

# Study on Barriers and Challenges Ahead in Public Private Partnership Projects

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## ABSTRACT

The Public-Private Partnership mostly did the world economic development and growth across the country. Number of schemes are started in joint collaboration with private sectors in order to give national economy an impulse and thus enhancing the pace of economic growth by the Government. PPPs aim is to combine the skills, expertise and experience of both the public and private sectors to deliver higher standard of services to the nation. In PPP, some challenges like transparency, time concern objects, lack of Latest technology and machinery, project costing, choice of best private firms and institutions, strategy formulation, capital management, absence of skilled man power etc. The purpose of this paper is to find out the various challenges and issues through some case studies that create difficulties to promote PPP.

**Keywords:** Economic growth, Public Private Partnership, Infrastructure, Case Study, Key Learning's, Observations, Challenges ahead and Issues

## I. INTRODUCTION

A public private partnership (PPP) is an arrangement between the government on one side and private sector on the other side, for the purpose of provisioning of public assets and/or public services or infrastructure, through investments being made being carried out by the private sector entity, for a specified period of time. Allocation of risk between the private sector and the public entity is well defined. With a common objective in place, both entities come together sharing their own experiences and strengths, which results in the accomplishment of a common vision.

In a competitive global environment, governments around all over the globe are focusing on finding new ways to finance the projects, build infrastructure and deliver services. Public-Private Partnerships (PPP's or P3's) are becoming a common tool to bring together the strengths of both sectors, both in technicality and financially. In addition to maximizing efficiencies and innovations of private entities, PPPs can provide needed capital to finance government projects, thereby freeing public funds for core economic and social programs.

## II. METHODS AND MATERIAL

### 1. Scope and Objective of the Study

The objective of this paper is to identify the main factors influencing the issues and challenges faced by the Public Private Partnership Projects in India based on case studies.

The main objective of this research is to

- To assess the PPP projects in India.
- To investigate issues and challenges faced by the Public Private Partnership Projects in India.

### 2. PPP in India

To encourage private sector investments in the country, the Government of India (GOI) has been focusing on the development of enabling tools and activities, through the PPP format. Private investments amounting to US\$500 billion expected to bridge the infrastructure gap of US\$1000 billion over the period 2014-2019. As a part of meeting this financing gap, the PPP model is increasingly been seen as a means of harnessing private

sector investment and seeking operational efficiencies in the provision of public assets and services.

### A. Scope for PPP India

Technical in Budget, the finance Minister has insured a sharp increase in institutional funding to PPP Project refinance to evolve a takeout financing scheme in conference with banks to ensure greater funds to the infrastructure sectors. The proposal is to make IIFCL refinance 60% of commercial banks loan for PPP projects in critical infrastructure projects. For all such PPP projects, a well-defined regulatory framework has been identified by the State Governments. It includes enactment of legislations for clearly defining the types of infrastructure facilities, the governing authorities, the procedural requirements and the scope of private sector in execution of these projects.

The PPPs also plays a role in e-Government for longer-term contracts between public contracting entity and private provider for delivery of specified outputs. Electronic processing enables easy communication amongst partners and different models outsourcing discreet tasks. The risk is transfer to private sector, commercial know-how and managerial skills are shared. The Best-practice technologies and innovation can be involved in PPP to have successful infrastructure projects for our country. The private sector participation is expected to be about 50 billion USD and of which 15 billion USD is expected from the foreign investors.

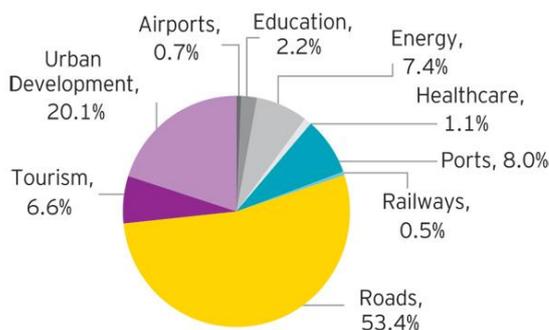
In the next three years, more than 100 projects worth about Rs 98,000 crore would be available for bidding as part of the Annual work Plan of NHAI. Thus, huge participation from the investors belonging to various fields such as investment bankers as well as the companies from the infrastructure sector including construction companies, and those dealing with construction equipment and technology will be there.

