

## PUBLIC-PRIVATE PARTNERSHIP- THE BACKBONE OF INFRASTRUCTURE

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### Abstract

*Infrastructure is the necessity sector for the development of any economy. The public-private partnerships have engaged as a very feasible, viable, and growing route of creating infrastructure for our country. This paper talks about how public-private partnership has covered their dominant role in building infrastructure of the country. Though public sector will continue to play a major role in building of infrastructure, the PPPs have enabled us to channelize private sector investment in infrastructure. Keeping in mind that our India lies in rural area not in big city. This paper also concern about how PPPs has taken up some big step of infrastructure project like DMRC, PPP AC, IIPDF VGF, IIFCL. During 2007-2012 private sector contributed 36.6% in the overall infrastructure investment leading to infrastructure investment rising from -5% of GDP, during 2002-2007 to -7% of GDP during 2007-2012. This paper also put light on the policy formulation of 1991 on of the India's largest step taken up in infrastructure. This sector is highly responsible for propelling India's overall development and enjoys intense focus from Government and private bonding for initiating policies that would ensure time-bound creation of world class infrastructure in the country The present article explores the possible reasons for this uneven growth in India to be due to differences in the political will among the national and sub-national governments in promotion of the infrastructure PPP policies. Most probably, PPPs not only in infrastructure but also give its contribution to other sector also like management, proficient risk mitigation, and enhanced technological innovation This paper also analysis e endogenous risk faced by the public and private sector how the will conclude themselves in front of the economic development and the society for which they are working, beside this how they will distribute the profit in practice based on the conclusion of the study.*

**Keywords:** Infrastructure, Management, Development, Public-Private Partnership etc.

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## INTRODUCTION

Public-Private Partnership is defined as a legal agreements between public and private-sector entity that offer the delivery of physical infrastructure & services to the society in specific time duration. PPP aims to take advantage to the strength of the public sector through stable governance, citizen's support and those of private sector by their enhanced operational efficiency, innovative technology, managerial effectiveness so as to deliver higher standard of service to the people with better value of money.

Public private partnership is an ancient phenomenon, they were not studied sincerely by scholars until the late 1980s, when they began to be adopted in public administration as well as management in both developing and developed countries. PPP's have been a topic of political controversy and also scholarly debate especially concerning the merits and demerits of PPP's with traditional government run services also the nature of partnerships they bring about.

PPP is a broad term that can be applied to anything from a simple, short term management contract (with or without investment requirements) to a long-term contract that includes funding, planning, building, operation, maintenance and divestiture. PPP arrangements are useful for large projects that require highly-skilled workers and a significant cash outlay to get started. They are also useful in countries that require the state to legally own any infrastructure that serves the public.

## BASIS OF PUBLIC PRIVATE PARTNERSHIP

Some of the essential conditions to label a public-private arrangement are conceived in the definition by the National policy on PPP's. Though each PPP contract is a unique one depending on the circumstances of the case, each one of them is based on some integral characteristic common to such contract notwithstanding a few other condition which I also desirable in a good an fair PPP are related to specifications about risk assumption, method of payment, weather the payment would be through cash flows from the public sector based on presentation or whether it would be charged from the consumer utilizing the service, incentive and penalty based structure in the arrangement so as to assure that the private sector is benchmarked against service delivery, re-colonization of minimum technical specification without effecting impossibility of innovation and specified time period for either transfer of the project or its application by the private sector entity.<sup>1</sup>

In recent years the concept of PPP is acquiring much more impetus across the country just because it has been able to provide ample blend to the much needs projects which government cannot do only by its own. Public-private partnership can provide solution that can overcome hurdle to development due to a lack of infrastructure. PPPs are not only substantial help to the private sector only rather it allows government to expand the provision of services by using market tools. It can increase the number of services that can be supply

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<sup>1</sup> Dr. Vidya Telang & Dr. Vishakha Kutumbale, *Public Private Partnerships In India: An Overview Of Current Scenario*; Available at: <https://www.researchgate.net/publication/281024752>

within a given state budget and, more supreme, it increases their value in terms of quality and performance. The liberal government policy have also helped in conducting the world closer to this country, as a result of these liberal policies, India is becoming a hub of PPP.

