

A Review of Contractual Framework for Public-Private-Partnership Models in Road Projects of Gujarat

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Abstract: Infrastructure has become the new standard for development of countries worldwide, however governments of different countries find it difficult to build and sustain large infrastructure projects. In response there is a growing trend of involving private partners for developing and maintaining such mega infrastructure projects. Public-Private-Partnership (PPP) has become one of the best methods to develop infrastructure. Many public-private-partnership models are working in different sectors for Indian infrastructure development. PPP models can vary according to the type of infrastructure being built, duration of the project capital, financing structure etc. This paper is an attempt to review the available literature pertaining to the contractual framework of the PPP models used for development of road infrastructure in Gujarat state. Road sector is a major thrust area for infrastructure development in Gujarat. Generally a used mode of PPP includes Build Operate Transfer (BOT), Design Build Finance Operate and Transfer (DBFOT), Build Operate Lease and Transfer (BOLT), etc. for road sector within Gujarat. The current study compares BOT-Toll, BOT-Annuity and DBFOT for their theoretical considerations. Important factors such as financial structure and model concessionaire agreements, operation and maintenance across different PPP models were studied to compare and develop a better understanding. Furthermore the outcome of these study i.e. positive aspects of different existing PPP models also presented recommendations for developing a new PPP model for development of Road Infrastructure projects for Gujarat which could be used by National Highway Authority of India (NHAI) for future projects.

Keywords — Concessioner Agreement, Build-Operate-Transfer (tall), Design-Build-Finance-Operate-Transfer

I. INTRODUCTION

Rapid urbanization in many countries has led to a massive demand for investment in infrastructure (WB, 2006). All over the world, governments have been engaging in public-private-partnership (PPP) provisions for the growth of infrastructure. In each country, primary type of infrastructure is road sector and for which few procurement model has been adopted e.g., the Indiana toll road, the Chicago skyway, and Pennsylvania Turnpike in the United States. The PPP contractual model is defined as national legislation (Decree-Law No. 86/2003) “the contract or union of contracts by which private entities, nominated by private partners, in the long term are compelled to assure, before a public partner, that the development is aimed at satisfying a collective need, and where

funding and responsibility for investment and operation and maintenance obligations belong, in whole or in part, to the private partner.” The emergent trend for the project finance is ruder in Asia as economic and currency crunch increases. A Public-private partnership (PPP or 3P) is a commercial legal relationship defined by the Government of India in 2011 as “An arrangement between a government/statutory entity/government owned entity on one side and a private sector entity on the other, for the provision of public assets and/or public services, through investments being made and/or management being undertaken by the private sector entity, for a specified period of time, where there is well defined allocation of risk between the private sector and the public entity and the private entity receives performance linked payments that conform (or are benchmarked) to specified and pre-determined performance standards, measurable by the public entity or its representative.”

Today, there are hundreds of PPP projects in various stages of implementation throughout the country. As outlined in 12th Five Year Plan (2012-2017), India has an ambitious target of infrastructure investment (estimated at US\$1 trillion). In the face of such an enormous investment the Government of India is actively promoting PPPs in many sectors of the economy. India has the second largest road network in the world, spanning a total of 4.87 million kilometers. Roads in India transport over 60 per cent of all goods and 85 per cent of total passenger traffic. The National Highways account for 1.9 per cent of the total road network in India and are expected to reach 100,000 kms by the end of the 2017 from 97,135 kms in FY15. The Government of India has formulated a seven-phase programme, ‘National Highway Development Project (NHDP)’, vested with National Highways Authority of India (NHAI), for the development of National Highways in the country. The private sector has emerged as a key player in the development of road infrastructure in India. Increased industrial activities, along with increasing number of two and four wheelers have supported the growth in the road transport infrastructure projects. The government’s policy to increase private sector participation has proved to be a boon for the infrastructure industry with a large number of private players entering the business through the public-private partnership (PPP) model. During the next five years, investment through PPP is expected to be US\$ 31 billion. With the Government

permitting 100 per cent foreign direct investment (FDI) in the road sector, several foreign companies have formed partnerships with Indian players to capitalise on the sector's growth.

One of the main characteristics of PPP agreements is related to the financing model of the projects. Although project finance is sometimes used as a synonym for PPP, this is not entirely accurate. The question of risk sharing is undoubtedly one of the most critical issues for the success of the model. It is through an effective risk-sharing agreement that value for money (VFM) can indeed be delivered. Contracts permitting the use of certain assets, facilities and rights like leases, licenses, concessions. The choice of the format for PPP should be decided by the concerned governmental authority after evaluating factors such as: felt need for a particular infrastructure facility which determines the output/performance parameters; felt need for private participation in the development and operation of that facility including the value for money proposition; most efficient way of developing and operating that facility; and balance between viability, welfare objectives and public policy needs.

