



# **iJRASET**

International Journal For Research in  
Applied Science and Engineering Technology



# **INTERNATIONAL JOURNAL FOR RESEARCH**

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

**Volume: 11    Issue: X    Month of publication: October 2023**

**DOI: <https://doi.org/10.22214/ijraset.2023.56086>**

**[www.ijraset.com](http://www.ijraset.com)**

**Call:  08813907089**

**E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)**

# Litigation Hampers a Country's Development - Study on National Highway Projects

D K oza<sup>1</sup>, Rajiv Bhatt<sup>2</sup>

<sup>1</sup>PhD Scholar, Gujarat Technological University, chandkheda, Ahmedabad, Gujarat, India

<sup>2</sup>Associate professor and Head, A.D.Patel Institute of technology, New V.V.Nagar, Anand, Gujarat, India

**Abstract:** Court proceedings and litigation are on the rise globally. The judiciary is having trouble keeping up with the daily rise in lawsuits. Litigation impedes the development of the nation. Both developed and developing nations have their unique systems for conducting legal proceedings. The legal proceeding is intricate, time-consuming, and expensive. Each nation allocates a larger portion of its budget to infrastructure since it helps the nation's socioeconomic development. The study area is considered a national highway project of India. In this study, the eleven-year litigation data was collected from the Supreme Court of India, Gujarat High court, and Delhi High court for the National Highway Authority of India. The said data are compared with each other by a linear relationship. The finding indicates that in the various courts a significant number of unresolved cases are increasing daily. The study is valuable for displaying and quantifying the potential threat of litigation that could hamper a country's development. This study has the capacity to effectively address litigation in national highway project. This study has two limitations it has considered only national highway projects under NHAI and it focuses only on three court cases i.e. Supreme Court, Gujarat high court, and Delhi high court.

**Keywords:** Litigation, National Highway, country development, Economy, unresolved court case

## I. INTRODUCTION

The economy, environment & development of the country is greatly impacted by Infrastructure projects, (Zuo, Jin and Flynn, 2012; Maqsoom *et al.*, 2021) National Highway Projects are contributing a lot to the socio-economic countries' development. The Authority of the country is ready to accept new technology, innovation, design, material, etc., to achieve the best quality infrastructure for society. The challenge faced by most authorities is litigation during development, maintenance, and construction. Due to litigation the project will suffer in time overrun and cost overrun criteria. Every litigation is costly for both parties of the contract as well as for the country indirectly. Extreme rare projects of highway completed under the budget (Shen *et al.*, 2007; Sovacool, Gilbert and Nugent, 2014; Larsen *et al.*, 2016). India, as a developing country with a different environment, and geographical area, highway network expansion is very important. The National Highway Authority of India is a governing body for the overall development of arterial routes of the country for interstate transportation. The nation's current total length of national highways, including all routes, is 1, 44,634 km (Ministry of Road Transport & Highways, 2022) NHAI has accomplished multiple records in highway construction. Its latest feat is a new Guinness World Record for laying bituminous concrete on a 75 km single lane in just 105 hours and 33 minutes. The record was made on the Amravati – Akola section of National Highway 53 in Maharashtra (NHBF, 2022) NHAI is always ready to accept new technology, innovation, green revolution, etc. Relief for Road Sector Contractors, and Developers due to COVID-19 Pandemic given by the authority (Ministry of Road Transport & Highways, 2022). NHAI has accepted an Electronic toll collection system that would work with radio frequency identification technology. This technology namely Fastag has done a smooth collection of tolls to save time for a vehicle. The collection of toll in the calendar year 2022 is Rs.50,855 cr (NHAI, 2023) grew 46% from the last year. The NHAI is also checking the performance of GPS based toll collection system. NHAI focuses on improvement in the planning & execution process, the use of IT, modern survey techniques like the use of drones, and digitization of all things. But at the same time, projects are going into litigation in the era of the smart contract. However, the Dispute Resolution Board (DRB), which was established by the NHAI, assists in obtaining firsthand information on site activities and resolving the disagreement prior to it proceeding to arbitration or court. Under this system, a three-member board is appointed, and they make at least six site visits per year or as needed. So far, 97 DRBs have been established to assist in resolving conflicts and reducing problems relating to various projects. (NHAI, 2022) In FY22, NHAI resolved arbitration cases worth Rs 4,000 crore (Bhutani, 2022). Almost 4.7 crore cases are still pending as of May 2022 in courts at all levels of the legal system.

