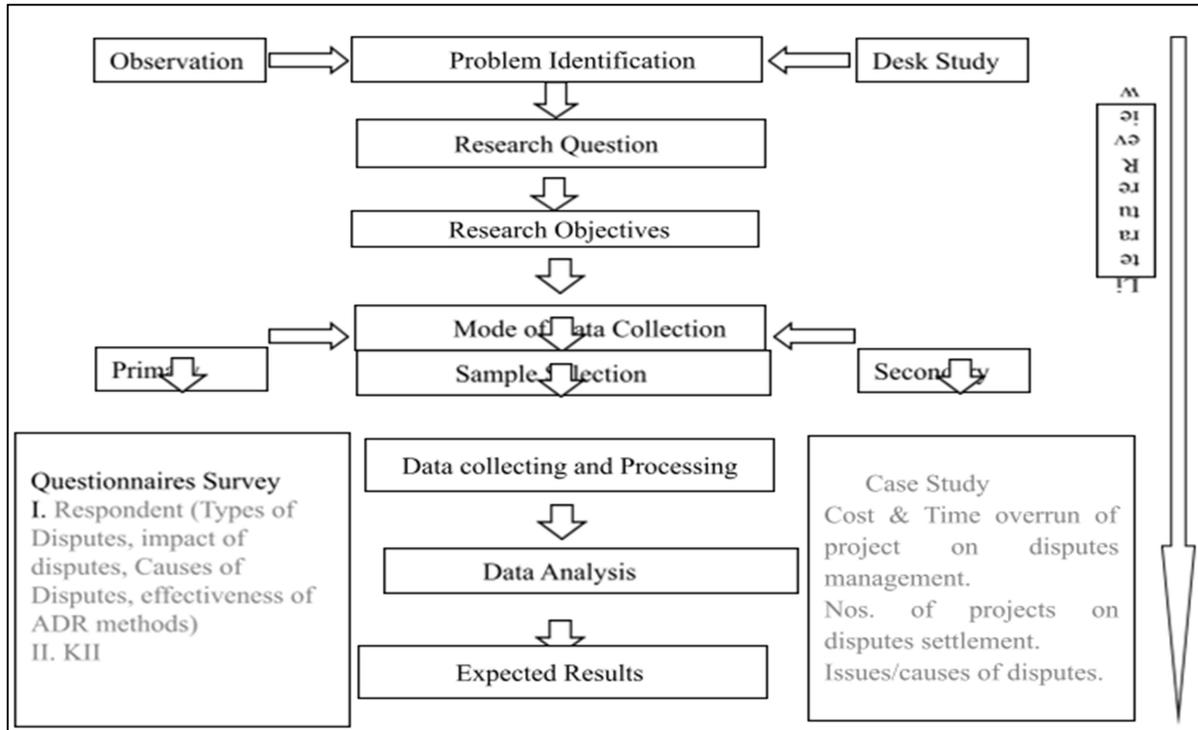


Figure 1: Flow chart for research methodology

Table: Research Design Table

Research Objectives	Types of Data	Source of Data	Research Tools
To assess the effectiveness of alternative dispute resolution methods.	Secondary data (Case Study) Primary data (Questionnaire, Key Informant Interview)	Use of ADR for settlement of cases	Descriptive Methods

6. RESULTS AND DISCUSSION

Different disputes/claims have arisen during the construction phase of individual road projects. Causes of disputes, found in case studies, semi-structured interviews and questionnaire surveys, are discussed one by one in the sections below.

6.1 Commonly used dispute resolution methods practised on road contracts in Nepali Context

Opinions on the questionnaire have been collected from the main stakeholders (i.e. Employer, Consultant/Engineers, and Contractors) of the road

contracts. The figures show the commonly used dispute resolution practices with their rankings in terms of the responses.

Client's Response

Figure 4-1 shows the responses of the clients on the commonly used dispute resolution practices on road contracts in Nepal. The client's responses on Negotiation, Conciliation, Mediation, Adjudication, Arbitration, Litigation and, others have been found to be 22%, 15%, 19%, 13%, 19%, 10% and 2% respectively. It is found that Negotiation is used as a common method and Mediation is needed before

Arbitration. Litigation is ranked as the least commonly used dispute resolution process in terms of the client's responses.

