

DISPUTE RESOLUTION IN LARGE-SCALE INFRASTRUCTURE PROJECTS: RETHINKING LEGAL AND POLICY FRAMEWORKS FOR SUSTAINABLE INFRASTRUCTURE DEVELOPMENT

Dr. Sanaullah Aman^{*1}, Waheeba Zeeshan²

^{*1}CEO Saarosh ADR Center, Islamabad, CEO of PhD Doctors Firm for Capacity Building and Trainings

²Associate at Saarosh ADR Center, Islamabad, Former Research Associate at Islamic Research Institute, Islamabad

¹sanaullah.aman@yahoo.com, ²waheebaz97@gmail.com

DOI: <http://doi.org/10.5281/zenodo.21640695>

Keywords

Article History

Received: 29 January 2026

Accepted: 14 March 2026

Published: 28 March 2026

Copyright @Author

Corresponding Author: *

Dr. Sanaullah Aman

Thesis Statement

An effective, autonomous ADR process with robust legal frameworks and a unified public policy process is essential for the viability, sustainability and confidence of mega-scale projects.

Abstract

It is the large-scale infrastructure projects that are the driver for the economic development, regional integration and sustainable development. Sadly, they're complicated and often lead to contractual problems, land problems, financial problems, environmental problems and government regulatory problems. Traditional litigation does not often offer solutions to the issues due to the high costs, lengthy timelines and disincentive to investment. This paper argues that such a coherent integrated framework for the use of Alternative Dispute Resolution (ADR) procedures, backed by open legal institutions and a clear public policy is needed to facilitate the implementation of effective governance of large-scale infrastructure projects. This paper will critically examine the limitations of the existing dispute resolution mechanisms, evaluate the feasibility of international dispute resolution mechanisms and recommend suitable reforms in the policy for projects like CPEC. The paper proposes an analytical framework of the linkage of legal certainty, independence of institutions, and investor confidence.

Introduction

Development of infrastructure is an important aspect of the economic policy these days. Governments increasingly tap into huge investment in infrastructure for growth, connectivity and foreign investment and regional integration. Various entities including governments, foreign investors, contractors, financial institutions and communities are

involved in the projects, such as highways, ports, energy projects and industrial corridors.

These projects are complicated, resulting in conflicts. Infrastructure disputes have a number of additional features, as compared to regular business conflicts, such as contractual overlaps, public interests, environmental, regulatory, and international investment considerations. The delay in the course of such disagreements can

significantly add to the project's expenses and affect the economy.

Traditional litigation does not often meet the needs for infrastructure governance as it prevents the projects from implementation by involving long court cases. Using ADR mechanisms will give a more efficient remedy to go ahead with the project and reduce transaction costs.

Literature Review

Size and scope of projects in construction law, international investment law and public policy has indeed had a significant influence on the discussion of dispute resolution. In contrast to regular commercial projects, large-scale projects are complicated by the involvement of various parties, long duration of contracts, cross-border financing, involvement of government, environmental responsibilities, and public accountability. Therefore, these projects have a certain special characteristic when it comes to conflicts, and they're very different from "business" conflicts. There is a consistent body of work which supports the need for effective dispute resolution mechanisms not only for the protection of contractual rights but also to maintain project continuity, investor confidence and to ensure the overall economic development goals are achieved. The issue that appears in infrastructure construction projects is believed to be a multi-dimensional technical issue for a long time for construction law scholars. These conflicts are always about things such as scope changes, cost escalation, poor execution, procurement issues, land acquisition, environmental issues, project delay, and force majeure. These types of conflicts can be more complicated, and often involve some decision makers who have specialized expertise in engineering, finance, project management, and international commerce that may differ from the parties in traditional litigation. This recognition has helped parties to be more willing to employ alternative dispute resolution methods (ADR) as an alternative to a court between them.

One important problem in the existing literature is that the existing mechanism of litigation does not seem to be effective in resolving infrastructure

conflicts efficiently. In developing nations, national court systems are often faced with accusations of procedural rigidity, a high rate of procedural delays, a high number of pending cases and lack of technical ability in complex commercial cases. But it is believed that a long litigation process adds to the cost of projects and uncertainty for governments and private investors. The loss of time due to dispute resolution has a tendency to repeatedly derail construction projects, drive up financing expense, and dissipate the economic goals of large infrastructure projects. Efficiency is, therefore, an important aspect of the governance of infrastructure, and an important factor in justice.

