CHAPTER 48

Decision-making Framework for Compensations Claimed over Extension of Time Claims

Adil Ahmad[1], Sharayu Ingle[1], Tejas Bhondiwale[1] and Harapriya S.[2]

ABSTRACT

Most construction projects are executed through contracts which are generally not easy to comprehend. Increase in size and complexities of construction projects lead to further ambiguities in the prevailing contract forms causing adversarial impacts. This includes an increase in the number and frequency of claims and disputes, besides time and cost overruns. Moreover, construction projects often face delays due to various unforeseen circumstances per say force majeure, leading to claims arising over Extension of Time (EoT) for compensation. In many cases, with approval of the Extension of Time, the claimant is eligible for further compensation for the damage sustained during the extended period. There is a need to develop a system that can assist stakeholders at every hierarchy to understand the necessity and quantify their claims prior to taking it to litigation. In this study, an attempt has been made to develop a decision-making framework to address the compensations laid over by EOT claims. A structured database was created wherein reasons for EOT along with compensation were listed. Data regarding the EOT claims for various disputes was collected through arbitration cases in the construction industry pertaining to the Indian scenario. Each of the claims was studied and the reasons behind the judgment were proved.

Keywords: Construction projects; EOT; Compensation; Arbitration cases; Decision-making framework.

1.0 Introduction

A contract, as per the Indian Contract Act 1872, is an agreement enforceable by law, made with free consent, lawful consideration, and a valid objective. In construction, contracts typically set a specific timeline for project completion. However, unforeseen challenges like adverse weather, site conditions, scope changes, material delays, or third-party disruptions often necessitate an Extension of Time (EOT). Delays impacting a project's critical path may entitle contractors to an adjustment of the contractual completion date through a contract amendment or change order.

[1]*School of Construction, NICMAR University, Pune, Maharashtra, India*
[2]*Corresponding author; School of Construction, NICMAR University, Pune, Maharashtra, India (E-mail: P2370128@student.nicmar.ac.in)*

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If a delay is beyond the contractor's control, they may seek not only an EOT but also compensation when damages exceed permissible limits. Claims must be substantiated with cost calculations for human resources, machinery, materials, profit loss, and other additional expenses incurred during the extended period. Evaluating these claims is complex, requiring assessment of entitlement, causation, delay quantification, contractual terms, and legal considerations. This project aims to develop a structured decision-making framework for assessing compensation over EOT claims. By integrating key factors, the framework will provide a transparent and equitable approach, streamline claim resolution and ensure fair outcomes for all stakeholders.

2.0 Need of the Decision-making Framework

In construction projects, delays are a common challenge that can significantly impact timelines and costs. When a project exceeds its scheduled completion period, contractors may seek an Extension of Time (EOT) to avoid penalties. However, in cases where the delay is caused by factors beyond the contractor's control—such as client-side inefficiencies, delayed approvals, or unforeseen site conditions—contractors may also claim compensation for additional expenses incurred.

The need for this study arises from the complexities involved in assessing and deciding compensation, claims over EOT. There is often ambiguity in determining whether a contractor is entitled to compensation and to what extent.

Inconsistent decision-making can lead to disputes, financial losses, and delays in project execution. The claims and dispute resolution process in construction and other large projects can have significant time and cost implications. Delays caused by claims often result in extended project timelines, which in turn increase labour and material costs, as well as administrative and legal expenses. Extended conflicts also consume valuable resources and can strain relationships among project stakeholders, further complicating the process. With predefined criteria and standardized processes, communication remains transparent, and conflicts can be resolved more quickly. A well-defined decision-making framework can help the Stakeholders to minimize unnecessary major cost burdens incurred by filing misguided and infructuous claims.

This study aims to develop a systematic approach to analyse compensation claims over EOT, considering legal, contractual, and practical aspects. By establishing clear guidelines, the study will help project stakeholders—including contractors, engineers, and clients—make informed decisions, minimize conflicts, and improve financial planning in construction projects. Every other Construction Project is unique and complex in its own way, and so are the Claims and Disputes arising from the delays and non-conformity in execution of the contract. The Dispute Resolution Mechanism followed for each case is subjective to the Arbitrator. This limits the decision-making effectiveness of the Framework for the Stakeholders.

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3.0 Decision-making framework

3.1 Data collection

A total of 54 Arbitration Awards were collected from different Arbitrators pertaining to Indian Construction Industry. These awards were thoroughly studied and were segregated according to our Project scope. 26 Arbitration Awards were found where the client awarded Extension of Time to the Contractor on account of delay attributed to the client. In these cases, the Contractor asked for extra Compensation for the damages sustained by them during the extended period for maintaining their day-to-day expenditure.