### B. Status of PPP India

Technical in Budget, the finance Minister The PPP India database (Department of Economic Affairs, Ministry of Finance) indicates that 758 PPP projects costing INR3,833 billion is awarded/underway status (i.e., in operational, constructional or in stages wherein at least construction/implementation is imminent). There exists significant untapped potential for the use of

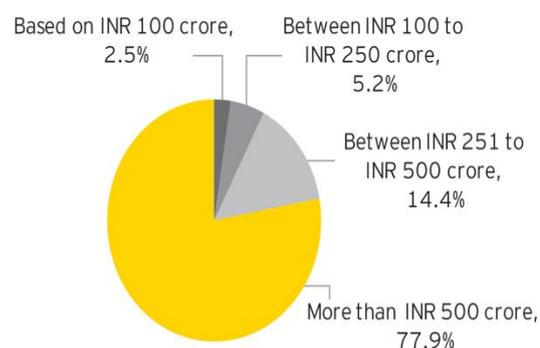
the PPP model in e-governance, health and education sectors. Karnataka, Andhra Pradesh and Madhya Pradesh are the leading states in terms of number and value of PPP projects. At the central level, the National Highway Authority of India (NHAI) is the leading user of the PPP model. The graphs shown in FIG 1 and FIG 2 depict the status of the PPP Projects in India.

**PPP projects in India by sector  
(Total number of projects: 758)\***



**Figure 1. PPP Projects in India by Sector**

**PPP projects by value of contracts  
(Total value of contracts: INR3,833 billion)\***



**Figure 2. PPP Projects by Value of Contracts**

### C. PPP Policy Frame Work

Major policy and institutional initiatives taken:

- Formation of PPP Appraisal Committee to streamline appraisal and approval of projects.
- Preparation of PPP Toolkit to improve PPP decision making process.
- Establishment of transparent and competitive bidding processes through model bidding documents.
- Extending financial support through development funds, VGF, user charge reforms, etc.

## PPP Policy Frame Work

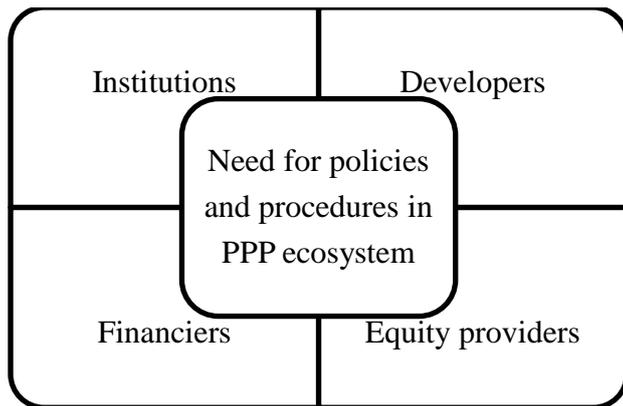


Figure 3. PPP Frame work

### D. Prominent Qualities of PPP Policy

- The GOI plan to sanctify PPPs as favoured accomplishment models depending upon the existence of strong track record for those models. It has built strong reliable processes to acquire a PPP project.
- To encourage transparency in PPP, it will issue different compulsory revelations and just applications, set up dedicated dispute resolution mechanism, develop new market-based products (e.g., pre-bid rating), and explore possibilities of setting up web-based PPP market place.
- The GOI is expected to set up MIS for nonstop supervision of the performance of PPP projects.

### E. PPP Engagement Models

No single PPP engagement model is there that can satisfy all conditions concerning a project's location setting, its technical, financial features, risk allocation, transparency of procedures, project appraisal, cost and time parameters, governance and regulatory independence, etc. This has led to innovation in the engagement models.

- BOT (Build Operate Transfer)
- BOOT (Build Operate Own Transfer)
- Joint Venture (JV)
- Management Contract (MC)
- BOT (Build Operate Transfer)
- DBFOT (Design Build Finance Operate Transfer)
- BOO (Build Own Operate)
- BOOST (Build Operate Own Share Transfer)

## 3. Case Studies

### A. Case 1: Alandur Sewerage Project

The Alandur Sewerage Project was initiated in the year 1996 by the Chairman of the Alandur Municipality. AM, located adjacent to Chennai, forms a part of the Chennai Metropolitan Area. With a population of around 165,000, the municipality is a residential suburb of Chennai with predominantly residential and commercial activities. Approximately one-fourth of its population lives in slums.