Arbitration is becoming more and more popular as a forum in which to settle disputes regarding infrastructure, as evidenced by the litany of references to arbitration in the literature. The benefits of international commercial arbitration over litigation include: party autonomy, confidentiality, flexibility of processes, neutrality and arbitrator expertise. Moreover, the New York Convention has helped to improve investor confidence in cross-border infrastructure investments through the strengthening of enforceability of arbitral awards in foreign courts. As such, most academics advocate the use of arbitration as an alternative way of resolving international construction conflicts, for it minimizes uncertainty of jurisdiction and also offers greater certainty of proceedings.

Mediation has been gaining increased academic interest as an alternative collaborative process that helps maintain ongoing commercial relationships, in addition to arbitration. Mediation can help to create consensus and find an agreement that works for both parties instead of perhaps going to court that might have a negative impact on ongoing construction activities. Today, mediation is regarded as a different alternative to arbitration rather than an end in itself, but rather as part of an overall dispute management system. Relatively small issues can be averted from becoming expensive disputes by early intervention in contractual matters via the mediation process,

sparing both commercial partners and the project from disruption.

Hence, in the long-term success of CPEC efficient, credible and internationally acceptable dispute resolution process is of utmost importance. Legal conflicts are perceived not only as contractual problems, but as governance problems, which can be used to influence the foreign investment, economic development and bilateral cooperation. Moreover, the development of good ADR institutions is essential to reduce the delays, investor confidence and sustainable implementation of the infrastructure project.

Legal certainty is another key issue debated in the academic world in relation to FDI. Before putting large sums of money into infrastructure projects over the long term, international investors usually evaluate the effectiveness of the domestic legal institutions. It seems from the literature that investors will pay a lot of attention to the predictability of the legal structure, fair courts and effective law enforcement. International arbitration clauses are often necessary for investors to minimize legal uncertainty and risks when there is a lack of effective or fair local courts. Therefore, dispute resolution mechanisms are increasingly becoming an important instrument affecting investment competitiveness, apart from their role as procedural legal means.

International infrastructure governance is also discussed, focusing on the institutional neutrality. The typical infrastructure project includes public authorities as contractual parties leading to issues of impartiality as to the choice of forum for dispute resolution, which is often domestic courts. Arbitration under internationally recognized arbitral institutions is thus often preferred as it gives the process independence and increases the legitimacy of the results of the arbitration. The credibility of the institution has been shown in literature to directly affect investor confidence by decreasing the perception of political/Administrative interference.

It is a trend which has been gaining momentum with the help of current scholarship, dispute management has focused more on prevention than on dispute solving. After a dispute has arisen,

methods of resolving the conflict must be stressed; but researchers are now saying that preventing a dispute should be initiated during the first stages of project planning and contract negotiations. The careful drafting of dispute resolution clauses, risk allocation provisions, dispute review boards, periodic contract management and mandatory negotiation procedures are becoming more well-known as ways to effectively reduce the number of disputes before they become formal legal disputes. This preventive one is part of a new trend of conflict resolution from oppositional to collaborative project governance.

Another theme in the literature is the development of specialized institutions for the resolution of infrastructure disputes. A few researchers propose to create special arbitration centers, formed by multi-disciplinary experts who possess legal and technical engineering and financial expertise to handle the conflicts concerning highly technical engineering problems, complex financing arrangements, environmental regulations, public-private partnership etc. It would make better decisions in a more efficient process in such institutions.

While there has been much academic research undertaken on ADR, there are some issues that still need to be resolved. The cost and time of arbitration proceedings may be an additional expense and time in very complex international projects. International governance of infrastructure is not yet certain because of the different legal systems at home, variability in implementation, political instability and changing institutional competencies. Further, the matter of transparency of the conflict on public assets remains under question, since if the information is kept confidential, the public may not be held as accountable as they should be over the government's funds. The concerns here indicate that ADR should be used in conjunction with - and not in lieu of - judicial monitoring.