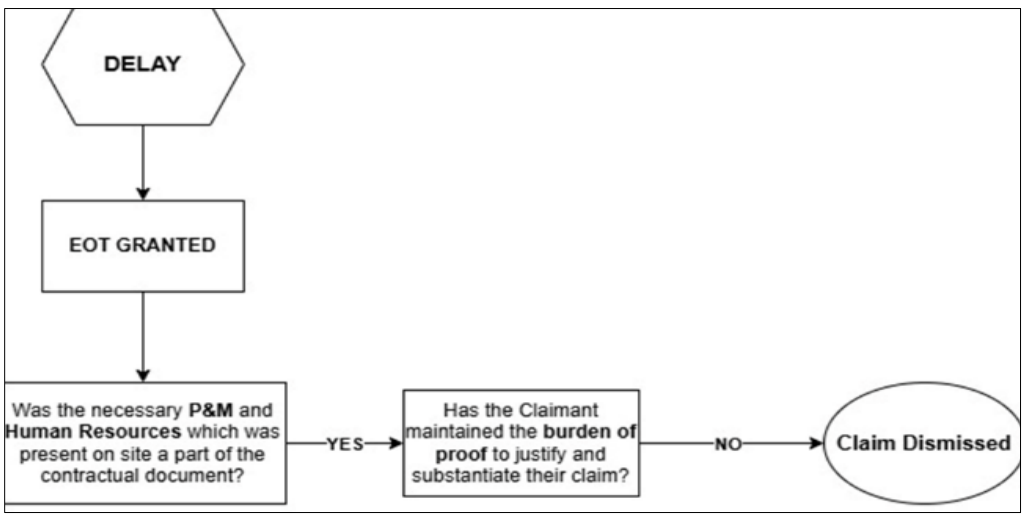
3.2 Data analysis

Out of 54 cases, 26(67%) relevant cases were found which were further segregated into four categories i.e. Escalation, Extra cost, Loss of profit, Legislation. Out of these categories, claims related to extra cost were found to be greater in number. Total 30 cases which is 61% of all the cases, were found from 54 awards. When seeking compensation for delays, a contractor must first verify whether the contract includes provisions for deploying Plant & Machinery (P&M) and Human Resources on-site. Proper documentation is essential to substantiate claims for additional costs incurred due to project delays.

3.3 Development of decision-making framework

Flowchart- Logic 1 outlines the process for evaluating a contractor's claim for compensation due to project delays.

Figure 1: Flowchart- Logic 1



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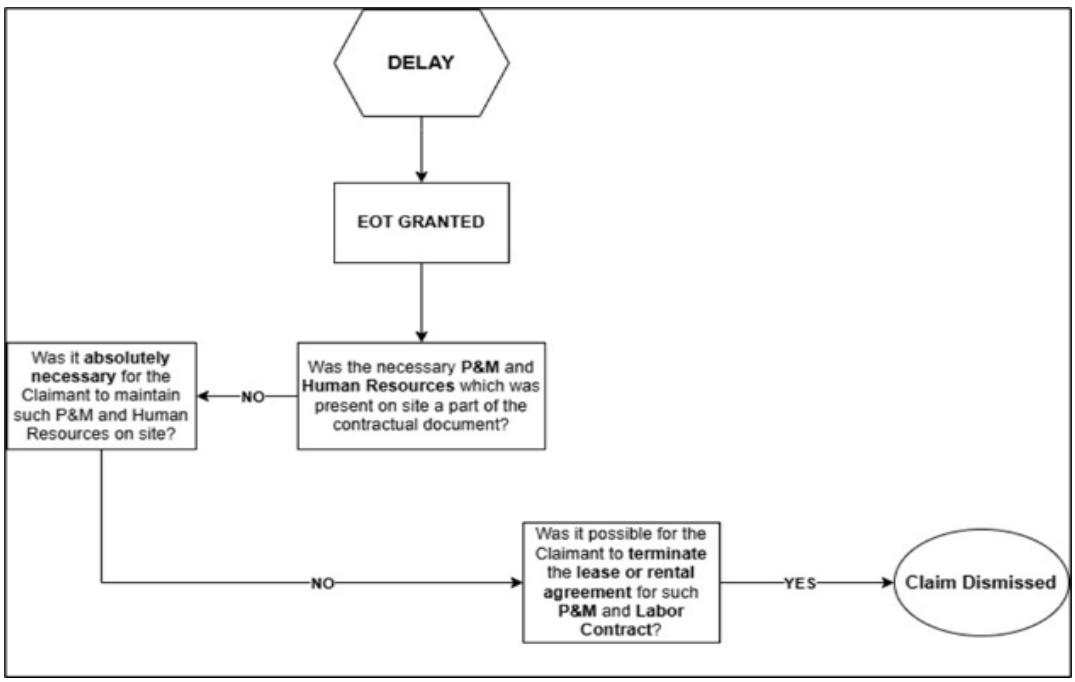
When a delay occurs and an Extension of Time (EOT) is granted, the first step is to determine whether the contract explicitly requires the contractor to maintain Plant & Machinery (P&M) and human resources on-site. If there is no such contractual obligation, the claimant has the option to terminate rental or labor contracts, and any claim for compensation is dismissed. If the contract does mandate these resources, the claimant must provide sufficient documentary evidence, such as muster rolls or payroll records, to justify the claim. Failure to provide this evidence results in the dismissal of the claim. This process ensures that claims are substantiated and align with contractual provisions.