#### Description

The ASP was designed with the following objectives:

- To improve the standard of living of the residents of Alandur (on par with that of Chennai);
- To provide the most essential basic facility to all the residents of the town;
- To eradicate the mosquito menace;
- To avoid the recurring expenditure on septic tank cleaning; and
- To avoid ground water contamination.

The project components included:

- A sewerage network consisting of the main sewer line, branch sewer line and manholes;
- Construction of a sewage pumping station;
- A sewage treatment plant; and
- Low cost sanitation.

#### Key Learning and Observations

1) *Beneficiary participatory approach:* People's participation in the project, including the fact that almost 29% of the project cost was garnered from public contributions, was the most outstanding aspect and learning from the ASP. The success of the project from the outset depended highly on effective collection of connection charges and monthly sewer fees as also public acceptance of engaging a private BOT participant.

2) *Stakeholder involvement and interdepartmental coordination:* Continued involvement of stakeholders throughout the project ensured timely completion of the project and addressing of issues even as they arise. The ASP established that close involvement of all stakeholders/departments at the key decision-making

stages of the project, as also for review and monitoring, is critical to ensuring that the project stays on-track.

*3) Political will and strong decision making, especially at the grass-root level:* The ASP demonstrated that 'political will and quick decisions make projects happen'. While strong support for the sewerage system within Alandur existed, political will was essential to convince the customers and citizens to pay a significant share of the cost and accept the entry of the private sector. Throughout the project decision making stages, the members of the municipality maintained full support for the project.

*4) Acceptance of fiscal discipline:* The term lenders, TNUIFSL and TUFIDCO, placed strict lending conditions on the municipality, requiring the municipality to accept and implement strong fiscal discipline measures. TNUIFSL required the municipality to establish a separate sewer account distinct from the general budget of the municipality, forcing discipline and transparency on the officials managing the system. Thus, the loan as well as contractual obligations ensured strong fiscal discipline by the municipal body, by making it take difficult decisions on capital priorities, closely oversee the sewer system management, and ensure budgeting of sufficient funds to meet payment schedules.

*5) Assurances on payment to the Private Sector Participant:* The municipality agreed to provide the BOT operator a minimum level of income by accepting the 'take or pay' condition in the Agreement. Thus, the municipality assumed the risk of minimum payment to the operator while the private partner assumed all other responsibilities and risks of financing, constructing and operating the STP for a period of 14 years.

*6) Technical and financial assistance:* The expertise needed to plan and manage the technical and financial aspects of the project far exceeded the capacity of the municipality. Assistance from the other government bodies in the state, the Chennai Corporation, and sources, such as the USAID's FIRE project, was critical. TNUIFSL and FIRE played a substantial role in structuring the project, managing the feasibility studies, and preparing the bid and contract documents crucial to project success.

*7) Transparency in bidding and contracting procedures:* The transparent approach to the project, right from inception to selection of contractor/operator and implementation, was critical to providing the necessary assurance to the private sector bidders on the professional approach of the municipality. Public participation in the deliberations of the management committee overseeing the tendering process execution was also important.

## **B. Case 2 : Gangavaram Port Project**

Located on the East Coast of India in the State of Andhra Pradesh (district of Visakhapatnam around Latitude 17° 37' N and Longitude 83° 14' E, about 15 kms south of Visakhapatnam Port), Gangavaram Port has been developed as all weather, multipurpose, deep water port with a depth of up to 21 meters, capable of handling Super Cape size vessels of up to 200,000 DWT.

### **Description**

The master plan has a provision for 29 berths with a capacity of 200 MTPA to be developed in three phases over 15-20 years. In Phase I, five berths have been constructed with an estimated handling capacity of 35 MTPA. One berth is dedicated to iron ore, the second berth is for handling coal and there are three multi-purpose berths to handle containers and other cargo.

### **Key Learning And Observations:**

*1) Robust project preparation by government sponsors prior to tender is critical:* As was experienced in the first round of tendering, realistic traffic projections were not prepared thus leading to unfounded optimism from both the government and the bidders' side.

*2) Bid evaluation criteria need to be simple but robust:* The first round of tendering had several evaluation parameters that were working at cross-purposes and encouraged speculative bidding.