(Sumeda, 2022). Arbitration is still the chosen ADR technique in the construction industry as a last resort because of Arbitration difficulties, despite mounting criticism suggesting that arbitration is increasingly becoming litigation. (Saeb, Mohd Danuri and Mohamed, 2021). The construction sector turned to arbitration when it became frustrated with the length of time and expense of litigation. (Steen, 2000). However, NHAI made a fast-track approach process of arbitration and established a society named SAROD-Society for Affordable Redressal of Dispute. Jointly established by NHAI and NHBF, this Society is operationalized by the appointment of arbitrators who have been recommended by member firms and NHAI and who are amenable to adhering to SAROD's norms and regulations. NHAI and NHBF members make up the Governing Body that oversees this Society. The fees for arbitrators have been fixed to Rs. 50,000 for each hearing, which is now in line with the NHAI Price Schedule for its Ad hoc Arbitrators. (NHBF, 2022). Despite of this NHAI faces the problem of huge litigation during country development and construction. The authors analyze data for the Litigation during construction on the National Highway Authority of India, for the different courts and evaluate the hampers of country development.

## II. OBJECTIVE OF THE STUDY

To analyze the hampering in development of the country by litigation for National Highway Projects: India.

To quantify the potential threat of litigation for National highway projects

## III. LITERATURE SURVEY

The review of different literature Indian and international was carried out from different journals Out of that some key findings are as follows:

There are three primary stages to a conflict or dispute before it becomes a legal issue for construction projects. The following are these phases: Stages 1 and 2 of the claim process are claim creation, claim rejection, and the failure of a peaceful resolution (Stage 3). Cost overruns or delays in particular construction project components are what give rise to a claim that eventually results in litigation. (Jagannathan and Delhi, 2020). Different opinions on the validity and/or value of the claim may give rise to disputes. Improvements in claims management and the facilitation of more effective and efficient dispute minimization tactics can be achieved by fine-tuning management emphasis to anticipate and prevent, or provide for, typical problem areas. (M.Kumarswamy, 1997). In order for project stakeholders to make the greatest use of the available ADR options rather than turn to litigation, it will be crucial for drafters/revisers to take into consideration the criteria outlined in this study when creating or revising contract clauses. (Jagannathan and Delhi, 2019). Practices for concurrent conflict settlement vary across India. Dominant Cause, Apportionment, and other approaches that are widely used around the world have been used in India, although they are still in their infancy and are not yet widely used. (Munvar, Mengistu and Mahesh, 2020) Litigation, which in the past was the first option due to legal certainty not meeting the criteria anymore, will be challenged for judicial review after the district court, high court, and Supreme Court as the final judgment by the disgruntled plaintiff. Arbitration is the preferred option because it satisfies the requirements of (1) legal certainty, (2) cost, (3) time, and (4) maintaining a relationship where the outcome is final and binding, as well as its confidentiality. However, recently, it has turned into a last resort because the majority of arbitration tribunal decisions can be appealed to the courts. (Hardjomuljadi, 2020). The top five reasons for filing cases were unclear contract terms, bad contract drafting, inconsistent application of provisions by different contract parties, a lack of information, and problems with amendment. They added that the main causes of disputes between parties to contracts are insufficient contract documentation and superfluous information. These top-ranked classes come from the contract and stakeholder categories of the proposed model, both in the literature and in the SCC cases. Litigation involves additional costs on the original contract and the parties involved (such as legal fees and charges for damages). (Chan, Nik-Bakht and Han, 2021) The resolution of construction disputes takes a lot of time and money every year. Thus, it is essential to employ the proper management strategy to minimize claims and address the issues. (R. Ansari, S. A. Banihashemib, R. Taherkhania and A, 2022) Just 7% of the projects under study were completed within budgets, and only 8.5% were finished on schedule; More cost overruns and delays were experienced by large urban development projects. (Heravi and Mohammadian, 2021) Compared to internal project interests, the interests of the impacted communities have a stronger influence on social disputes in the project. (Sanggoro, Alisjahbana and Mohamad, 2022). Journal of Law, Management, and Humanities International The concept of alternative dispute resolution (ADR) might take the place of traditional dispute resolution procedures. If talks or a compromise cannot be reached, ADR promises to settle any disputes, including civil, business, industrial, and familial disputes. ADR typically employs impartial third parties to facilitate communication and settle conflicts between the parties. It is a strategy for preserving interpersonal harmony and lowering antagonism between individuals and groups. (Ghosh Sweta, 1999). Although many conflicts that begin with arbitration end up being resolved through the court system, arbitration doesn't seem to have much of an impact on resolving construction issues in Kuwait (Alrasheed *et al.*, 2023).