Figure 2: Flowchart- Logic 2



Flowchart- Logic 2 determines the validity of a contractor's compensation claim after an EOT is granted. If maintaining P&M and labor on-site was not contractually required, the claim is dismissed. If required, but termination of rental or labor agreements was possible, the claim is also dismissed. Only claims with contractual obligations and supporting evidence are considered The flowchart- Logic 3 outlines the conditions under which a compensation claim is awarded after an EOT is granted. If the contractor was required to maintain P&M and labor on-site, had a valid labor or rental contract, and notified the Engineer in Charge (EIC) of damages due to idle resources, the claim is considered. The claimant must also provide documentary evidence such as salary slips, attendance registers, and maintenance receipts to substantiate the claim.

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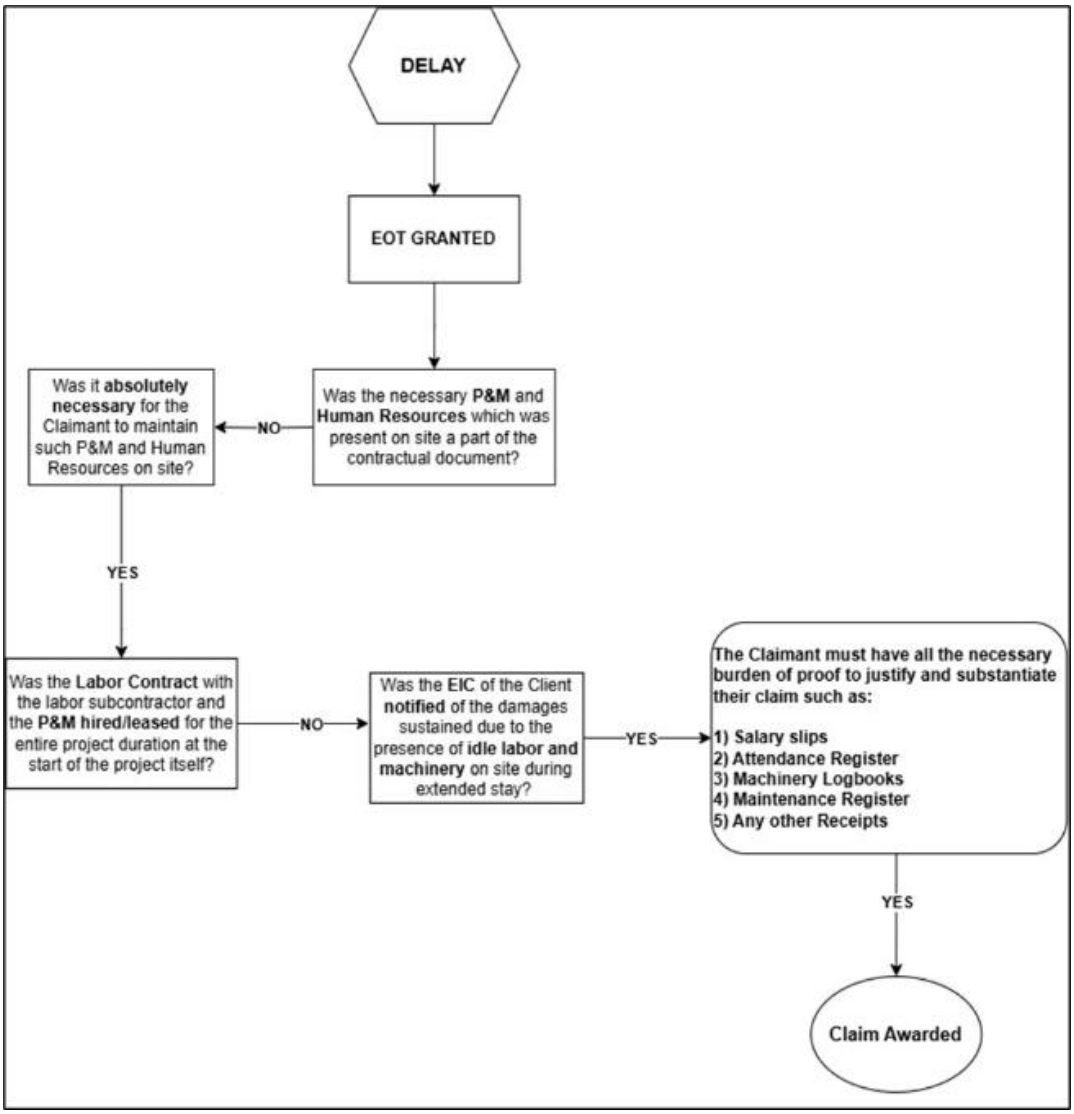
Figure 3: Flowchart- Logic 3