*3) Addressing fundamental project related and contractual issues, prior to the tender, is important:* The second round of tendering experienced a long drawn contract finalization period. This was largely because some of the fundamental issues, such as, contractual issues, land acquisition and rehabilitation issues had not been adequately addressed prior to tender. It can be seen

that once these issues were resolved, the project was financially attractive and bankable. Today the project is a success story.

4) *Recommended:* It is recommended that where firm commitments are made they should be definitive or within a decision both parties failing which the government sponsors may find themselves in a serious predicament can manage making framework that.

5) *Land transfer back on normal termination of the project is a concern area:* The contract specifies that the government shall acquire the said land and transfer the ownership to the port SPV and that on normal termination of the project due to efflux of time, the land along with the essential assets will revert back to the government on a formula-based valuation. Hence, return back of land for a fully functional port is a major risk that the government has taken upon itself under the concession agreement.

6) *Waiver of concession fee in years of no profits was a progressive policy stand:* An interesting feature of this contract is that the government is paid a gross revenue share by the SPV only in the years of profits. This stance had a historical perspective. The government had decided upon this more flexible approach. While effective contract management is, vital it has been underplayed by government sponsors in the past and this places more pressure on the government to undertake active contract management and supervision.

### III. RESULTS AND DISCUSSION

#### Issues and Challenges

##### A. Generic Issues and Options

However, there are improvements in infrastructure development in the nation during the recent years but there exists a significant gap between demand and supply of significant infrastructure facilities and services, which has become a limitation on the rapid pace of economic development. Infrastructure gap exists in almost all the sectors. The following generic issues, therefore, need the attention to make the PPP model as a success storey in the infrastructure growth and development in the country as in the case of some of the developed and developing economies.

- Transparency
- Risk Allocation
- Project Appraisal
- Cost and Time Overruns
- Government Guarantee
- Centre-State Disagreement
- Regulatory Independence
- Corporate Governance

##### B. Challenges in PPP

1) *Regulatory environment:* There is no independent PPP regulator as of now. In order to attract more domestic and international private funding of the infrastructure, a more robust regulatory environment, with an independent regulator is essential.

2) *Lack of information:* The PPP program lacks a comprehensive database regarding the projects/studies to be awarded under PPP. An online database, consisting of all the project documents including feasibility reports, concession agreements and status of various clearances and land acquisitions will be helpful to all bidders.

3) *Project development:* The project development activities such as, detailed feasibility study, land acquisition, environmental/forest clearances etc., are not given adequate importance by the concessioning authorities. The absence of adequate project development by authorities leads to reduced interest by the private sector, mispricing and many times delays at the time of execution.

4) *Lack of institutional capacity:* The limited institutional capacity to undertake large and complex projects at various Central ministries and especially at state and local bodies' level hinder the translation of targets into projects.

5) *Financing availability:* The private sector is dependent upon commercial banks to raise debt for the PPP projects. With commercial banks reaching the sector exposure limits, and large Indian Infrastructure companies being highly leveraged, funding the PPP projects is getting difficult.

While most of the above issues are being analyzed and solved by the GOI, the inadequacy of sources of funding is the worst hindrance for the success of the PPP model.

#### IV. CONCLUSION

In developing economy nation like India, there exists an infrastructure gaps in all most all the sectors, posing a serious threat to the growth momentum. Some patterns have emerged from the study that forms the basis suggestions for improving PPP implementation.

- First, the independent regulator played an important role in protecting lenders interest by scrutinizing the capital expenditure of terminals for tariff setting. Such an authority is necessary for regulating PPP projects.
- Second, we can suggest the realistic forecasts as a means of preventing projects from ending in failures due to a unrealistic traffic projections.
- Third, concessionaires could not achieve the required financial closure within agreement due to poor project preparation at the pre-bid stage. We therefore suggest sufficient time to pre-project planning as a means of ensuring success in early project closure.
- Moreover, the fourth commonality shows that three cases have successfully demonstrated the ability to deliver value for money in terms of time efficiency, cost overrun anticipation, traffic performance, attractive interest rates and tenor of debt.

Thus, the study also shows that Indian government has successfully developed a PPP toolkit and Government should take necessary steps to implement the PPP project in other states also in order to develop the infrastructure in the country.

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