Consultant's Response

Figure 4-1 shows the responses of the consultants on the commonly used dispute resolution practices on road contracts in Nepal. The consultant's response on Negotiation, Conciliation, Mediation, Adjudication, Arbitration, Litigation and others have been found to be 27%, 20%, 17%, 10%, 17%, 8% and 0% respectively. It is found that Negotiation is used as the most common method and Mediation is needed before Arbitration. Litigation is ranked the least as commonly used dispute resolution process in terms of consultant's responses.

Contractor's Response

Figure 4-1 shows the responses of the contractors on the commonly used dispute resolution practices on road contracts in Nepal. The contractor's response on Negotiation, Conciliation, Mediation, Adjudication, Arbitration, Litigation and others have been found to be 27%, 13%, 18%, 18%, 15%, 9% and 0% respectively. It is found that Negotiation is used as the common method and Mediation/Adjudication is needed before Arbitration. Litigation is ranked as the least commonly used dispute resolution process in terms of contractor's responses.

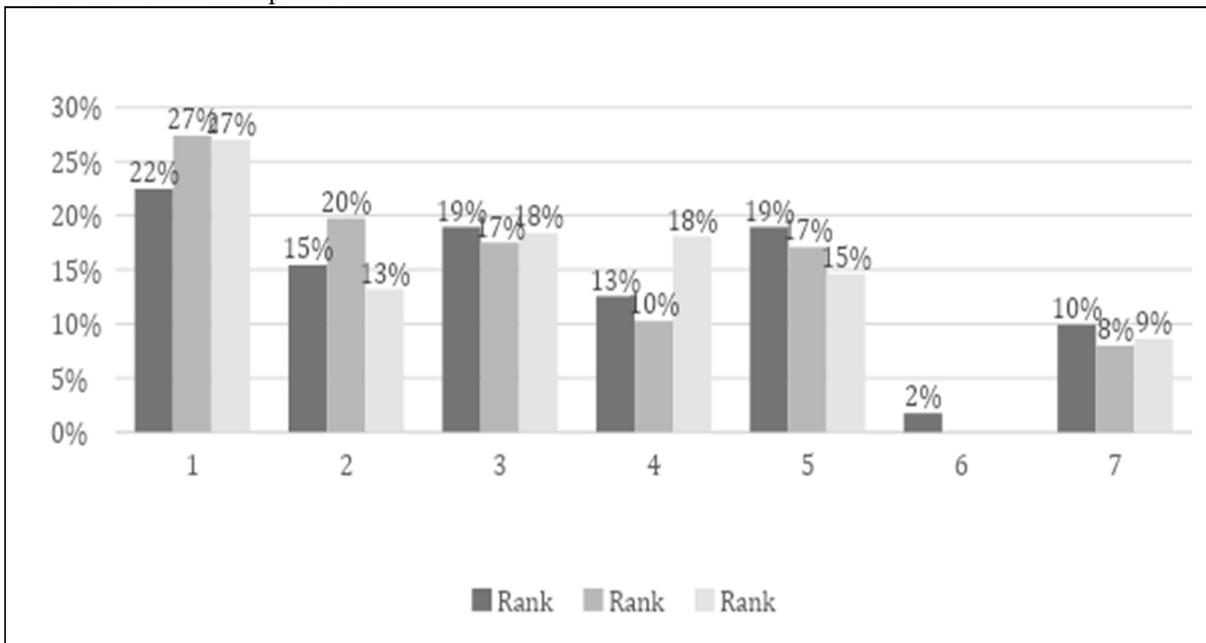


Figure 2: Commonly used dispute resolution practices on road contracts in Nepal

From the questionnaire study, it is found that all the respondents have given a higher weight on the Negotiation and lower weight on the Court / Litigation. This shows that the commonly used dispute resolution practice on road contracts is Negotiation, in which the disputes that had arisen during the construction stage were settled from positive negotiations between the stakeholders of the project. Also, according to the Global Construction Disputes Reports 2021, Negotiation is ranked top in 2019 and 2020. If the disputes cannot be settled through negotiations then they will go through the process of Conciliation, Mediation, Adjudication, Arbitration or Court/Litigation. In the case studies, only the cases of disputes which were not settled by Negotiation/Conciliation/Mediation were found and

they have caused a significant impact on the project performance.