#### IV. RESEARCH METHODOLOGY

The methodology adopted to achieve the objective is shown in figure 1 given below. Extraction of the obligation of litigation the authenticated data required so it would be extracted from different courts websites. In the second step, the extracted data were sorted year-wise, and each case detail was recognized with the argument that the case is pending or disposed off. The third step combines the sorted data as NHAH is the petitioner or respondent. The same procedure was adopted for the different courts. After preprocessing each court data find out the linear equation and  $R^2$  value. Finally, compare the linear equation and  $R^2$  value of all courts. On the basis of the comparison between the all results judge the linearity.

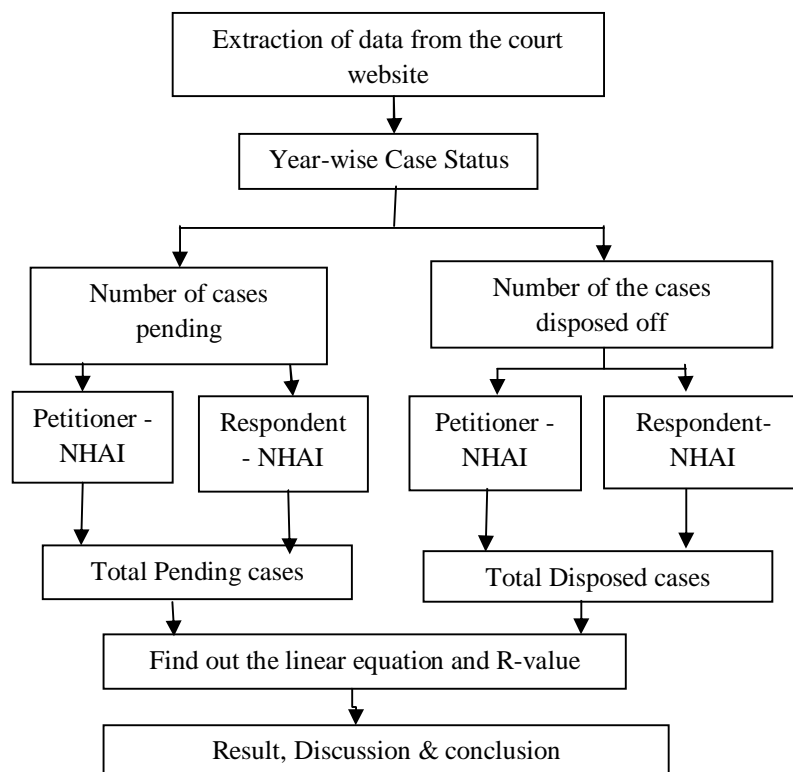


Figure 1 Framework of Research Methodology

#### V. DATA COLLECTION

The data have been collected for the last eleven years for the period starting from 2010 to 2020 from different courts. The data were extracted from the website of the concerned court. The study area was fixed as Supreme Court (SC, 2020), Delhi High court (DHC, 2020), and Gujarat high court (GHC, 2020). Gujarat is the home state of the researcher so data was easily acknowledged. NHAH head office is available in Delhi so chances of more cases would be available. While the Supreme court is the highest court in India. When any party does not agree with the decision given by any of the high court then the party goes to the supreme court. For the said reason these three court data were collected. These court cases would happen when a dispute was not resolved or satisfied by any of the dispute resolution methods or techniques like arbitration, and conciliation as well as from the SAROD- NHAH fast-track dispute resolution technique. The authors extracted data from the above court websites. The said data were sorted year-wise.

#### VI. ANALYSIS

The data were analyzed as per figure 1. Each case data for one court was argued by the functional argument that whether it was pending or disposed off and cases laid on the similar group. Afterward, the data were separated into cases where NHAH was the petitioner (P) as well as the Respondent, the said thing was done for both the group pending case and disposed off the case. The same procedure was adopted for the different courts.

