

I. CONTEMPORARY ISSUES AND CHALLENGES IN INFRASTRUCTURE DEVELOPMENT AND PROJECT FINANCING IN INDIA: A CRITICAL ANALYSIS

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ABSTRACT

Since Indian independence, the successive Governments of Free India endeavoured to build a new India from the colonial roubles. The prime and foremost challenge was to build an empowered nation by building on infrastructure in every possible area, be it Roads, Railways, Airways and Waterways, Telecommunications, Energy, Health Infrastructure, or other Civic Facilities. However, the roads have been long and tortuous. In the last seventy years of striving, there have been challenges, some negotiable, some frustrating, and some unsurmountable. The purpose of this paper is to identify the key challenges that beset the path to proper infrastructure for modern India. This paper would also identify the challenges faced in financing these mega projects and the possible solutions that can remedy such challenges. The ideal model for executing these projects is the PPP model through Public and Private participation. Apart from the Authority awarding the contract, there are other stakeholders involved such as the Promoters/Sponsors, Special Purpose Vehicles, Contractors, Senior Lenders, Guarantors, Engineers, Architects, Lawyers, Off takers, and other entities that facilitate the project life cycle. There are pertinent problem areas such as issues of land acquisition, obtaining regulatory approvals, financing risks, time and cost overruns, changes in political policies, environmental and social risks, design risks, technology risks among the myriad of other risks involved in the project lifecycle. These risks and challenges are to be understood and addressed for any meaningful discussion on infrastructure development and project financing in India.

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|--|----|--|----|
| I. Infrastructure, Its Need, And Scope In The Indian Economic Ecosystem | 16 | Highways Authority Of India (“NHAI”)..... | 13 |
| II. Projects And Project Finance Transactions..... | 5 | 5. A Study On Risks Associated With The Key Clauses In Model Concession Agreements In Road Project | 15 |
| III. Contemporary Issues Relating To Infrastructure Projects..... | 8 | IV. Challenges In Infrastructure Development And Project Financing... .. | 16 |
| A. Force Majeure And Covid-19..... | 9 | A. Land Acquisition..... | 16 |
| 1. Case Study On The Invocation Of Force Majeure: Mep Infrastructure Developers Limited v. South Delhi Municipal Corporation & Ors..... | 9 | 1. A Case Study On Land Acquisition: Narayan Prasad v. The State Of Chhattisgarh | 17 |
| 2. Possible Remedy | 11 | 2. Environmental Clearances And Regulatory Approvals..... | 18 |
| 3. Other Critical Issues | 13 | 3. Financial Risks | 18 |
| 4. A Case Study On Changes In Law And Indemnity Clauses In Model Concession Agreements: Gmr Hyderabad Vijayawada Expressways Pvt. Ltd. v. National | | 4. Project Stage-Wise Challenges..... | 19 |
| | | 5. Disputes | 20 |
| | | V. Conclusion | 21 |

Long years ago, we made a tryst with destiny, and now the time comes when we shall redeem our pledge, not wholly or in full measure, but very substantially. At the stroke of the midnight hour, when the world sleeps, India will awake to life and freedom. A moment comes, which comes but rarely in history when we step out from the old to the new when an age ends, and when the soul of a nation, long suppressed, finds utterance. – Shri. Jawaharlal Nehru, Tryst with Destiny, 15th August 1947

I. INFRASTRUCTURE, ITS NEED, AND SCOPE IN THE INDIAN ECONOMIC ECOSYSTEM

Infrastructure refers to the essential and rudimentary amenities and systems serving a country as well as the services and facilities necessary for the survival and growth of a country’s economic ecosystem. It includes physical and technical structures like roads, bridges, tunnels, dams, waterways, airports, metros, etc. It is thus the tangible framework of goods and services that are provided to the population of a nation. It is a major