6.2 More effective dispute resolution practices on road contracts in Nepal

Opinions on the same questionnaire have been collected from the main stakeholders (i.e. Employer, Consultant/Engineers, and Contractors) of the road contracts as shown in the table. The figure shows more effective dispute resolution practices with their ranking in terms of the responses.

Client's Response

Figure 4-2 shows the client's responses on more effective dispute resolution practices on road contracts in Nepal. According to the responses, each stage of ADR has a higher weight percentage than Litigation. This shows ADR is a more effective dispute resolution process than Litigation. The

responses on Negotiation, Conciliation, Mediation, Adjudication, Arbitration, and Litigation have been found to be 29%, 15%, 16%, 15%, 15%, and 10% respectively.

Consultant's Response

Figure 4-2 shows the consultant’s response on more effective dispute resolution practices on road contracts in Nepal. According to the responses, each stage of ADR has a higher weight percentage than Litigation. This shows ADR is a more effective dispute resolution process than Litigation. The responses on Negotiation, Conciliation, Mediation, Adjudication, Arbitration, and Litigation have been

found to be 29%, 15%, 17%, 16%, 15%, and 10% respectively.

Contractor's Response

Figure 4-2 shows the contractor’s response on more effective dispute resolution practices on road contracts in Nepal. According to the responses, each stage of ADR has a higher weight percentage than Litigation. This shows ADR is a more effective dispute resolution process than Litigation. The responses on Negotiation, Conciliation, Mediation, Adjudication, Arbitration, and Litigation have been found to be 28%, 20%, 19%, 15%, 11%, and 7% respectively.

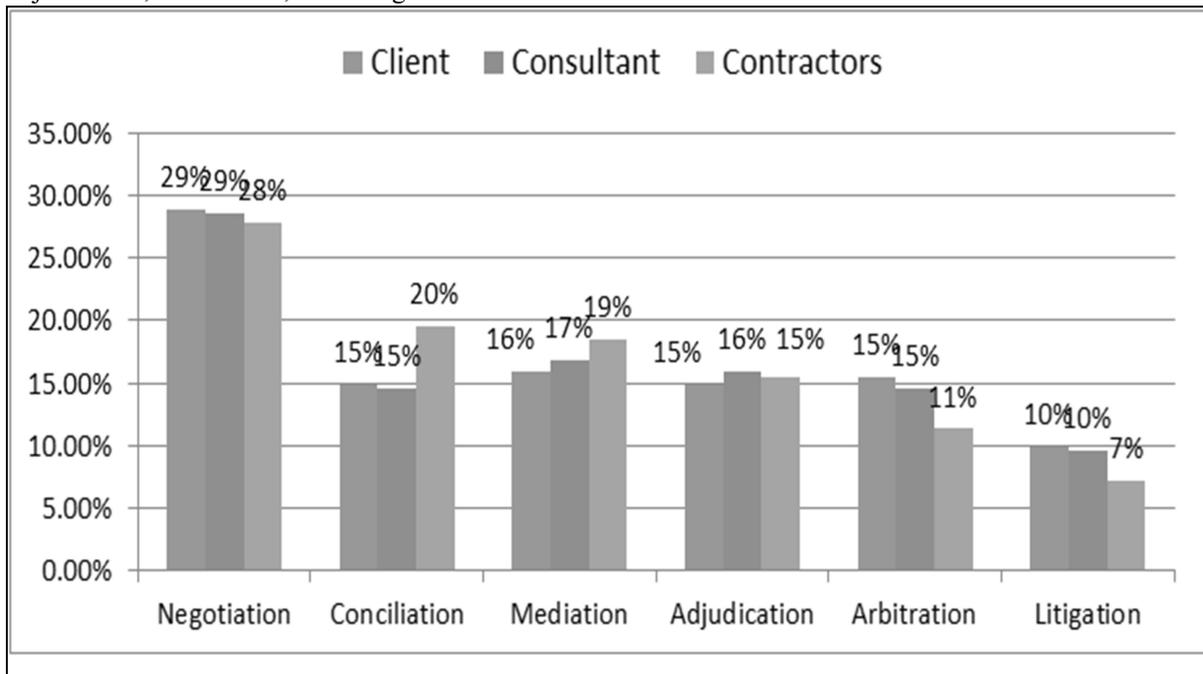


Figure 3: More effective dispute resolution practices on road contracts in Nepal

From the questionnaire study, it is found that all the respondents have given a higher weight on the Negotiation and lower weight on the Court / Litigation. Figure 4.1 shows that the commonly used dispute resolution practice on road contracts is Negotiation. Conciliation and Mediation are similar in working process in which the stakeholders are positive towards the dispute settlement. But figure 4.2 shows that the more effective dispute resolution practice on road contracts where the parties were not willing to negotiate on the cause of disputes and the claims which comes under the Adjudication, Arbitration and Litigation methods. According to the Public Procurement Rule 2064 (11th amendment), after Negotiation, the case goes directly to Arbitration. But from figure 4.2, it is seen that the