Researchers have analyzed a linear association between the number of cases and the year in the same court from the data collection as statistical analysis. An equation is said to be linear if the maximum power of the variable is consistently 1. Based on the linear relationship, the  $R^2$  value was found.  $R^2$  stands for the square of the  $x$  &  $y$  correlation coefficient.

There is no linear relationship between  $x$  and  $y$  if the  $R^2$  value is zero. There is a perfect linear relationship between  $x$  and  $y$  when  $R^2 = 1$ .  $R^2$  denotes the proportion of  $y$ 's variability that can be accounted for by  $x$ 's variability. R-squared ( $R^2$ ) is a statistical measure that shows how much of a dependent variable's variance is explained by one or more independent variables in a regression model. R-squared measures how well the variation of one variable accounts for the variance of the second, as opposed to correlation, which describes the strength of the relationship between independent and dependent variables.

## VII. RESULT & DISCUSSION

Table I shows case details of the Supreme Court from the year 2010 to 2020. Based on the table I data, Figure 2 was prepared. It shows Supreme Court case details of the last eleven years. in figure 2 disposed off cases follow the linear relationship equation as  $y = 1.572x - 3155$  with  $R^2$  value of 0.348. However, the pending cases linear relationship equation is  $y = 1.490x - 2999$  with  $R^2$  value is 0.648. That means the disposed off cases rate at the Supreme Court would be 34.8% while the pending cases rate would be 64.8% for the last eleven years.

Table I: NHAJ court cases in the Supreme Court of India

NHAJ cases in Supreme Court						
	No cases pending			No cases disposed		
Year	P	R	T	P	R	T
2010	0	0	0	4	1	5
2011	0	0	0	3	4	7
2012	1	0	1	6	0	6
2013	1	0	1	4	3	7
2014	2	0	2	11	2	13
2015	0	0	0	10	11	21
2016	4	1	5	3	7	10
2017	4	3	7	6	9	15
2018	1	8	9	12	22	34
2019	2	18	20	2	19	21
2020	4	5	9	2	7	9

R – Respondent P- Petitioner T – Total Source: supreme court website <https://main.sci.gov.in/case-status>.

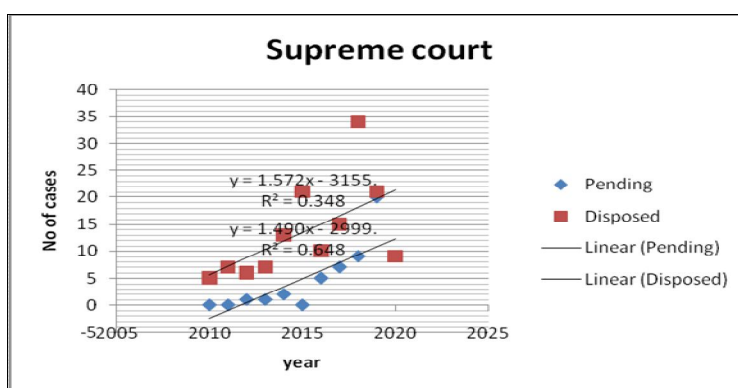


Figure 2 Linear relationships of cases versus year in Supreme Court of India

Table II shows details of cases in the Gujarat High court from 2010 to 2020. Based on table III, figure 3 was prepared. It shows Gujarat High court case details for the last eleven years. It is observed that the Gujarat high court having linear relation equation of disposed of cases is  $y = -0.009x + 33.22$  with  $R^2$  value is  $3E-06$ . While pending cases linear relation equation is  $y = 1.981x - 3987$  with  $R^2$  value is 0.418. This means pending cases at the Gujarat High court would be 41.8% for the last eleven years.