sector of the country and the world that propels the development of a nation forward towards progress and advancement. By the year 2022, it is expected that India will be the world's third-largest construction market.¹ It will thus require an infrastructure investment of 50 trillion rupees to sustain this development. The infrastructure sector is thus a key driver for the Indian economy. As per the quarterly fact sheet on Foreign Direct Investment (“**FDI**”) from April 2000 to June 2021 that was released by the Department for Promotion of Industry and Internal Trade (“**DPIT**”), FDI in the construction development sector (including townships, housing, built-up infrastructure, and construction development projects) and construction (infrastructure) activities was US\$ 26.14 billion and US\$ 25.38 billion, between the months of April 2000 and June 2021.² In 2021, infrastructure activities accounted for a 13% share of the total FDI inflows of US\$ 81.72 billion.³ India's logistics and transport infrastructure industry is valued at \$160 billion and employs over 22 million people directly.⁴ By the year 2022, the infrastructure activities are expected to grow at a compound annual growth rate of 10 percent to \$215 billion. Furthermore, the government allocated Rs. 233,083 crore (US\$ 32.02 billion) to the Indian infrastructure towards the transport sector in its Union Budget 2021.⁵ Therefore, the market opportunity for infrastructure development in India is vast and growing.

¹ *Infrastructure in India*, IBEF (Nov 29, 2021), <https://www.ibef.org/industry/infrastructure-sector-india.aspx>.

² Jayajit Dash, *Logistics Market Seen Growing 10.5% a Year, to Reach \$215 Billion by 2020: Study*, BUSINESS STANDARD (March 18, 2019).

³ *Id.*

⁴ *Id.*

⁵ The Finance Act, 2021, No. 13, Acts of Parliament, 2021 (India).

The scope of infrastructure was elucidated and updated by the Cabinet Committee on Infrastructure by a notification dated 1st March 2021⁶ to include the following:

Illustration I: Master List of Infrastructure Subsectors as of 1st March 2021

| Sr. No. | Category | Infrastructure sub-sectors |
|---------|------------------------------|---|
| 1. | Transport | Roads and bridges, Ports [Includes supporting terminal], Inland Waterways, Airport Railway Track, tunnels, viaducts, bridges, Urban Public Transport (except rolling stock in case of urban road transport) |
| 2. | Energy | Electricity Generation, Electricity Transmission, Electricity Distribution, Oil pipelines, Oil/Gas/Liquefied Natural Gas (“LNG”) storage facility (Includes strategic storage of crude oil.), Gas pipelines [Includes city gas distribution network.] |
| 3. | Water Sanitation | Solid Waste Management, Water supply pipelines, Water treatment plants, Sewage collection treatment, and disposal system Irrigation (dams, channels, embankments, etc.) Storm Water Drainage System |
| 4. | Communication | Telecommunication (fixed network) [Includes optic fibre/cable networks which provide broadband/internet.], Telecommunication towers |
| 5. | Social and Commercial | Education Institutions (capital stock), Hospitals (capital stock)[Includes Medical Colleges, Para Medical Training |

⁶ Cabinet Committee on Infrastructure, *Harmonized List of Infrastructure Sub-Sectors*, PRESS INFORMATION BUREAU, GOVERNMENT OF INDIA (1st March 2012).

| | | |
|--|-----------------------|--|
| | Infrastructure | Institutes and Diagnostics Centres.], Three-star or higher category classified hotels located outside cities with a population of more than one million, Common infrastructure for industrial parks, Special Economic Zones, tourism facilities and agriculture markets, Fertilizer (Capital investment) post-harvest storage infrastructure for agriculture, and horticultural produce including cold storage Terminal markets, Soil-testing laboratories, Cold Chain (Includes cold room facility for farm level pre-cooling, for preservation or storage of agriculture and allied produce, marine products and meat.). |
|--|-----------------------|--|

This master list is an indicative analysis and broad spectrum of the meaning of infrastructure and its subsectors in India. It was updated with the intent to guide all the agencies responsible for supporting infrastructure in India.⁷ The nature of the master list is intentionally flexible to be inclusive and universally acceptable to all agencies. This master list was thus created to attain a uniform definition of the term infrastructure and maintain a framework and institutional mechanism for the same. Infrastructure would thus include “projects” that would come under the sub-sectors in the master list provided above.

