

CHAPTER 17

Arbitration in Dispute Management

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ABSTRACT

Disputes are common in construction projects. These disputes should be resolved in a timely manner so that it least effect the time and the cost of the project. Arbitration can be used as a dispute resolution mechanism for the speedier and cost-effective method. With more complex projects being developed in India, the need for effective dispute resolution techniques like arbitration will play a crucial role in dispute management in construction industry. The study focuses on challenges faced by arbitration and changes that should be brought to resolve the disputes in construction industry to avoid cost overrun and completion of project on time.

Keywords: Arbitration; Dispute resolution; Construction industry; ADR; Contract management; Arbitration and Conciliation Act, 1996; Legal framework; Cost overruns.

1.0 Introduction

1.1 Background

The Construction sector has a large number of stakeholders such as in other various stakeholders, i.e., employers, regulators, contractors, consultants, and project owners. Thus, on this ground, it gives rise to common disputes that occur due to delays, contract violations, design faults, and unforeseen events. Routine litigation is typically lengthy and costly; therefore, arbitration becomes an emerging viable option. The writer introduces the use of arbitration in the resolution of construction-themed disputes in this paper and its advantage over traditional legal procedures

1.2 The role of arbitration in construction disputes

Arbitration is a structured but adaptive and agile means of resolving conflicts and awarding legally binding substitutes for court battles. Arbitration is codified under India's Arbitration and Conciliation Act, 1996, allowing parties to settle divergences through unbiased arbitrators, trade experts, and legally binding decrees.

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1.3 Advantages of settling the dispute by arbitration

ADR employs some of these methods like adjudication, conciliation, and mediation. Research targets arbitration as the most effective method of resolving construction disputes in mega construction projects. Gamage (2024) and Soni & Pandey (2017) argue that arbitration is the most favored method of resolving mega construction infrastructure disputes because it is enforceable by law and can be enforced. The power of arbitration is enforceability, confidentiality, and speed. Research, however, points out some of the disadvantages like arbitrators' appointment bias, delay in enforcing the award, and costly arbitration. Gamage (2024) offers a reflection on how ADR methods, in this case, arbitration, have helped in the management of delay and cost overruns in projects through the provision of a formal but flexible alternative. Similarly, Karpe & Joshi (2018) cite contractual imbalances, technical issues, and behavioral issues as key causes of dispute in the construction industry and arbitration as an effective solution method.

1.4 Research objectives

This study aims to:

- Identify and examine the most common causes of disputes in construction projects.
- Evaluates the effectiveness of arbitration in resolving construction disputes.
- Analyze arbitration case studies to highlight key trends and outcomes.
- Compare arbitration with other dispute resolution methods to determine its relative advantage.

2.0 Research Methodology

This study follows a qualitative research approach, using case studies, legal precedent reviews, and comparative analysis to assess arbitrations effectiveness in resolving construction disputes. By examining real world arbitration cases in the construction industry, the research identifies key trends and patterns in dispute resolution, challenges faced, and arbitration effectiveness.

The research follows a structured methodology that includes:

- *Literature Review*: Systematic and critical review of arbitral case law, literature and laws to develop a theoretical framework.
- *Case Study Analysis*: Examine some construction arbitration cases to see the common issues and observe the remedy process.
- *Legal Framework Analysis*: Indian law of arbitration in terms of its effect on resolving disputes, including Indian disputes.
- *Comparative Analysis*: Comparative analysis of arbitration vis-à-vis other methods for dispute resolution, i.e., litigation and mediation, to ascertain its positives and negatives.
- *Med-Arb Approach*: Med-Arb is a blend of mediation and arbitration to resolve construction disputes expeditiously at reduced cost in a binding manner.

3.0 Literature Review

3.1 Alternative Dispute Resolution (ADR) in construction

ADR covers multiple approaches, including mediation, conciliation, and adjudication. Studies highlight that arbitration is the most effective method in resolving disputes in large scale construction projects. Study by Gamage (2024) and Soni & Pandey (2017) highlights that arbitration has become the most preferred method in large-scale infrastructure disputes due to its legally binding nature and enforceability. The advantages of arbitration include enforceability, confidentiality, and time efficiency. However, studies also find several problems, such as arbitrator selection biases, delay in award enforcement, and high arbitration fees. A study by Gamage (2024) highlights how ADR techniques, especially arbitration, have contributed to reducing project delays and cost overruns by offering structured yet adaptable solutions. Similarly, Karpe & Joshi (2018) identify contractual disputes, technical issues and behavioral factors as a leading cause of conflicts in the construction sector, with arbitration emerging as an effective resolution strategy.