Table II NHAH court cases in Gujarat High Court

NHAH Cases in Gujarat High court						
	No cases pending			No cases disposed		
Year	P	R	T	P	R	T
2010	0	0	0	0	6	6
2011	0	1	1	4	5	9
2012	0	0	0	0	12	12
2013	2	1	3	0	57	57
2014	0	2	2	0	2	2
2015	0	2	2	0	10	10
2016	0	2	2	0	4	4
2017	0	0	0	0	8	8
2018	1	8	9	0	29	29
2019	0	34	34	0	25	25
2020	0	13	13	0	2	2

R – Respondent P- Petitioner T – Total

Source: Gujarat high court website <http://gujarathc-casestatus.nic.in/gujarathc/#>

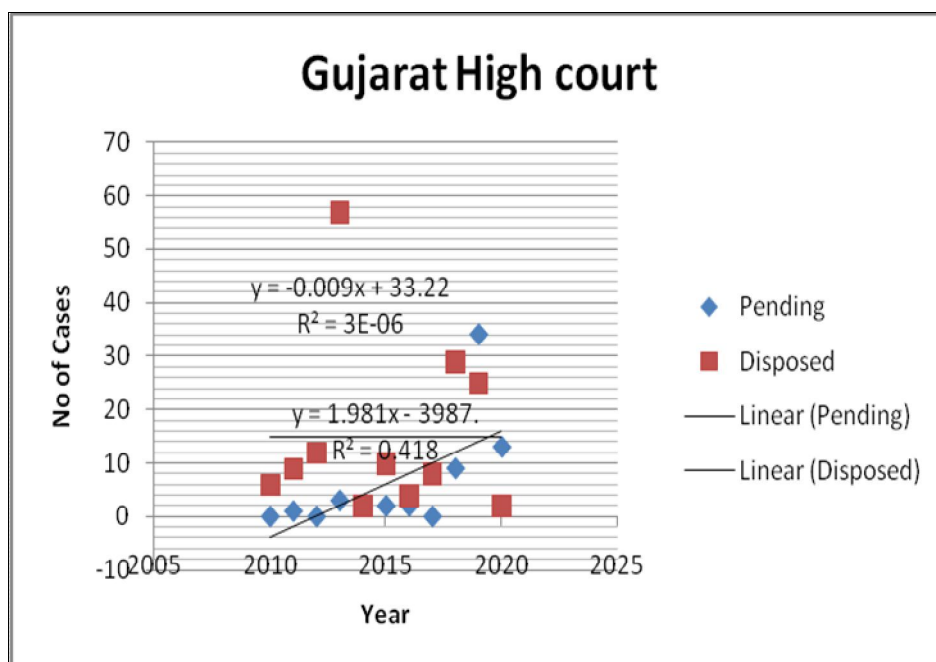


Figure 3 Linear relationships of cases versus year in Gujarat High court 1

Table III shows case details of the Delhi High court from 2010 to 2020. Based on table III, Figure 4 was prepared. It shows Delhi High court case details for the last eleven years. It is observed that Delhi high court cases have a linear relation equation to disposed-off cases  $y=3.345x - 6715$  with  $R^2$  value is 0.418. Pending cases have a linear relation equation is  $y=0.663x - 1333$  with  $R^2 = 3E-6$ . That means the disposed-off cases rate at Delhi High court would be 41.8% while pending cases would be less for the last eleven years.

Table III NHAH court cases in Delhi High Court

NHAH Cases in Delhi High court						
	No cases pending			No cases disposed		
Year	P	R	T	P	R	T
2010	5	14	19	2	0	2
2011	1	10	11	0	0	0
2012	2	14	16	1	0	1
2013	2	11	13	0	0	0
2014	5	12	17	0	3	3
2015	8	10	18	2	5	7
2016	10	14	24	0	4	4
2017	11	14	25	2	1	3
2018	23	40	63	8	4	12
2019	24	31	55	2	5	7
2020	7	16	23	0	3	3

R – Responder P- Petitioner T – Total

Source: Delhi high court website

[https://delhihighcourt.nic.in/dhc\\_case\\_status\\_list\\_new.asp](https://delhihighcourt.nic.in/dhc_case_status_list_new.asp)

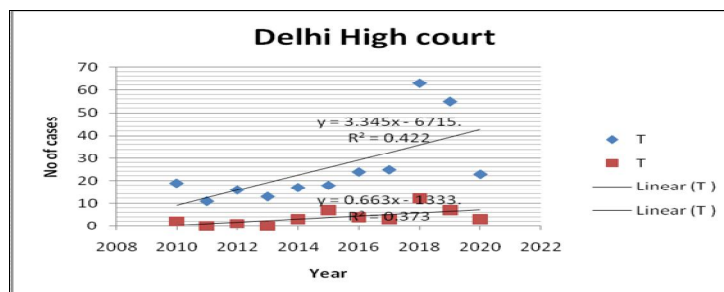


Figure 4 linear relationships of cases versus year in Delhi High Court

From the above tables, lots of cases were found in the Supreme court, Gujarat High court, and Delhi High court. Authority had filed cases against the contractor and the contractor had filed cases against the authority. The pending cases versus disposed-off cases were abnormal. There would be unusual linear relationships between the similar court pending and disposed-off cases, as well as dissimilar linear relationships between different courts pending to pending and pending to dispose-off cases. It shows each court functioning is unique, the environment and contract are of different types and different financial models.