II. PROJECTS AND PROJECT FINANCE TRANSACTIONS

Infrastructure projects in India are implemented in the public-private partnership model. The Ministry of Finance, Department of Economic

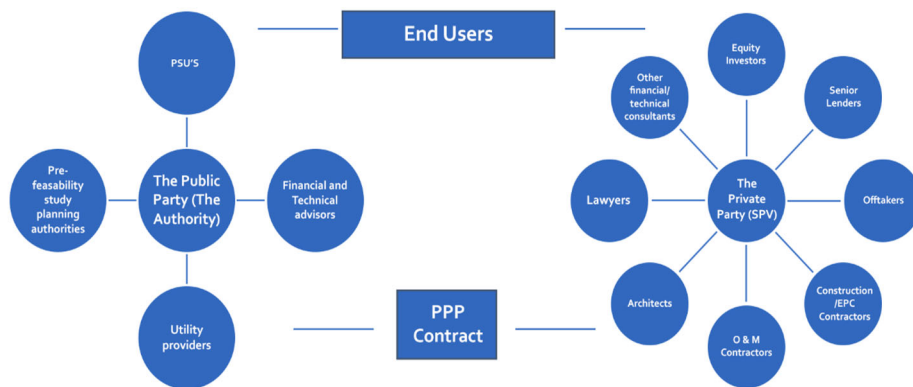
⁷ *Supra*, note 6.

Affairs, (Infrastructure Section), defines a public-private partnership project (“PPP”) as-⁸

PPP means an arrangement between a government or statutory entity or government-owned entity on one side and a private sector entity on the other, for the provision of public assets and/ or related services for public benefit, through investments being made by and/or management undertaken by the private sector entity for a specified period, where there is a substantial risk-sharing with the private sector and the private sector receives performance-linked payments that conform (or are benchmarked) to specified, pre-determined and measurable performance standards.

Therefore, as per the above definition provided by the Ministry of Finance, Government of India, it may be understood in essence that a public-private partnership project refers to a project based on a contract or a concession agreement, between the government/statutory entity and a private party, for delivering infrastructure service/(s) on payment of user charges.

Illustration II: Relationship between the typical parties in a Public-Private Partnership project



⁸ PPP CELL, INFRASTRUCTURE DIVISION, DEPARTMENT OF ECONOMIC AFFAIRS, FAQs: PUBLIC PRIVATE PARTNERSHIPS IN INDIA (last updated: 20th February 2022).

A public-private partnership contract is entered between the awarding authority and the private party. The private party is generally constituted by the promoters and/or the sponsors of the project company which is also known as the Special Purpose Vehicle. This Special Purpose Vehicle is a corporate entity, which is generally a joint venture that is constituted for the specific purpose of raising project finance and the execution of the project. It is the project company that enters into a PPP contract with the authority, in the form of a concession or a license. The special purpose vehicle, being an outsourced enterprise receives the assets to design, build, and operate the project. The project cost of Indian infrastructure projects is mainly a culmination of equity and debt, generally financed by the investors in the form of equity and the rest being debt-financed. The prototypical financial structure for infrastructure projects has a debt-to-equity ratio of 60:40 or 80:20,⁹ with some projects having more or less.

The ratio may vary depending upon the transaction's structure, technical risk, financial risk, and other risks involved. In different stages of the project, i.e., the pre-bidding stage, the bidding stage, the PPP development stage, the PPP operation stage, other players are involved such as the lenders, the lawyers, the contractors, the operators, and ultimately the end-users. All of the players in a project cycle play an important and non-substitutable role in the project transaction cycle. Out of the many challenges in infrastructure projects' development and completion, the main challenges are the issues related to cost and time overrun. During the pandemic, a report

⁹ PRIVATE FINANCE AND PROJECT FINANCE, APMG PPP CERTIFICATION GUIDE, APMG INTERNATIONAL (August 6, 2021).

by the Ministry of Statistics¹⁰ stated that 525 infrastructure projects were hit by time overruns, and 470 infrastructure projects, were hit by cost overruns of more than Rs 4.38 trillion due to deferment of completion of projects. Some of the imminent causes for such delays in project completion and increase in costs of projects are due to the risks associated with environmental clearances, land acquisition, poor infrastructure, changes in law, geological issues, and other contractual complications in the project documentation. This paper aims to discuss some of the critical issues in an infrastructure project and the challenges in infrastructure development and project financing in India.