3.2 Arbitration and Conciliation Act, 1996

India's arbitration law is regulated by the 1996 Arbitration and Conciliation Act. As required by law, the Act adopts international standards of arbitration. In spite of such legislation, there are some issues, which also include judicial interference too deeply and institutional arbitration lack. Party autonomy by which the parties are entitled to select the arbitrators, can arbitral procedure, and the law applicable, is an essential provision of the Act. It is neutral since it offers equal and fair apportionment of procedure. Last but not least, it brings finality to the awards so that the arbitrators' awards are binding and enforceable in law. Non-governing arbitration is also known as "hoc" arbitration. Although efficient and economically advantageous, the process will always produce procrastination and inefficiency in the process without highly structured parties. Institutional arbitration provides formal rules with official processes and bureaucracy assistance from arbitral institutions like the International Chamber of Commerce (ICC) or Singapore International Arbitration Centre (SIAC), although these provide official processes and bureaucracy assistance. Institutional arbitration is a highly formal process but one widely available to be used less than optimally in India. Raju's study demonstrates that institutional arbitration can make dispute resolution more reliable and effective.

4.0 Case Study Analysis and Findings

A critical review of construction industry disputes in arbitration to achieve primary trends regarding dispute resolution. Findings provide an overview of the efficacy of arbitration and what are some of the prime factors behind its success. Major findings reveal the need for explicit contracts because clearly written contracts lower conflict to a great extent, as can be

seen in the case of Mumbai International Airport Ltd. Although arbitration is intended to be fast in solving disputes, it leads to delays due to difficulties in enforcing the awards. Although generally faster than litigation, arbitration in complex matters can be expensive.

4.1 Key case studies

Case Study 1: SEPCO vs. Power Mech Projects Ltd. (2021): The point of contention was interim relief under Section 9 of the Arbitration Act when SEPCO had appealed an arbitral award in favor of Power Mech. The question was whether such interim relief could be granted once an arbitral award was appealed. The Supreme Court held the validity of such relief by noting how crucial it was for the protection of arbitration orders even after an award.

Case Study 2: Tunnel Construction Arbitration: Here, a contractor brought action for extra charges owing to adverse rock conditions as opposed to conditions indicated in the notice of tender. The issue was whether the contractor was or was not to be paid for such unexpected conditions at site. The tribunal went against the contractor, but here one should refer to the requirement to carry out comprehensive pre-bid site investigation.

Case Study 3: Road Construction Arbitration: A contractor had demanded additional for delays in the project under the cover of weather conditions and poor ground. The underlying issue in dispute was whether there was merit in the form of additional compensation for the delays. Minimum compensation was ordered by the tribunal but demanded the contractor to pay for risk appraisal and poor planning for the project.

Case Study 4: Change Orders in Building Construction Arbitration: Here, a contractor sought extra costs due to a series of change orders that resulted in drastic changes to the scope of work for the project. Whether cumulative changes warranted extra costs by the contractor was the question. The tribunal concluded that drastic change orders justified the contractor's claim and entitled the contractor to extra costs and extended project durations.

Case Study 5: Defective Work in Bridge Construction Arbitration: A conflict existed regarding faulty workmanship during bridge construction. The crux point was whether contractor negligence or design faults caused the defects. The tribunal held joint liability between contractor and designer group, with the recognition that each was at fault.

Case Study 6: Mumbai International Airport Ltd. vs. Airports Authority of India: This was a matter of honouring lease terms in a major infrastructure undertaking. The question on the table was whether conditions under a lease can be enforced. The tribunal had recourse to the importance of well-enforceable terms in a contract in a bid to eschew such controversy.

Case Study 7: Union of India vs. Mago Construction Pvt. Ltd.: A client had been awarded damages due to delay resulting from client non-conformity through delayed approvals. Whether delay was justified or not to qualify for awarding damages was in question. The arbitration relied on the assumption that delay was on the client for insufficiency in site readiness as basis to award damages.