## VIII. CONCLUSIONS

Table IV –  $R^2$  value for disposed-off cases and pending cases at different courts.

	$R^2$ Disposed of case	$R^2$ Pending case
Supreme court	0.348	0.648
Gujarat High Court	3E-06	0.418
Delhi High Court	0.422	0.373

From the above table no IV Disposed-off cases vary from 34.8% in the Supreme court to the highest 42 % in the Delhi High court, while Pending cases vary from 37.3% in Delhi high court to 64.8% in the Supreme Court. More Disposed-off cases demonstrate good functioning. More pending cases in Courts means having more potential threat of litigation and it will hamper the project and ultimately the country's development. Maximum cases of 109 were filed for NHAH in the year 2019. Cases are increasing more and more. From the above study, the litigation risk is from 37 % to 64% for national highway projects.

It is high time to do a serious investigation into the problem of litigation, the root cause for NHAI projects which hinders the development of the nation to identify the problem's real issues.

## IX. FUTURE SCOPES

- 1) Litigation in development projects other than the national highways.
- 2) Effect of Litigation in the different contractual models on the national highway.
- 3) Effect of critical contract clauses in the contractual model for initiation of litigation

## X. CONFLICT OF INTEREST

The corresponding author declares there aren't any competing interests on behalf of the other writers.