III. CONTEMPORARY ISSUES RELATING TO INFRASTRUCTURE PROJECTS

The rapid changes in the Indian economic environment along with the advent of the Covid-19 pandemic had a cascading impact on infrastructure projects, contractual obligations between contracting parties, a continuation of construction activities and cost for timely completion of projects in the Indian infrastructure industry. Furthermore, the perpetual lockdowns which directly affected the workforce of the nation resulted in delay and stoppage of work, and contributed to the disruption of the logistics supply chain which further aggravated the cost and time overruns of projects in the country. The above instances resulted in many infrastructure companies and affected parties invoking the force majeure clause in their plight to remedy their predicament. Therefore, one of the most essential

¹⁰ 422nd Flash Report on Central Sector Projects (Rs. 150 Crore and Above), Ministry of Statistics and Programme Implementation Infrastructure and Project Monitoring Division, GOVERNMENT OF INDIA, March 2021.

issues among various others in infrastructure project development in modern times is the Force Majeure Clause.

A. Force Majeure and COVID–19

The term ‘Force Majeure’ implies a “superior or irresistible force”, an unavoidable catastrophe, that affects the performance of contracts, and which puts at risk the execution and timeline of completion of projects. There is generally a standard force majeure clause built-in concession agreement between the awarding authority and the private party in India, with less scope of alteration. The Indian concession contracts are mostly lopsided, offering more rights to one party than the other. Thus, it is imperative to have a clear understanding of the risks and the nature of the Force Majeure clause, invocation of which is essential for either of the party by a notice to the other party, especially in cases of continuous suspension of work beyond a duration specified in the contract due to extraordinary circumstances envisaged under this clause.

1. Case Study on the Invocation of Force Majeure: MEP Infrastructure Developers Limited v. South Delhi Municipal Corporation & Ors.

The brief facts of the case¹¹ were such that as per a construction contract (Toll Collection Contract) entered into by the parties, the petitioner, a contractor of a highway development project, was liable to pay revenue to the respondent for being allowed to collect toll as per the concession agreement. The petitioner defaulted in making payments.

¹¹ MEP Infrastructure Developers Limited v. South Delhi Municipal Corporation & Ors., (2020) SCC OnLine Del 728.

As per the order, the petitioner was directed to make payments to the respondent, during which time no coercive action was to be taken against the petitioner. However, the respondent served a termination notice upon the petitioner by an interim order. The effective date of termination was extended for the petitioner due to the nationwide lockdown. Thus, considering the above, the petitioner filed an application for modification of the order on the grounds that the construction contract had become temporarily non-operational and unfeasible given the nationwide lockdown and sought protection against the termination. The issues for consideration before the Delhi High Court were whether the Force Majeure clause under the contract between the parties was in force and whether the appointment of an arbitrator was permissible in the absence of an arbitration clause.

It was held in this case that once a party has acknowledged the prevalence of a force majeure situation, it cannot challenge the non-performance of the contract which is impacted by the pandemic. It also observed that since the pandemic has been explicitly classified as a force majeure event vide the office memorandum¹² issued by the Government, there would be no requirement for a separate notice. This observation is relevant for several infrastructure projects, which prescribe the issuance of an early warning notice as a pre-requisite for invoking the Force Majeure clause. The High Court also observed that the relaxations given by the Central and State Governments would not amount to abatement of the force majeure event for construction contracts. Therefore, this is an important judgment delivered by the Hon'ble Delhi High Court during the beginning of

¹² Office Memorandum No. F. 18/4/2020-PPD, GOVERNMENT OF INDIA, MINISTRY OF FINANCE, DEPARTMENT OF EXPENDITURE, Procurement of Policy Division, (19th February 2020).

the pandemic on invocation of the force majeure clause in infrastructure projects. In the instant case, the Government vide above office memorandum had recognised Covid-19 as a force majeure event. The analysis of the judgment, in this case is that if there is an official recognition of a force majeure event by the Government itself, the recognition acts as a notice for invocation of the force majeure event. There would be no requirement for a notice in this situation. Furthermore, the Hon'ble High Court went on to hold that once a force majeure event has been acknowledged by a party, it may not challenge the non-performance of the contract due to the force majeure event.