Case Study 8: Forum projects private ltd. vs. berhampur development authority: This was a case of a dispute over payment terms and the performance of a contract. The issue was whether payment disputes arising from non-adherence to contracts were legitimate. The tribunal dismissed the contractor's claim since they failed to adhere to the terms of the contract agreed upon.

Case Study 9: Union of India vs. Popular Construction Co.: The Union of India challenged an arbitral award where the period of limitation provided under Section 34 of the Arbitration Act itself had lapsed. The issue was whether the period of limitation could be extended under Section 5 of the Limitation Act. The Supreme Court held that it was not feasible and upheld the strict period of limitation to challenge arbitral awards.

5.0 Legal Framework Assessment

The Arbitration and Conciliation Act, 1996, was taken over into the UNCITRAL Model Law for the adoption of the best international practices. The Arbitration in India is governed by the Arbitration and Conciliation Act, 1996. The second time procedure was overhauled in 2015, 2019, and 2021. The 2015 amendment introduced time limitations for arbitral awards, reduced judicial interference, and enhanced the independence of arbitrate proceedings. The amendment of 2019 necessitated the establishment of the Arbitration Council of India and made provisions for the appointment of arbitrators rather than institutional arbitration. The amendment of 2021 covered conflict of laws for enforcement of awards by making the grant of an automatic stay subject to conditions. All these advances have restored the legitimacy, effectiveness, and enforceability of arbitration in India and put it on its feet as a more respectable means of dispute resolution.

5.1 Impact of disputes on project schedule, cost and quality

Construction disputes have tangible implications for schedule, cost, and quality and are likely due to contract interpretation, delay, payment, and faulty work. They lead to delays in projects, incur costs in terms of claims and litigation expenses, and interrupt cash flow, with performance consequences. Cutting corners contractors will be likely when contractors are diverted. Intractable conflict also leads to tension on stakeholder relations and working together. Conflict resolution is crucial to continuous progress, quality, and legality. Interim relief, rock classification, delays, change orders, faulty work, enforcement, interpretation of the contract, payment disputes, non-performance, and time-barred claims are issues that adversely affect project timeliness, increase costs, and decrease quality. They result in work stoppages, cost overruns, cash flow issues, rushed implementation, and sub-standard work, eventually deteriorating project results. Pre-arbitration litigation of construction projects induces serious delay, excessive legal expenses, interruption of cash flow, and compromised quality with financial costs. Following arbitration, binding awards accelerate settlement, permit work to

continue, limit costs above litigation, provide easier cash flow, and ensure quality by way of expert rulings.

Table 1: Comparison of Dispute Impact Before and After Arbitration (Case Study)

Impact Area	Before Arbitration (High Negative Impact)	After Arbitration (Improved Impact)
Project Schedule	<ul style="list-style-type: none"> • Major delays and stoppages. • Slow enforcement and decisions • Penalties and overruns. 	<ul style="list-style-type: none"> • Faster settlements. • Work continues during disputes • Quicker closure than litigation.
Project Cost	<ul style="list-style-type: none"> • High legal fees. • Cash flow disruptions. • Increased costs. 	<ul style="list-style-type: none"> • More cost-effective • Stable cash flow • Reduced cost escalation.
Project Quality	<ul style="list-style-type: none"> • Poor workmanship from financial strain. • Quality compromises. 	<ul style="list-style-type: none"> • Expert resolutions maintain quality.

Table 2: Comparison of Dispute Resolution Methods (Case Study)

Identified Causes of Dispute	Adjudication	Litigation	Conciliation	Arbitration
Interim Relief Dispute	Quick but Temporary	Time-Consuming	Informal, non-binding	Binding & Flexible
Rock Classification Dispute	Expert Decision	Legal Complexities	Mutual Agreement	Technical Expertise
Delay Dispute	Specialized Review	Court Backlogs	Encourages Settlement	Binding & Enforceable
Change Order Dispute	Fast Decision	Costly & Lengthy	Mutual Agreement Possible	Fair & Confidential
Defective Work Dispute	Construction Knowledge	Expensive Litigation	Amicable Resolution	Detailed & Technical
Contract Interpretation Dispute	Expert Decision	Legal Complexities	Negotiation Based	Enforceable & Clear
Payment Dispute	Quick Resolution	Court Delays	Mutual Agreement	Strong Enforcement
Contract Non-Fulfilment Dispute	Partial Relief Possible	Prolonged Legal Battle	Encourages Settlement	Legally Binding & Final
Time-Barred Dispute	Some Relief Possible	Rigid Legal Framework	Informal, Limited	Flexible & Case-Specific