## REFERENCES

- [1] Alrasheed, K. et al. (2023) 'Litigation versus Judicial Arbitration as Binding Dispute Settlement Techniques in Public Construction Projects', Journal of Legal Affairs and Dispute Resolution in Engineering and Construction. American Society of Civil Engineers (ASCE), 15(1). doi: 10.1061/(asce)la.1943-4170.0000580.
- [2] Bhutani, C. (2022) 'Arbitration settle', Business today. Available at: <https://www.businesstoday.in/latest/economy/story/nhai-settled-dispute-cases-worth-rs-4000-crore-in-fy22-328866-2022-04-06>.
- [3] Chan, E. E., Nik-Bakht, M. and Han, S. H. (2021) 'Sources of Ambiguity in Construction Contract Documents, Reflected by Litigation in Supreme Court Cases', Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 13(4). doi: 10.1061/(asce)la.1943-4170.0000498.
- [4] DHC (2020) Delhi High court case status. Available at: [https://delhihighcourt.nic.in/dhc\\_case\\_status\\_list\\_new.asp](https://delhihighcourt.nic.in/dhc_case_status_list_new.asp).
- [5] GHC (2020) Gujarat Highcourt Court case status. Available at: <http://gujarathc-casestatus.nic.in/gujarathc/#>.
- [6] Ghosh Sweta, sinha vijoykumar (1999) 'A System of Rights', The American Journal of Legal History, 43(1), p. 95. doi: 10.2307/846144.
- [7] Hardjomuljadi, S. (2020) 'Use of Dispute Avoidance and Adjudication Boards', Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 12(4), p. 03720004. doi: 10.1061/(asce)la.1943-4170.0000431.
- [8] Heravi, G. and Mohammadian, M. (2021) 'Investigating cost overruns and delay in urban construction projects in Iran', International Journal of Construction Management. Taylor & Francis, 21(9), pp. 958–968. doi: 10.1080/15623599.2019.1601394.
- [9] Jagannathan, M. and Delhi, V. S. K. (2019) 'Litigation Proneness of Dispute Resolution Clauses in Construction Contracts', Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 11(3), p. 04519011. doi: 10.1061/(asce)la.1943-4170.0000301.
- [10] Jagannathan, M. and Delhi, V. S. K. (2020) 'Litigation in Construction Contracts: Literature Review', Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 12(1), p. 03119001. doi: 10.1061/(asce)la.1943-4170.0000342.
- [11] Larsen, J. K. et al. (2016) 'Factors Affecting Schedule Delay, Cost Overrun, and Quality Level in Public Construction Projects', Journal of Management in Engineering, 32(1). doi: 10.1061/(asce)me.1943-5479.0000391.
- [12] M.Kumarswamy, M. (1997) 'Engineering , Construction and Architectural Management Article'.
- [13] Maqsoom, A. et al. (2021) 'Influence of Construction Risks on Cost Escalation of Highway-Related Projects: Exploring the Moderating Role of Social Sustainability Requirements', Iranian Journal of Science and Technology - Transactions of Civil Engineering. Springer International Publishing, 45(3), pp. 2003–2015. doi: 10.1007/s40996-021-00601-2.
- [14] Ministry of Road Transport & Highways (2022) Road Network in the Country. Available at: <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1888480>.
- [15] Munvar, C., Mengistu, D. G. and Mahesh, G. (2020) 'Concurrent Delay Analysis: Methods, Case Law, and Expert Perception', Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 12(1), p. 04519035. doi: 10.1061/(asce)la.1943-4170.0000343.
- [16] NHAI (2022) 'No Title', conciliation. Available at: [https://nhai.gov.in/nhai/sites/default/files/2022-04/Press Release 06042022.pdf](https://nhai.gov.in/nhai/sites/default/files/2022-04/Press%20Release%2006042022.pdf).
- [17] NHAI (2023) 'Fastag-'. Available at: [https://nhai.gov.in/nhai/sites/default/files/2023-01/Press Release- FASTag.pdf](https://nhai.gov.in/nhai/sites/default/files/2023-01/Press%20Release%20FASTag.pdf).
- [18] NHBF (2022) Achievements by NHBF. Available at: <https://www.nhbf.co.in/achievements.php>.
- [19] R. Ansari, S. A. Banihashemib, R. Taherkhanian, S. M. and A (2022) 'Decision Support System for Analyzing Key Performance Indicators in Construction Projects Management', International Journal of Engineering, 35(5), pp. 865–874. doi: 10.5829/ije.2022.35.05b.03.
- [20] Saeb, A., Mohd Danuri, M. S. and Mohamed, O. (2021) 'Selecting the Appropriate Method for Resolving Construction Disputes in Iran', Iranian Journal of Science and Technology - Transactions of Civil Engineering. Springer International Publishing, 45(3), pp. 2017–2033. doi: 10.1007/s40996-020-00553-z.
- [21] Sanggoro, H. B., Alisjahbana, S. W. and Mohamad, D. (2022) 'Influence of Project and Affected Local Community Interests Level on Social Conflicts in Indonesian Infrastructure Projects', International Journal of Engineering, Transactions A: Basics, 35(7), pp. 1217–1226. doi: 10.5829/ije.2022.35.07a.01.
- [22] SC (2020) Supreme Court of India case status. Available at: <https://main.sci.gov.in/case-status>.
- [23] Shen, L. Y. et al. (2007) 'A checklist for assessing sustainability performance of construction projects', Journal of Civil Engineering and Management, 13(4), pp. 273–281. doi: 10.1080/13923730.2007.9636447.
- [24] Sovacool, B. K., Gilbert, A. and Nugent, D. (2014) 'An international comparative assessment of construction cost overruns for electricity infrastructure', Energy Research and Social Science. Elsevier Ltd, 3(C), pp. 152–160. doi: 10.1016/j.erss.2014.07.016.
- [25] Steen, M. & (2000) 'Resolving construction disputes out of court through ADR', Journal of Property Management, 65(5). Available at: <https://go.gale.com/ps/i.do?id=GALE%7CA65953682&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00223905&p=AONE&sw=w> (Accessed: 23 February 2023).
- [26] Sumeda (2022) The clogged state of the Indian judiciary, The hindu. Available at: <https://www.thehindu.com/news/national/indian-judiciary-pendency-data-courts-statistics-explain-judges-ramana-chief-justice-undertrials/article65378182.ece> (Accessed: 10 May 2022).
- [27] Zuo, J., Jin, X. H. and Flynn, L. (2012) 'Social sustainability in construction - An explorative study', International Journal of Construction Management, 12(2), pp. 51–63. doi: 10.1080/15623599.2012.10773190.



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)