2. Possible Remedy

In the light of COVID-19, the specific Force Majeure clause concerning the rights of the parties has gained unusual topicality both in the Indian and global contexts. Remedies against the COVID-19 pandemic can be both equitable and contractual in nature. Commercial impracticability or other provisions under the Indian Contract Act such as Frustration of Contract may be relied upon. The doctrine of frustration is defined under section 56 of the Indian Contract Act, 1872.¹³ As per section 56 of the Indian Contract Act, 1872 the doctrine of frustration states that an agreement to do an impossible act is void.

Therefore, under section 56 of the Indian Contract Act, 1872, the application of the doctrine of frustration would take place when the performance or the further performance of a contract has been rendered impossible or has been indefinitely postponed due to the happening of an

¹³ The Indian Contract Act of 1872, No. 9, Acts of Parliament, (India), §56.

event which was not and could not have been contemplated by the parties to the contract when they entered into it. The Hon'ble Supreme Court of India in *Southeast Asia Marine Engg. & Constructions Ltd.*¹⁴ held on the relationship between the frustration of contract and force majeure events, that force majeure events are covered by the doctrine of frustration under section 56 of the Indian Contract Act, 1972. Therefore, the Hon'ble Court relying on the doctrine of frustration held that on the occurrence of an event that renders the performance impossible, the contract becomes void thereafter. During the current times, the doctrine of frustration can be considered to have gained importance to challenge claims of non-performance of contracts due to the COVID-19 pandemic for infrastructure projects hit by arbitrations and disputes due to invocation of the force majeure clause during the COVID-19 pandemic.

The Hon'ble High Court in the case of *Halliburton Offshore Services Inc. v. Vedanta Limited and Ors.*¹⁵ dated 29 May 2020 held that the non-performance of contractual obligations or breach of contract may not be justified merely by an invocation of a force majeure clause. On the interpretation of the force majeure clause, it was held by the Hon'ble Delhi High Court that the force majeure clause should be interpreted narrowly and not broadly. However, it may be pertinent to note that excusing non-performance perhaps may be permitted only sparingly in exceptional situations.

¹⁴ *Southeast Asia Marine Engg. & Constructions Ltd. (SEAMEC LTD.) v. Oil India Ltd.*, (2020) 5 SCC 164.

¹⁵ *Halliburton Offshore Services Inc. v. Vedanta Limited and Ors.*, (2020) SCC OnLine Del 542.

3. Other Critical Issues

Other essential issues in infrastructure projects pertain to issues such as promoters' obligations towards projects, the enforceability of guarantees, indemnity, disputes, and arbitrability of disputes. Furthermore, in the event of failure of the project leading to the project going into losses, the recourse will be between the revival of the project and the project company or liquidation. Enforcement of security interests at the time will be of great consideration along with the choice of whether to move for the corporate insolvency resolution process of the project company or to revive the project company.

4. A Case Study on changes in law and Indemnity clauses in Model Concession Agreements: GMR Hyderabad Vijayawada Expressways Pvt. Ltd. v. National Highways Authority of India (“NHAI”)¹⁶

The facts of the case are such that on 9th October 2009, GMR and NHAI entered into the Concession Agreement for construction work of NH-9, now NH-65. GMR claimed compensation on the ground that there had been a “change in law”, during the tenure of the agreement between GMR and NHAI. GMR claimed that it was entitled to compensation, under the indemnity clauses of the contract between GMR and NHAI. NHAI contested the claim. The parties brought the issue before an arbitral tribunal. All the learned members of the Arbitral Tribunal have held that the rejection of the compensation claim by NHAI was unsustainable. The majority award held

¹⁶ GMR Hyderabad Vijayawada Expressways Pvt. Ltd. v. National Highways Authority of India, (2020) SCC OnLine Del 923.

that the NHAI should be permitted to quantify the compensation payable to GMR.