6.0 Comparative Analysis

Arbitration offers a binding, flexible, and technologically responsive method of resolving construction disputes. Compared to the temporary relief of adjudication, the non-binding solutions of conciliation, or the expensive time-wasting of litigation, arbitration offers faster, expert-guided, and enforceable solutions. It effectively resolves disputes like interim relief, payment claims, and interpretation of contracts in equal proportions of legal authority and industry expertise, thus ideal for construction disputes of robust nature.

7.0 Implementing Hybrid Resolution Models: Med-Arb Approach

While arbitration ensures capable and binding decisions, it is sometimes rigid and time-consuming. Mediation, based on cooperation and early resolution, settles disputes quickly and preserves relations. Med-arb, in which arbitration is combined with mediation, offers the best compromise, is faster, more flexible, and enforceable, and therefore an even better hybrid solution to adjudication or litigation. Med-arb is a combination of mediation and arbitration ideas. The parties try to settle first by way of mediation. In case the matter is not settled, it defaults to arbitration, wherein a final and binding award is made. This offers flexibility at the beginning and certainty at the end. For Med-Arb to be utilized effectively, contracts need to include clearly stated Med-Arb procedures. Appoint neutrals trained in arbitration and mediation. Create a carefully planned timeline for both phases and maintain neutrality in case the same person is acting as the mediator and the arbitrator. The use of arbitration institutions and increased awareness among stakeholders within a project are invaluable to the application of this model but making arbitration the first option for binding settlement. The model has many strengths: it accelerates dispute resolution by facilitating early resolution through mediation, gives enforceability in the event of arbitration, if necessary, reduces the cost of law overall, conserves business relationships, and is adaptable as regards finality of orders. All these advantages combined make it most appropriately suited to complex construction disputes.

7.1 Real case example of Med-Arb in construction dispute

In a commercial building project, a design company supplied materials to a construction company. A dispute emerged regarding the material specifications, leading to withheld payments and a standstill in project progress. The parties, despite their longstanding business relationship, could not resolve the issue through legal advisors. They opted for the Med-Arb route as defined in their contract. The process began with mediation, which clarified misunderstandings but failed to resolve monetary disagreements. The dispute was then referred to the same neutral for arbitration, who issued a legally binding decision within two weeks. This swift and structured process helped resume project work while preserving the working relationship.

8.0 Challenges and Recommendations

8.1 Challenges in arbitration

Despite its advantages, arbitration has many shortcomings as well. Its greatest weakness is being prohibitively expensive, particularly in the case of foreign cases where arbitration may be way too expensive. Costs in certain cases may even be on equal terms or even more expensive than regular litigation, particularly where multiple arbitrators and expert witnesses are employed. Also, enforcement of awards is delayed to some extent because courts take time to enforce arbitral awards, hence diluting the efficacy of arbitration. Differences in national laws and court rulings also complicate enforcement. This creates a feeling of injustice and dilutes the trustworthiness of the arbitration process. Also, unavailability of certain arbitration hearings can destroy the confidence among the parties concerned.

8.2 Recommendations for improvement

For ensuring efficiency in arbitration, certain steps are advised. Institutional arbitration would be made possible through persuasion of parties to make use of well-known arbitration institutions so that consistency and objectivity of process may be enhanced. Court support could be supplemented by streamlining the legal process, which also would go towards making enforcement of an arbitration award much faster. There is also a need for robusting the training of the arbitrators so that the arbitrators are adequately well-equipped with technical expertise in given fields such as construction disputes.

9.0 Conclusion

Arbitration assumes an essential role in the dispute resolution process and achieves the perfect balance between cost-effectiveness, efficiency, and expert determination. While arbitration is blessed with many advantages over traditional litigation, it faces challenges such as delays in enforcement and inefficiencies in procedure. Accordingly, institutional arbitration and legal enforcement can be strengthened further, and Hybrid models propagated, which have the potential to mostly increase the arbitration mechanism. With its remedy, the construction sector will be able to derive more accurate and timely resolution of disputes, hence ensuring smoother delivery of projects and financial risk diminution.

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