II. LITERATURE REVIEW

According to UK government, who made first attempt to push private sector for financing any infrastructure projects under PFI, launched in the UK in 1991^[10]. As suggested by ^[4] a functional specific definition of PPP is more focus on financing, construction and operation and maintenance are key features with bi-dimensional view of mutuality and organization identity. Sarkar and Patel (2012) made an attempt to develop a project risk management model for the PPP highways projects. Their model addresses most of the challenges faced by the PPP highway projects in India. The identified risks were analyzed and suitable mitigation measures were suggested. Therefore, as an integrated perspective, PPP can be defined as a strategy that is utilized to provide quality infrastructure facilities and services with high efficiency (as purpose and function), based on a long-term contractual arrangement between public and private parties (as basis of formal governance of the relationship), through the synergetic cooperation between the public and private partners (as means and key feature)^[14]. The cycle of PPP is start from development stage and ending with operation while going through intermediate stage of realization. A framework is developed to act as the lens for the institutional analysis of PPP project transactions, as shown in Fig.1. The micro process is mainly concern with resource allocation and employment during project execution when rules are contractual and designed to regulate participation (Level 4 in Fig. 2). The contractual arrangement, formal and informal, includes perception of PPP, constitutions, laws and regulations, etc. As it can be seen from fig.1 that constraints influence transaction process and it can mainly governed by rules as at this stage it follows legal framework. The institutional and contractual rules, with their interactions with each other, constitute the governance system of the whole PPP project^[14].

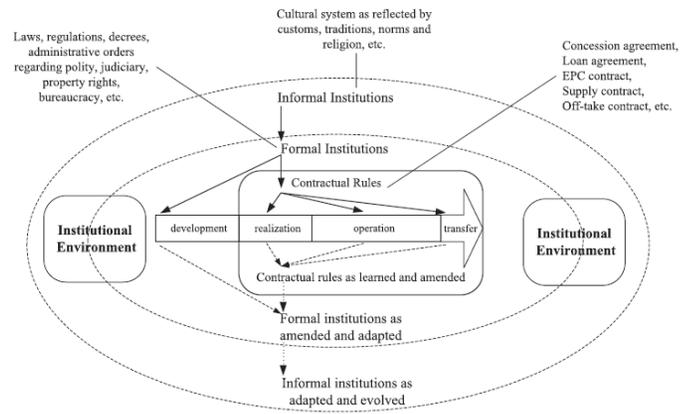


Fig. 1. Institutional framework for PPP development (Zhang et al. 2014)

There are numbers of examples of PPP failures caused by government actions, which are indicated by poor understanding in PPP concept such as: lack of government support and guarantees, unclear contract provisions, an inappropriate of assurance from government. Concession contracts are connector between two parties involves and it is not only solution to prevent the project failure. As there are many numbers of problems occurred during the implementation of the contractual agreement^[5]. Central feature of PPP's is the contractual arrangement. Private investor is sharing equity participation and financial risk for long term contracts^[3]. Innovative long term approaches and traditional shorter term are new range of contractual forms. The few forms of the different contracts are: Service Contract, Leases, Management contracts, Concession contracts, Privatization, Joint Ventures. As explain in Fig 2, there are five types in which private parties can involve in different PPP forms.

Agreement of concession is covering main five major aspect of basic agreement, pre-construction, construction, operation and termination as shown in fig. 3. Both the parties have rights to put their view in agreement except content against law, which is used for enforcement the agreement^[2].

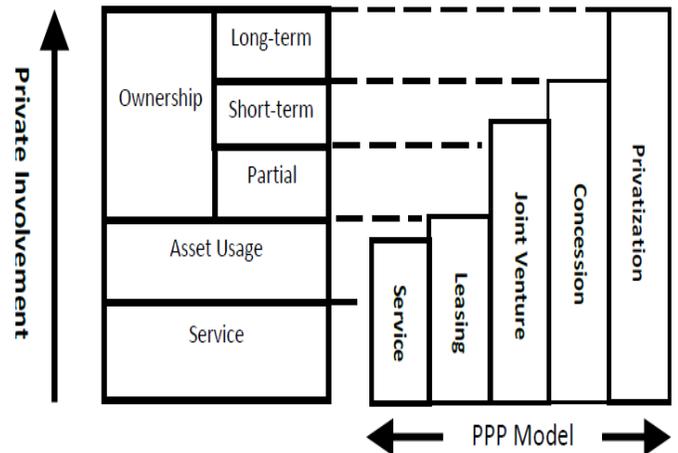


Fig. 2. Spectrum of PPP model [1]

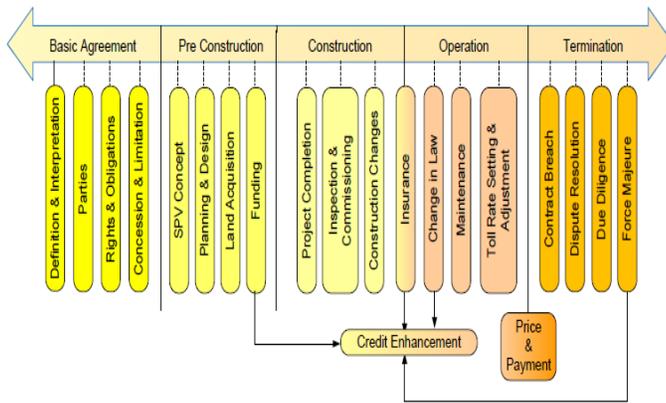


Fig. 3 five major scope of concession agreements [2]

III. CASE STUDY

For the case study authors are selected two projects within Gujarat which lies under NHAI and known as NH-8. There two different cases are taken for study of concessioner agreement which is made for each project and following points are consider for discussion.