first effective dispute resolution practice after Negotiation is Adjudication. The second is Arbitration and the third is Litigation. This means one stage of dispute resolution is needed between Negotiation and Arbitration. Because Negotiation is based on understanding between two parties, whereas if there is Adjudication, which is evidence-based, it also helps for the arbitrators in decision making.

From the case studies, all the cases were first discussed or analysed and awarded by the Adjudication then Arbitration and the cases are settled by the final decision awarded by Litigation. Therefore, the effective dispute resolution practices on road contracts by the questionnaire study and from the case study are the same.

6.3 Disputes Management Practices

6.3.1 Practices of Dispute Management in Particular Projects based on Case Studies

Table 3: Practices of Dispute Management in Particular Projects

SN	Project Name	Present status of disputes
1.	KCHP/GC/19/068/69, Construction of Ghurmi-ChataraKoshi Corridor Sector, Km 146+100 to Km 149+600	Awarded by litigation (on the basis of ADR (Arbitration) decision)
2	KCHP/GC/12/068/69, Construction of Ghurmi-ChataraKoshi Corridor Sector, Km 16+920 to Km 18+880	Awarded by litigation (on the basis of ADR (Arbitration) decision)
3	KCHP/GC/01/068/69, Construction of Ghurmi-ChataraKoshi Corridor Sector, Km 0+000 to Km 2+160	Awarded by litigation (on the basis of ADR (Arbitration) decision)
4	TRIP/337312/RBID/2071/72/01, Upgrading and Construction of Rani-Biratnagar-Itahari-Dharan Road Sector.	Till date pending in upper court
5	AH/MT/1-03/068/69, Construction(Improvement) of Maitighar-Tinkune Road Section (1+300 to 2+660)	Awarded by litigation (on the basis of ADR decision)
6	EEAP/NCB/DG/03, Upgrading of Dhading-Gorkha Road, Ghyampesal-Gorkha Section (Km 54+300 to Km 64+500)	Decision pending on litigation till date
7	51-2067/68, Construction of Motorable Steel Truss Bridge over Marsyangdi River at Damauli, Purkot VDC, Tanahu.	Decision pending on litigation till date
8	RIP/EXIM/TS-04, Upgrading of Tulsipur - Salyan Road (Km 0+000 to Km 61+744)	Court's decision for reformation of arbitration.(Pending till date)

From the study of these eight cases, there are four cases finally settled by way of Litigation on the basis in line with the Arbitration decision and remaining four cases were awarded by Arbitration but pending till date on Litigation. From the study of cases which were settled, it is found that the analysis of disputes and decision by arbitrator on the process under Arbitration is taken by Litigation. In case No. 8, the court decided the reformation of Arbitration for the analysis of the issues and their settlement. So, ADR method is effective for analysis of the disputes and their settlement. Also, the disputes were transferred to the higher dispute resolution bodies and most of the cases were settled on the basis of ADR decision.

6.3.2 Practices of Disputes Management in Road Projects based on Semi-Structured Interviews

The practices of dispute resolution in Nepali road contracts has been assessed through semi-

structured interviews of DoR higher lever personnel without considering any specific projects.

During interviews on different ADR methods and Litigation, they replied Arbitration is time consuming and not cost effective. It is the most used one due to its high legal value almost equal to Litigation. Negotiation is the best in respect of secrecy, time and cost effectiveness and it is found to be applied in initial phase though it does not have legal importance, so it was found to have been applied only as a step of ADR.

6.3.3 Practices of Dispute Management in Road Projects based on Questionnaire Survey

Based on Questionnaire Survey, main stakeholders have been familiarised with the Alternative Dispute Resolution (ADR) process on the road projects under the Department of Roads.