Flowchart- Logic 4 explains the conditions under which a compensation claim is awarded after an EOT is granted. If labor and P&M were hired for the entire project duration from the start, the claim is valid even if the EIC was not notified. However, the claimant must provide documentary evidence such as salary slips, attendance registers, and maintenance records to substantiate the claim.

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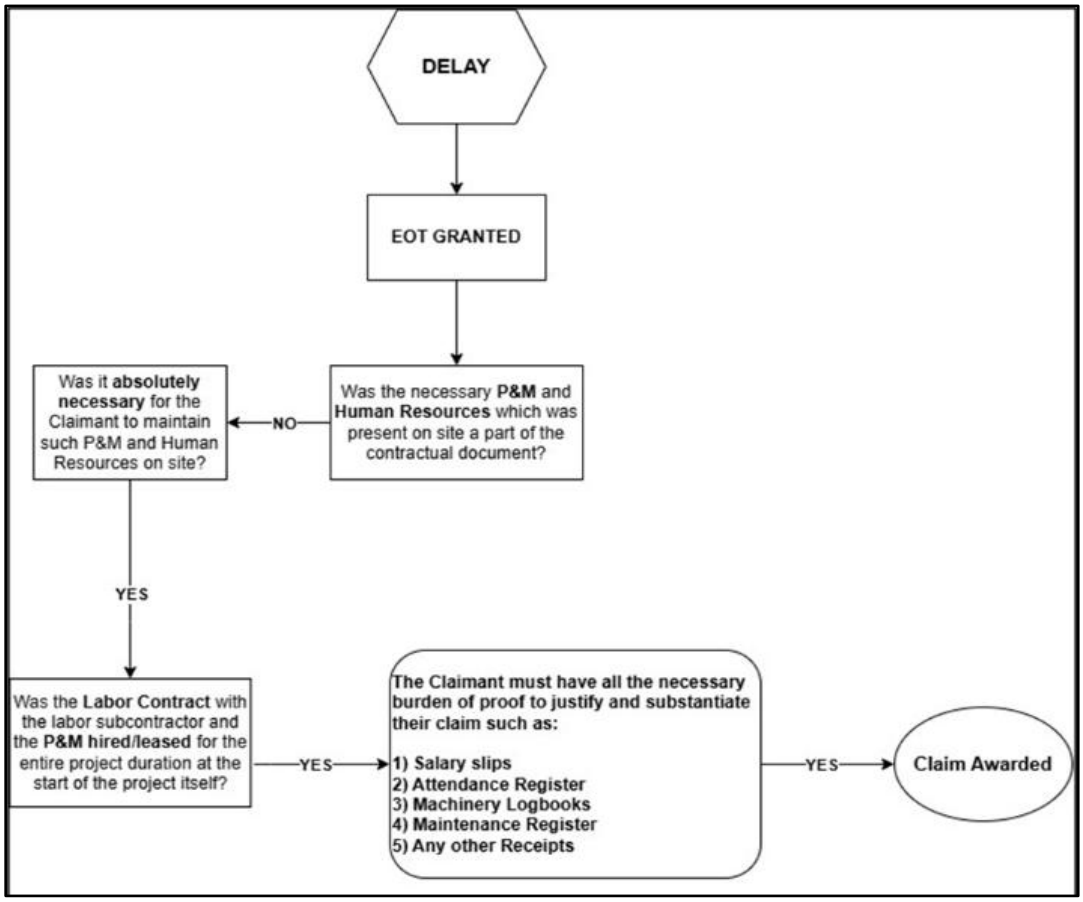
Figure 4: Flowchart- Logic 4