The minority however dissented and held that the task of examining the claim of GMR, on merits ought not to have been delegated to NHAI but ought to have been assigned to independent experts, such as an eminent body of auditors. The issues raised were (i) Whether “change in law” had taken place within the meaning of the expression as defined under the Concession Agreement; (ii) Whether the indemnity clause is applicable in the case; and (iii) What is the extent to which one has suffered financial prejudice due to the “change in law”. On indemnity, it was held that GMR was entitled to compensation under the indemnity clause of the concession agreement. However, it had to prove the existence of financial loss it faced due to a change in the law. Furthermore, an independent body of experts was to quantify the compensation payable to GMR.

In light of the above, this judgment is very significant as it sheds light on the relationship between the changes in laws/policies and the indemnity enforced due to such a change. One of the main issues decided in this judgement was the extent of the clause of indemnity and whether the terms within the clause “other financial burden” was inclusive or exclusive. The ratio that the courts relied upon is that the words “other financial burden”, as employed in the indemnity clause of the contract are expansive and comprehensive in equal measure, and would encompass any kind of financial burden, to which GMR would be subjected, as a consequence of the “change in law”. The Hon’ble Court observed that, unlike a statutory instrument, a contract is entered into between the parties thereto, with open eyes, and with the wherewithal to include in the contract all such covenants as would

manifest their intention. Therefore, it is a welcome move for the private party as the private party in a public-private partnership may enforce indemnity against the authority if it may be able to substantiate its claim of indemnity.

5. A Study on Risks associated with the Key Clauses in Model Concession Agreements in Road Projects

Illustration III: Comparative Analysis of Key Clauses in a Concession Agreement. [For this study, standard model concession agreements of NHAI are referred.]

| Sr. No. | Project | Key Considerations/ Clauses | Risk Share between The Authority and The Private Party |
|---------|--------------------------|---------------------------------|--|
| 1. | NHAI Model Concession | Force Majeure and Termination | Shared Risk |
| 2. | Agreements in DBFOT mode | Changes in Law | The Authority |
| 3. | | Concessionaire Event of Default | The Private Party |
| 4. | | Government Event of Default | The Authority |
| 5. | | Delays in Land Acquisition | The Authority |
| 6. | | Financing Risk | The Private Party |
| 7. | | Regulatory Approvals | The Private Party |
| 8. | | Design Risk | The Private Party |
| 9. | | Construction Risk | The Private Party |
| 10. | | Concessionaire Risk | The Authority |

| | | | |
|-----|--|--|-------------------|
| 11. | | Risks associated with operation and management | The Private Party |
| 12. | | Technology-related risks | The Private Party |

Therefore, an analysis of the above study may indicate that the nature and extent of risk-sharing between the parties stipulate that the private parties generally undertake higher risks associated with the project in terms of the key clauses and the key considerations when compared to the risks undertaken by the authority in the case of Design Build Finance Operate and Transfer (“DBFOT”) road projects.

IV. CHALLENGES IN INFRASTRUCTURE DEVELOPMENT AND PROJECT FINANCING

There are many critical issues and challenges in infrastructure development and project financing in India. The most important among the plethora of them are the following:

A. Land Acquisition

The risks associated with land acquisition are one of the most critical risks in infrastructure projects in India. One of the major concerns in public-private partnerships is the risk associated with delay in acquisition of the land due to untimely fulfilment of the requirements. The risks due to land acquisition are generally on the authority or the Government as it is considered the responsibility of the authority to procure the land. However, the responsibility of land acquisition remains beyond acquisition and exists

post-acquisition period as well, towards rehabilitation of the displaced public after acquiring the land.