The sum of the current literature demonstrates a definite development in the direction of a more unified system of conflict prevention, mediation, arbitration and collaborative governance. But key questions remain about the institutional

framework of dispute resolution processes designed to address the needs of developing countries in the midst of large-scale infrastructure projects. This paper aims to fill this void by critically discussing the potential for establishing specific ADR mechanisms, judicial bodies and a uniform public policy, to better govern infrastructure and boost investors' confidence, thereby promoting sustainable implementation of infrastructure initiatives, such as CPEC.

Methodology

This study is doctrinal research with qualitative approach, the purposes of which are to analyze the legal and policy issues of dispute resolution in large scale infrastructure projects. The doctrinal approach is especially suitable for this kind of research that is based on analysis of legal concepts, legal texts, policies and literature. The methodology allows a comprehensive analysis of legal rules in the framework of infrastructure disputes, as well as an analysis of the efficiency of the alternative dispute resolution available nationally and internationally.

In this study, the arguments are constructed and integrated with other legal literature and the well-known international principles of Alternative Dispute Resolution (ADR) in a critical way. The study also draws on relevant international legal instruments, such as the UNCITRAL Model Law on International Commercial Arbitration, the New York Convention 1958 and Singapore Convention on Mediation for a comparative perspective.

The research method is doctrinal legal analysis, which is used in order to explain and evaluate the legal principles applicable to arbitration, mediation and contractual and institutional processes of dispute resolution in infrastructure project. This involves analyzing the effectiveness of current laws and processes, and how they impact on the complicated conflicts that emerge in major development projects.

In addition, a policy analysis is carried out that assesses existing Governmental policies on infrastructure governance, protection of investments and dispute settlement. The

relationship between legal certainty, institutional independence and investor confidence and sustainable infrastructure development is given special consideration. The policy analysis pinpoints policy gaps and provides recommendations for changes to make the dispute prevention and resolution process more streamlined.

The study also adopts comparative analysis to explore internationally-recognized ADR mechanisms and the law related to the development of large-scale infrastructure projects, specifically that of the China-Pakistan Economic Corridor (CPEC). This comparison helps to analyze how international best practices can be adapted and how investors' confidence can be increased in the cross-border infrastructure investment process by building better international infrastructure dispute resolution systems at home. The emphasis during the study is the building of logic bridges between legal doctrine, institutional effectiveness and the overall goals of economic development and sustainable governance of infrastructure. The study is qualitative and interpretative as it is based on the results of legal analysis, the analysis of academic literature, analysis of international instruments and policy analysis.

Analysis

The Legal Challenges to Infrastructure Projects:

The legal risks of infrastructure projects are unique. Infrastructure projects involve, among others, long implementation times, multiple contracts, involvement of government, international financing and public interests. So, most conflicts are not simply legal issues. Therefore, disagreements seldom just stay between two parties as legal problems.

Rather, they can cause delays in construction projects, raise financing expenses, deter investments and diminish public trust. In reality, it is seen in the context of CPEC where land acquisition, finance, contractual agreements, compliance with regulations, etc., may cause conflicts. Thus, dispute resolution cannot be seen

as a solely legal process but at the same time as a needed governance element of the project.

The problems with old fashioned litigation:

Conventional courts offer procedural justice but often times, do not meet the practical needs of infrastructure projects.

There are a number of faults that emerge:

- lengthy proceedings;
- procedural rigidity;
- multiple appeals;
- high litigation costs;
- disruption of trade relations.

It is important to note that for mega projects, where costs are in billions, delays are economical costs. Legal matters years old, settled in court, can clear up legal claims but not keep the business value intact. This is one indicator that efficiency is a key part of justice in infrastructure governance. While cost is certainly a consideration, there are additional benefits to ADR. Technical disputes centered around engineering; financial and construction matters are settled using arbitration. Mediation fosters business-oriented problem solving without compromising business relationships.

ADR offers a party the opportunity to tailor procedures to fit the very specialized project, as opposed to litigation. Effective dispute resolution helps to continue the project and build investor confidence. In terms of governance, ADR can thus serve as an alternative to the courts but also as a tool to facilitate economic development.