The framework has been developed after careful study of the arbitration awards. An attempt was made to understand the reasoning behind the judgments by the Arbitrators. The framework, structured using multiple flowcharts, ensures that only well-substantiated claims with valid contractual provisions and supporting evidence are considered. By providing a systematic approach to claim evaluation, this framework minimizes conflicts, improves financial planning, and strengthens dispute resolution mechanisms. The most important aspects that a claimant should consider before going for a claim are-

1. The contractual provision for such a claim.
2. Notification to the EIC at the right time for the dispute.
3. Maintaining all documentary evidence for justification and substantiation of claims.

The following framework offers claimants an organized method for requesting compensation for project delays by applying the logical reasoning found in arbitration disputes.

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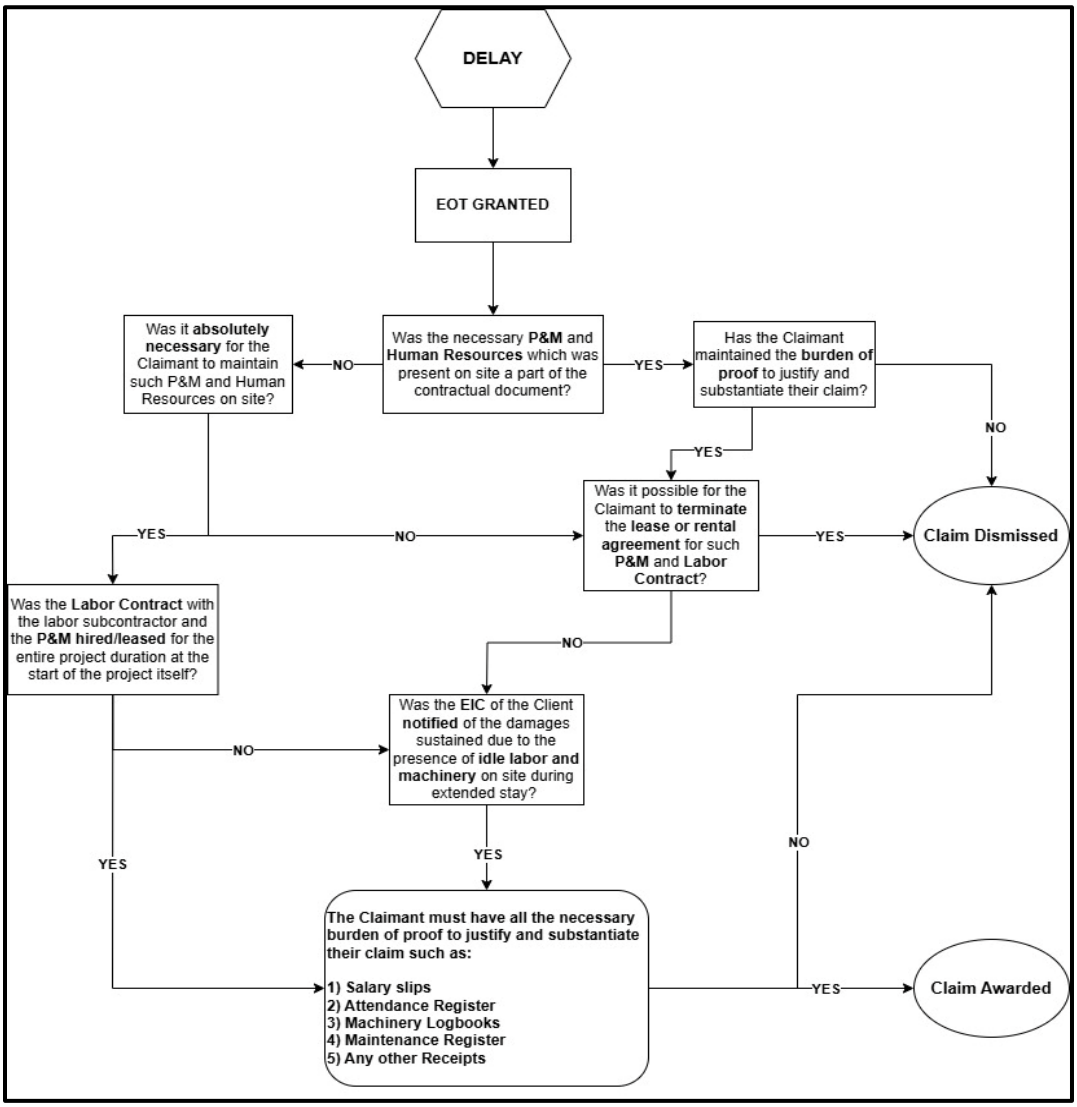
Figure 5: Flowchart - Framework for Losses Incurred due to Idle Labour and P&M