1. A Case Study on Land Acquisition: Narayan Prasad v. The State of Chhattisgarh

The Hon'ble Court in the case of *Narayan Prasad v. State of Chhattisgarh*¹⁷ decided certain important issues in the matter related to land acquisition. The facts of this case are such that two brothers owned a piece of land in their village located in Bilaspur that was included within the area known as Arpa Special Area Development Authority, Bilaspur. They made an application before the Arpa Special Area Development Tribunal, Bilaspur for a 'No Objection Certificate' for the sale of their lands. The application was however rejected on the ground that their lands were required for the construction of roads under PPP. Pursuant to this, they then filed a writ petition against the order.

The Hon'ble Chhattisgarh High Court held that in the absence of any law that prohibits the transfer, there can be no restriction to transfer the land directed by anybody. It was observed by the court that the Right to Property under Article 300-A of the Constitution of India is not only a constitutional or legal right, but it is also a human right and a person can be deprived of that right only by the authority of law. Land acquisition, therefore, requires striking the right balance between the individuals' right to property and the acquisition of land for industrial purposes. This judgment is significant as it highlights the judicial position on the balance of rights of an individual's

¹⁷ Narayan Prasad v. State of Chhattisgarh, (2017) SCC OnLine Chh 1226.

right to property vis-à-vis compulsory acquisition of land for industrial and infrastructural purposes.

2. Environmental Clearances and Regulatory Approvals

There is a pronounced tussle between environmental protection and infrastructural development. However, sustainable development is the only way forward. Due to the threat to the environment and forests by industrial and economic activities, environmental safeguards such as the Environmental Impact Assessments are put in place. The National Green Tribunal which was established under the National Green Tribunal Act, 2010 has been given the mandate to adjudicate over issues related to the sustainability of forests and natural resources, including those impacted by infrastructure development.¹⁸ Environmental safeguards are regularly changing with the changing times. Even supposing that the project is sustainable, any person from the public has the authority to question a project's environmental viability. Furthermore, the projects affecting the local environment are prone to cost and time overruns. Thus, infrastructure project parties must comply with these guidelines, regulatory requirements, and compliances that may be updated from time to time.

3. Financial Risks

Risk-sharing is one of the key advantages of public-private partnerships. The risks are divided between the authority and the private party in such a way that a project may be successfully carried out. As discussed previously in this paper, drawing attention to the study on risk-sharing carried out above, it is known that risks are divided between the

authority and the private party depending on the nature of the project and the type of public-private partnership. However, at times, there lies a possible question of imbalance regarding the risk share between the authority and the private party. Furthermore, the changing economic and market conditions affect the borrowers, as domestic and international investors search for higher returns of interests. Changes in the market, affect the borrowings in infrastructure projects.

4. Project Stage-Wise Challenges

The public-private partnership project deals with challenges at different stages of the project. One of the biggest challenges of the project is at the first and foremost stage of the project- being the planning stage. The planning stage is the stage wherein the cost and construction capacity of the project should be properly carried out. Therefore, a proper feasibility study is important as it lays down the foundation for the execution and implementation of the project in its later stages. The several challenges at the various stages of the projects are:

- Stage I - Feasibility Study, Pre-Bidding and Bidding Stage: Challenges relating to project planning, structuring the risks at the development and pre-bid stage, challenges associated with the preparation of bidding documents and challenges associated with the pre-bid leading to the award of contract.

¹⁸ The National Green Tribunal Act, 2010, No. 19, Acts of Parliament, 2010 (India).

- Stage II - Development Stage: Challenges relating to procurement, construction risks, implementation, and monitoring of the project, challenges in due diligence.
- Stage III - Operation Stage: Challenges associated with operating and maintaining the infrastructure utilities, several responsibilities and duties of the occupier of the factory, contractor, or principal employer of an establishment under various construction laws (i.e., Building and Other Construction Workers Act, 1996) and labour laws (i.e., the Factories Act, 1948, the Contract Labour Act 1970, the Workmen's Compensation Act, 1923.)