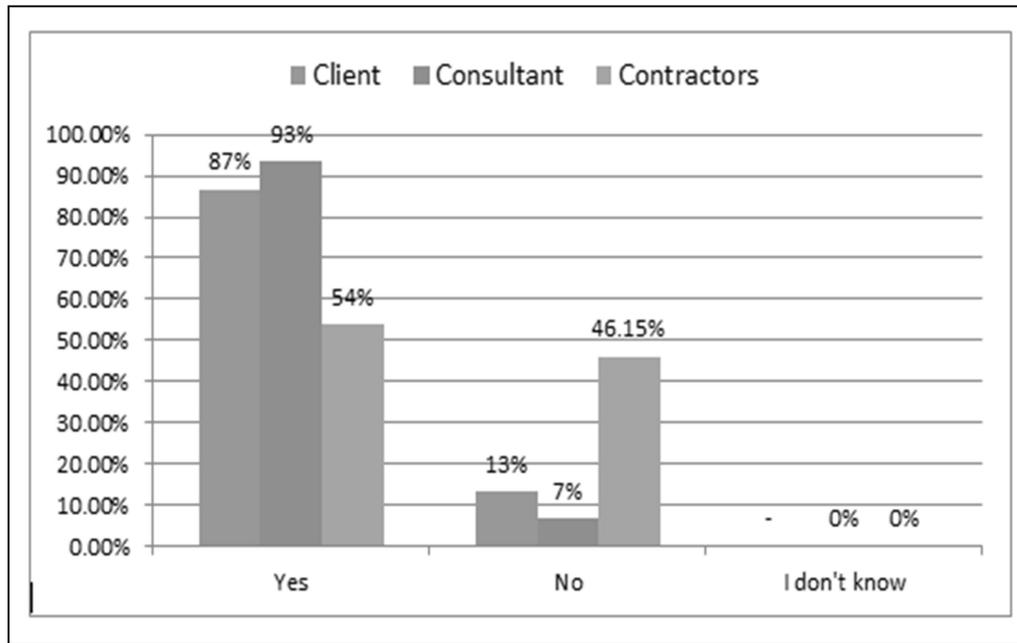


Figure 4: Familiarisation of respondents on ADR

Figure 4 shows the main stakeholders' response with "familiarisation" on the ADR process in the road projects -- it has been found to be 87%, 93%, and 54% for clients, consultants and contractors, respectively. Similarly, "no familiarisation" on the ADR process in the road projects has been found to be 13%, 7%, and 46.15% respectively. Similarly, "I don't know" response in the ADR process in the road projects has been found 0%, 0%, and 0% respectively for them. It is found that most of the stakeholders have been familiar with the ADR process in the road projects.

7. CONCLUSION

From the primary data obtained from the questionnaire survey and analysis of secondary data obtained from case studies, Negotiation (i.e. amicable settlement) is the most applied ADR to resolve the disputes followed by Conciliation, Mediation and Adjudication. Arbitration is used as the fifth ADR method due to its high legal value in spite of the high time and cost. Based on the findings of the study, following alternative dispute resolution processes were the most effective to resolve the disputes/claims, i.e. Negotiation (i.e. amicable settlement), Conciliation, Mediation, Adjudication, and Arbitration, in that order. According to the Public Procurement Rule 2064 (11th amendment), after Negotiation disputes go directly to Arbitration. But Figure 4.2 shows that the first effective dispute resolution practice after Negotiation is Adjudication. The second is Arbitration and the third is Litigation. This means one stage of dispute resolution is needed

between Negotiation and Arbitration. Because Negotiation is based on understanding between two parties, whereas if there is Adjudication, which is evidence-based, it also helps the arbitrators in decision making.

From the cases, among the eight (8) projects, time spent in settlement of the disputes raises the project cost and increases the duration of project completion. From the study of the eight (8) cases, four (4) project were found to have been settled by Litigation on the basis of ADR (Adjudication and Arbitration) decision, one (1) project was sent for the reformation of Arbitration by Court/Litigation and other three (3) projects are awarded by ADR (Arbitration) but till date pending in settlement process by Litigation.

8. RECOMMENDATIONS

Following are the recommendations.