4.0 Conclusion

This study developed a structured Decision-Making Framework for evaluating compensation claims arising from Extension of Time (EOT) in Indian construction projects. Delays often lead to disputes and financial losses, making informed decision-making crucial for stakeholders. Analyzing 54 arbitration cases, it was found that 26 involved EOT claims where

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contractors sought compensation for extended stay costs. These claims were classified into four categories: escalation claims due to inflation, extra cost claims for idle labor and machinery, loss of profit claims from delayed completion, and legislative changes leading to additional costs.

The framework provides a structured approach for arbitrators to assess claims based on key factors, including contractual provisions for labor and machinery, obligations during the extended period, contract terms, timely notification to the Engineer-in-Charge (EIC), and supporting documentation such as salary slips, logbooks, and receipts. By offering a systematic evaluation method, the framework enhances transparency, ensures fair compensation, and minimizes disputes. While designed for the Indian construction sector, it provides a foundation for improving claim resolution, strengthening contract clarity, and promoting industry-wide best practices.

References

Al Marri, D. A. (n.d.). Mitigating legal risks in construction project contracts: The importance and applicability of force majeure clauses.

Central Public Works Department (CPWD). (2014). *General conditions of contract (GCC-2014)*. Government of India.

Chaphalkar, N. B., & Patil, S. K. (2012). Decision support system for dispute resolution in construction contracts. *KSCE Journal of Civil Engineering*.

Di Paola, L., & Spanu, P. (2006). Concurrent delays. *Studio Legale Bonelli Erede Pappalardo & Tecnimont SPA*.

Ezel Din, A. S., & Abu Helw, A. (n.d.). Proposed force majeure clause for construction contracts under civil and common laws.

Galloway, P. D., Nielsen, K. R., & Dignum, J. L. (Eds.). (2012). Managing giga projects: Advice from those who've been there, done that. *American Society of Civil Engineers*.

Gamage, A. N. K. K., & Kumar, S. (2024). Causes of disputes in construction projects. *Scientific Journal of Civil Engineering, 8*(2), Article 002.

Hansen, S. (n.d.). Does the COVID-19 outbreak constitute a force majeure event? A pandemic impact on construction contracts.

Hansen, S., Rostiyanti, S. F., & Tjahyadi, W. (n.d.). A practical decision-making framework for extension of time claims associated with force majeure events.

DOI: 10.17492/JPI/NICMAR/2507048 *ISBN: 978-93-49790-54-4*

Iyer, K. C., Chaphalkar, N. B., & Joshi, G. A. (2008). Understanding time delay disputes in construction contracts. *International Journal of Project Management*.

Long, R. J. (n.d.). Analysis of concurrent delay on construction claims.

Osman, I., & Ataei, H. (n.d.). Studying construction claims due to COVID-19 for road and highway projects.

Patel, R. A., Patel, M. B., Patel, K. A., & Patel, D. A. (n.d.). Understanding time delay disputes in construction contracts.

Patil, J. D., & Savarkar, U. R. (n.d.). Comparative study of extension of time claims with case studies.

Patil, S. K., & Chaphalkar, N. B. (2020). Dispute resolution decision support system for Indian construction contracts. *NICMAR Journal of Construction Management*.

Patil, S. K., Sandbhor, S., Chaphalkar, N. B., & Patil, K. R. (2023). Development of dispute resolution framework for delay claims in highway projects.

Shah, A., Bhatt, R., & Bhavsar, J. J. (2014). Types and causes of construction claims. *International Journal of Engineering Research & Technology (IJERT), 3*(12).

Zain-Laden, W. R., & Rasheed, S. M. (n.d.). Comparison of time extension provisions between the Joint Contracts Tribunal and Iraqi Standard Bidding Document.

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