5. *Disputes*

Dispute resolution can be one of the causes of cost overruns and time overruns in infrastructure projects. Since litigations can be time-consuming, long, and costly, they can directly lead to delays in project completion. Moreover, standard contracts offer model clauses which are highly favouring one party over the other which creates a disparity of risk-sharing between the parties, and aid one party over the other at the time of dispute resolution. Although alternative dispute resolution mechanisms like arbitration save time for projects, however the arbitration costs of construction projects are generally high and add to the overall cost of the projects. Causes such as high arbitration costs, high arbitrators' fees, time-consuming dispute resolution, and high costs related to international arbitration further aid in raising the total cost of projects. Furthermore, another drawback of arbitration is the ability for the award to be questioned and appealed by a further judicial authority. When parties in a public-private partnership are

unable to reach mutual settlements, they are forced to opt the path of litigation.

It can be summarised that the risks associated with land acquisition, financing risks, challenges in dispute resolution, environmental clearances, and regulatory approvals remain to be the primary challenges associated with infrastructure development and project financing in India.

V. CONCLUSION

As discussed at the beginning of the paper, the need and scope of infrastructure in India are vast and growing. Therefore, to keep facilitating continuous growth of infrastructure development and project financing in India, it is essential to stay abreast with its key contemporary issues that impact the industry in modern times as well as address the bottlenecks that hinder the growth of this industry. Force Majeure is one of the leading causes for infrastructure projects going into disputes in modern times. The pre-pandemic era could not have possibly conceived the gravity of this clause in construction contracts. However, in contemporary times, the private party needs to meticulously investigate the provisions of suspension of work, extension of time, damages incurred, and cost escalations due to the impact of force majeure events such as the COVID-19 pandemic.

To substantiate its claims during the dispute resolution process, it is pertinent that the procedure for the invocation of the Force Majeure clause is followed through. Furthermore, evidenced by the case studies provided, it is known that changes in laws and policies have also greatly impacted infrastructure projects in India. The current situation of the COVID-19 pandemic resulted in many changes in state and national laws, which

consequently affected the labour force, the construction activities being carried out, and caused disruption in the supply chain hindering project timelines and costs. Staying up to date with modern changes in law and substantiating its financial impact for substantiating claims at the time of dispute is paramount at the time of dispute resolution. In the Indian infrastructure sector, there is a combination of risk-sharing between the authority and the private party. As per the comparative study on risk-sharing carried out in the paper, it can be noticed that predominantly the risks borne by the private party on infrastructure projects are greater than the risks borne by the authority. This results in an imbalance of risk-sharing. In the infrastructure industry, parties generally do not negotiate the terms of a standard form of contract. Thus, it results in ambiguous and lopsided terms of a contract that lead to disputes in the future. An initiative to inculcate and encourage negotiation in standard form contracts could potentially prove to reduce the number of disputes caused due to these unbalanced terms of the contract.

One of the most critical bottlenecks that affect infrastructure development in the nation is the issues around land acquisition. It is a roadblock to development in infrastructure as often there is opposition and aversion from local communities and the social and local environment. Furthermore, it is also the responsibility and duty of the state to rehabilitate the people who lost their land due to infrastructural and industrial purposes. Therefore, there should be a balance between an individual's right to property vis-à-vis compulsory acquisition of land for industrial and infrastructural purposes. Delay in procuring regulatory approvals and environmental clearances also lead to cost and time overruns in infrastructure

projects. Staying informed regarding the changes and executing timely compliances would provide a solution for this issue. Disputes in infrastructure contracts are also one of the primary causes of failure in infrastructure projects. Parties involved in costly and time-consuming litigation with the Authority face the unfortunate likelihood of going bankrupt due to lengthy litigations.

Therefore, there should be a general trend to shift towards swift arbitrations and to focus on reaching mutual settlements than to be caught up in expensive litigations. On a concluding note, it can be said that the future of infrastructural development and project financing is bright in India, although it faces some bottlenecks and challenges. Keeping an approach to resolve such challenges while also staying tuned with all the current critical issues in the industry should be the way forward to protect the interests of all the stakeholders involved.