- Claims arising from delay in work progress can be reduced by realistic work schedule with resource deployment plan. The employer should closely monitor the activities with approved work schedule and provide appropriate solution for the issues arising from disputes / claims.
- Claims arising from delay in payment can be reduced by systematic disbursement of payment or direct payment to the people working in groups under contractor.
- The cash flow management of contractors can be controlled by control mechanism for

the use of mobilisation fund on the same project works.

- Consultants should timely submit the corrected drawing with any information on location to work with smooth execution of work and settle on brief choices in regards to the specialised and authoritative issues by taking manager endorsement where vital in determined time as required.
- Specialists ought to sort out a post agreement grant meeting mutually with project workers (counting specialised group) to affirm material accessibility, constructability and different limitations hailed up by workers for hire before their site preparation.
- Claims arising due to design error and quality of works can be reduced by strict enforcement of standard specification and Quality Assurance Plan (QAP).
- The project monitoring / evaluation and control system should be enforced strongly.

9. CONTEXTUAL CONSIDERATIONS

Conflict resolution, including arbitration, will occur in an organisational environment, so it is important to understand this context in order to evaluate and select the most appropriate method. This paper provides an illustration of these techniques in the instance of a specific project type and the key learning points can be discerned, for consideration in other scenarios. The relative power of the stakeholders will be a principal consideration in determining acceptable arbitration arrangements. The greater the power difference then the more likely that the scheme will be biased towards the more powerful party. Appropriate prior research is, therefore, needed to assess the situation, using informal and formal techniques (Blair and Pagano, 2021). The operating environment is significant, in that potential risks and opportunities should be considered. The final conflict resolution scheme should be subject to a risk assessment, in order to ensure validity in this sphere (Blair, Woodcock and Pagano, 2021). These arrangements may be embodied in a formal contract, perhaps contained in a specific clause, as shown in this paper. The contractual arrangements should be scrutinised and agreed by all of the parties, in order to achieve an accepted format (Blair, Woodcock and Pagano, 2022). The ultimate objective is to resolve any potential conflict without recourse to legal proceedings, utilising an agreed method and to avoid a position where the contract fails to deliver its intended outcomes. This should benefit all parties

and preserve the organisational relationships, thus providing business continuity. This research can, therefore, provide an illustration for more general application, in terms of contract conflict resolution.

10. ACKNOWLEDGEMENT

The author is thankful to all the professionals who took part in discussions. The author thanks Saanvi Lavanya (Betkumar) and Sachi Vanshika (Betlana) for being with us as source of happiness. Thanks to Dr. Garry Blair for his technical advice.

REFERENCES

- Acharya, N. k., Lee, Y. D., &Im, H. M. (2006). Conflicting factors in construction projects: Korean perspective. *Engineering, Construction and Architectural Management*, 13(6), 543 - 566.
- Aryal, S., &Dahal, R. K. (2018). A review of causes and effects of dispute in the construction projects of Nepal. *Journal of Steel Structure and Construction*, 4(144), 2472-0437.
- Barrie DS, Paulson BC. (1992). *Professional Construction Management*, McGraw-Hill, Inc., USA.
- Bhattacharjee, Anol, "Social Science Research: Principles, Methods, and Practices" (2012). Textbooks Collection. 3. http://scholarcommons.usf.edu/oa_textbooks/3
- Blair G, Woodcock H, Pagano R. (2021). Risk Management in the Post Pandemic Business Environment. *J Adv Res Alt EnergEnv Eco*, 8(3&4): 15-21.
- Blair G, Woodcock H, Pagano R. (2022). To Outsource or Not to Outsource: Resource Decision-Making in the Project Management Environment. *J Adv Res Alt EnergEnv Eco*, 9(3&4): 10-20.
- Blair, G., & Pagano, R. (2021). A Guide for Researchers to Negotiate the Research Process.. *Journal of Innovative Research in Education & Management*, 4(3), 1-5. Retrieved from <http://ijirem.com/>
- Cakmak, P. I., &Cakmak, E. (2013). An analysis of causes of disputes in the construction industry using analytical hierarchy process (AHP). *AEI 2013: Building Solutions for Architectural Engineering*, 94-102.
- Chan, E. H. W., and Suen, H. C. H., 2005. Dispute resolution management for international construction projects in China, *Management Decision*, 43(4), 589-602.
- Chester, M., & Hendrickson, C. (2005). Cost impacts, scheduling impacts, and the claims process during construction. *Journal of construction engineering and management*, 131(1), 102-107.