- A. *Project: 1* – This project is extension of existing four lane highway to six-lane highway for the patch of Surat-Dahisar under NHDP Phase-5. Total length of the project is 239.00 km and it is connecting two state Gujarat and Maharashtra. This project develop under BOT (tall) concessioner agreement pattern.
- B. *Project: 2* – This project is also extension and improvement of six-laning of existing road under NHDP Phase-5. The total length of this project is 102.00 km and expressway is also existing beside the route. This project is develop under DBFOT (tall) base concessioner agreement.

C. POINTS OF COMPARISON

1) OBLIGATIONS OF THE CONCESSIONAIRE AND AUTHORITY: Concessionaire has authority to draft all the project agreements for its review and commence, and authority shall also have rights, but not the obligations to undertake such review and provide its comments, to the concessionaire within 15 days of the receipt of draft and within 7 days of execution of project agreement. The concessionaire has to submit a true copy duly signed by director of the concessionaire to the authority for record. Authority shall make the best endeavor to procure that no local tax, toll or charge is imposed on the use of whole or any part of the project subject to accordance with applicable laws, grant to the concessionaire the authority to regulate traffic. The Concessionaire shall have obtained all Central Government clearances and permits under the applicable laws relating to environmental protection and conservation from the Ministry of Environment and Forest.

2) RISK SHARING AND CHANGE IN SCOPE: All risks related to the project are shared almost equally by concessionaire and the authority in BOT (tall) and in BOT (annuity) all

risks related to the project are majorly borne by authority as each year they have to pay concessionaire regardless of the annual traffic. For the change in the scope the concessionaire shall inform to the authority and after approval if the change is more than 0.25% of the total project cost and it shall be borne by the concessionaire end if it exceeds further more than 5% of the total scope of the project in any continuous 3 years during construction than amount must not increase more than 20% during whole concession period. During the Construction Period, which is beyond the scope of the Project as contemplated by this Agreement ("Change of Scope"), provided such changes do not require any increase/ reduction in expenditure exceeding 10 % of the Total Project Cost and do not adversely affect the COD. All such changes shall be made by NHAI by an order (the 'Change of Scope Order') issued in accordance with the Procedure.

3) FINANCIAL C[1] LOSER AND CONCESSION FEES: Concessionaire has to agree to achieve Financial close within 180 days from the date of agreement and in case of delay concessionaire has to pay 0.1% of the performance security each day. In case of financial closer the concessionaire has to submit report to the authority at least two days prior to the financial closer. The concession agreement shall be deemed to have been terminated by mutual agreement of the parties, and upon termination performance security is encased as damage. Concessionaire agrees to pay fees for the 1st year of the concession period. A premium in the form of an additional concession fees equal to 38% of the total realisable fees during that particular year. Premium shall be determined by increasing the proportion of total realisable fees during that year by an additional 1% as compared to the immediately preceding year.

4) TERMINATION: Concessionaire fails to deliver project within stipulated date or date of commencement or fails to breach the maintenance requirements. Concessionaire fails to make payment to authority within time period specified also when the escrow default has occurred and the concessionaire fails to cure the default within cure period of 15 days. Concessionaire when declares bankruptcy etc. Authority if fails to cure their default within 90 days of cure period. The Concessionaire fails to achieve any Project milestone other than Scheduled Project Completion Date within the period set forth and fails to cure such default within a period of 180 days from the date of its occurrence. The Concessionaire is adjudged bankrupt or insolvent or if a trustee or receiver is appointed for the Concessionaire or for any of its property that has a material hearing on the Project.

IV. CONCLUSION

After studying different concessionaire agreement of the PPP models applied for Indian Highway projects it has been observed that BOT toll models appear to be most feasible model. There are some notable features of the BOT (toll) project concession agreement such like ownership of road, acceleration of construction, risk transfer, value of money, long and complex tendering process, etc. The BOT (annuity) projects are also feasible in certain conditions where the fluctuation of the

forecasted traffic and actual traffic flow is quite high. Finally, it can be recommended that, on considering concessionaire's financial model the project authorities may consider BOT (toll) if the financial backup of the organization is good. Otherwise concessionaire may also go for BOT (annuity) due to its neutral traffic risk.

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