Institutional neutral and investor confidence:

Litigation victories are typically not the first priority of foreign investors, who are more interested in legal certainty. Investors have been repeatedly drawn to arbitration bodies they know, which are thought to be both neutral and have established procedures, but are not favored by arbitration bodies which are seen as lacking institutional independence, and thus not credible. This indicates that legitimacy can be considered as an economic resource. A clear dispute resolution mechanism reduces political risk, reduces

investment uncertainty and encourages investment in infrastructure for the long-term.

Specialized infrastructure needed by ADR Institutions:

Arbitration that is general in nature might not be able to address infrastructure-related issues adequately.

A special school should have:

- technical engineering experts
- construction law specialists
- financial experts
- international arbitrators
- professional mediators.

These multi-disciplinary skills would help to make the legal process more efficient and effective.

The idea to jointly convene arbitration is an example of how the institutions of specialization may enhance bilateral cooperation, while ensuring a procedural neutrality.

Policy Implications:

Legal reform is not enough to ensure effective DR. Governments need to do more to strengthen:

- institutional transparency
- professional training
- contractual drafting standards
- public accountability
- enforcement mechanisms.

The role of infrastructure governance demands that the legislative body and the judiciary, arbitration institutions, investors and regulatory bodies work together. Deciduous legal arrangements may not yield effective results if they are not effectively implemented.

Conclusion

Major infrastructure programmers are strategic investments and for periods of decades constitute national economic development. One of the key ingredients to their success is not only their engineering skills and financial investment, but the presence of successful legal institutions that are able to handle the inevitable conflict. This paper has concluded that traditional litigation is sometimes not conducive to the business of infrastructure development. Rather, specialized

ADR mechanisms provide more efficient, flexible and institutionalized mechanisms, and retain long-term commercial relationships.

The analysis indicates that the greater the law's certainty and investor confidence, the greater the investors' confidence. Specialized ADR institutions, clear governance and internationally compatible arbitration standards and in-depth policy reforms should thus be part of the priority of countries that are seeking to develop sustainable infrastructure.

However, the successful resolution of a dispute should not be considered to be a process that resolves a conflict after it has happened; rather it should be regarded as a key component of good infrastructure governance that can help to create economic stability, help to attract investment and facilitate sustainable national development.

REFERENCES

- Aman, S. (2026). *Alternative dispute resolution*. Citiline Advertising. (Chapter 9: *Dispute Resolution in Large-Scale Infrastructure Projects: Legal and Policy Challenges*).
- Born, G. B. (2021). *International commercial arbitration* (3rd ed.). Kluwer Law International.
- Fenn, P., Lowe, D., & Speck, C. (1997). Conflict and dispute in construction. *Construction Management and Economics*, 15(6), 513–518.
- International Chamber of Commerce. (2021). *ICC Arbitration Rules 2021*. ICC Publishing.
- Moses, M. L. (2017). *The principles and practice of international commercial arbitration* (3rd ed.). Cambridge University Press.
- Redfern, A., Hunter, M., Blackaby, N., & Partasides, C. (2023). *Redfern and Hunter on international arbitration* (7th ed.). Oxford University Press.
- Sornarajah, M. (2021). *The international law on foreign investment* (5th ed.). Cambridge University Press.
- United Nations. (1958). *Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Convention)*.
- United Nations. (1985, amended 2006). *UNCITRAL Model Law on International Commercial Arbitration*.
- United Nations. (2018). *United Nations Convention on International Settlement Agreements Resulting from Mediation (Singapore Convention on Mediation)*.
- United Nations Commission on International Trade Law. (2021). *UNCITRAL Arbitration Rules*.
- World Bank. (2017). *Guidance on PPP contractual provisions*. World Bank.
- World Bank. (2020). *Procuring infrastructure public-private partnerships 2020*. World Bank.
- Yescombe, E. R. (2018). *Public-private partnerships in infrastructure: Principles of policy and finance* (2nd ed.). Butterworth-Heinemann.
- Zhang, X. (2005). Critical success factors for public-private partnerships in infrastructure development. *Journal of Construction Engineering and Management*, 131(1), 3–14.
- Ali, G., & Malik, A. R. (2020). China-Pakistan Economic Corridor: Prospects and challenges for regional integration. *Pakistan Horizon*, 73(2), 1–20.
- Hussain, E. (2017). China-Pakistan Economic Corridor (CPEC): Its economic implications for Pakistan. *Asian Journal of Comparative Politics*, 2(2), 123–138.