- Deoja, B. B., (2013). Claim Management in Construction Contract. In: NEPCA (Nepal Council of Arbitration), Seminar on Claim Management in Construction Contract. Union House, Kathmandu, 16 September 2013. Kathmandu: NEPCA. <https://www.nepca.org.np>
- Fenn, P., Lowe, D., & Speck, C. (1997). Conflict and dispute in construction. *Construction Management & Economics*, 15(6), 513-518.
- Mashwama, X., Aigbavboa, C., & Thwala, D. (2016). Investigation of construction stakeholders' perception on the effects & cost of construction dispute in Swaziland. *Creative Construction Conference* (pp. 196-205). Elsevier Ltd.
- Mishra AK. Project management: theory and practice from different countries. Project management: theory and practice from different countries. Tamilnadu: DK International Research Foundation. 2020 . <http://doi.org/10.5281/zenodo.4817542>
- Mishra, A. K. (2018). Dispute Resolution Practice of Project Management in Nepal. *J Adv Res Busi Law Tech Mgmt* 2018; 1(4): 1-11. <https://doi.org/10.5281/zenodo.7288359>
- Mishra, A. K., & Aithal, P. S. (2022). Effectiveness of Arbitration in Construction Projects. *International Journal of Management, Technology and Social Sciences (IJMITS)*, 7(1), 96-111.
- Mishra, A. K., & Aithal, P. S., (2022). Planning Assessment of Transport System: A Case from Nepal. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 6(1), 280-300. DOI: <https://doi.org/10.5281/zenodo.6577822>
- Mishra, A. K., Magar B. R. (2017). Implementability of municipal transport master plan of Bandipur Inner Ring Road, Tanahun, Nepal. *International Journal of Scientific & Technology Research*, 6(8), 306-313.
- Mishra, A. K., Mandal, L., & Pant, R. R. (2018). Causes of dispute in international competitive bidding road contracts funded by Asian Development Bank in Nepal. *J. Adv. Res. Busi. Law Technol. Manage*, 1(3), 5-16. <https://doi.org/10.5281/zenodo.7288516>
- Mishra, A. K., Shah, Ram Chandra & Aithal, P. S. (2020). Operational Assessment of Public Transport: A Case of Kathmandu, Nepal. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 4(2), 132-152. <https://doi.org/10.5281/zenodo.4033197>
- Mishra, A. K., Yadav, P., & Aithal, P. S. (2021). Time and Cost Performance Status of Sikta Irrigation Contract. *International Journal of Management, Technology and Social Sciences (IJMITS)*, 6(1), 286-305.
- Mishra, Anjay Kumar, & Aithal, P. S., (2021). Foreign Aid Movements in Nepal. *International Journal of Management, Technology, and Social Sciences (IJMITS)*, 6(1), 142-161. DOI: <https://doi.org/10.5281/zenodo.4677825>.
- Mitropoulos, P., & Howell, G. (2001). Model for understanding, preventing, and resolving project disputes. *Journal of construction engineering and management*, 127(3), 223-231.
- MOLJA. 2012. Public Procurement Act 2063 (2007). Kathmandu, Nepal: Ministry of Law, Justice & Parliamentary Affairs (MOLJA). <http://www.moljpa.gov.np/>
- MOLJA. 2012. Public Procurement Regulation 2064 (2008). Kathmandu, Nepal: Ministry of Law, Justice & Parliamentary Affairs (MOLJA). <http://www.moljpa.gov.np/>
- Nepal Law Commission, 2011. Mediation Act 2068 (2011). Kathmandu, Nepal: Nepal Law Commission. <https://www.lawcommission.gov.np/en/>
- Ogunlana, S. O., Promkuntong, K., & Jearkjirm, V. (1996). Construction delays in a fast-growing economy: comparing Thailand with other economies. *International journal of project Management*, 14(1), 37-45.
- Sambasivan, M., & Soon, Y. (2007). Causes and effects of delays in Malaysian construction industry. *International Journal of Project Management*, 25(5), 517-526.
- Sharma, R. H., & Awal, R. (2013). Hydropower development in Nepal. *Renewable and Sustainable Energy Reviews* (21), 684-693.
- Singapore International Arbitration Centre (SIAC) assessed from <http://www.siac.org.sg> and SIMC website at www.simc.com.sg Singapore Mediation Centre