The creation of world class infrastructure would require large investments in addressing the deficit in quality and quantity. Therefore, it is necessary to explore the scope for plugging this deficit through Public Private Partnerships (PPPs) in all areas of infrastructure like roads, ports, energy, etc.

### **MODELS OF PPP's**

PPP is model of presuming that public infrastructure and services is governed by government in partnership with private sector. It is long term process arrangement between government and private sector entity for provision of public benefit and services. Public-Private Partnership is an investing model for public infrastructure project such as telecommunications system, Power plant. PPP is a wide term that can be applied to anything from simple, short term management contract (with or without investment require) to a long-term contract that includes funding, planning, building operation, maintenance and divestiture.

PPP infrastructure projects also be taken place or useful for a large projects that require highly-skilled workers and a significant cash outlay to get started. They are also useful in developing counties and undeveloped countries that require the state to legally own any infrastructure that serves the public.

Different models of Public-private partnership funding are characterized by which partner is responsible for owning and maintaining assets at different stages of the project. Here are some examples:-

- *BOO (Build- Own-Operate)*: It is a project model of Public Private Partnership in which a private organization builds, own and operates some facility or structure with some degree of encouragement from the government. Although the government doesn't provide direct funding in this model, it may offer other financial incentive such as tax-exempt status.
- *BOOT (Build-Own-Operate-Transfer)*: It's a project in which a private organization conducts a large development project under contract to a public-sector partner, such as a government agency. A BOOT project is often seen as a key way to develop a large public infrastructure project with private funding.
- *Build Operate and Transfer (BOT)*: This is the simple and conventional PPP model where the private partner is responsible to design, build, operate (during the contracted period) and transfer back the facility to the public sector, Role of the private sector partner is to bring the finance for the project and take the responsibility to construct and maintain it. In return, the public sector will allow it to collect revenue from the users, The national highway projects contracted out by NHAI under PPP mode is a major example for the BOT model.

- *Design-Build (DB)*: The private-sector partner designs and builds the infrastructure to meet the public-sector partner's specifications, often for a fixed price. The private-sector partner assumes all risk.
- *Operation & Maintenance Contract (O&M)*: The private-sector partner, under contract, operates a publicly-owned asset for a specific period of time. The public partner retains ownership of the assets.
- *Design-Build-Finance-Operate (DBFO)*: The private-sector partner designs, finances and constructs a new infrastructure component and operates/maintains it under a long-term lease. The private-sector partner transfers the infrastructure component to the public-sector partner when the lease is up.<sup>2</sup>
- *Operation License*: The private-sector partner is granted a license or other expression of legal permission to operate a public service, usually for a specified term. (This model is often used in IT projects.)
- *Finance Only*: The private-sector partner, usually a financial services company, funds the infrastructure component and charges the public-sector partner interest for use of the funds.

## STATUS OF PPP PROJECTS IN INDIA

In the last one decade, a resource crunch has been faced by the government. The combined deficit of the central and state governments is roughly 10 percent of Gross Domestic Product (GDP). Government borrowing has been capped through the Fiscal Responsibility and Budgetary Management Act. This necessarily limits state participation in infrastructure financing, thus opening the door to innovative approaches, such as PPPs. The number of PPP projects in India has increased from 85 in 2004 to 840 in 2011 to 1339 in 2014 to 1,529 in (worth around Rs.1,048,641.22 Crore) till Oct 15, 2018. India is second only to China in terms of number of PPPs and second only to Brazil in terms of investment in PPPs.

## PROBLEMS, CHALLENGES AND RISKS IN PPPs

The PPP sector in India is still new and current. A passage of a minimum time period is imperative to gauge the effects and impact of any economic phenomenon. Only then and then can meaningful conclusions be drawn. As said earlier the public private partnerships in India are only 12 to 15 years old (or new) and a main part of activity on those grounds has actually taken place during the last 7 to 10 years. Apparently the reports and reviews which have come out about the PPP sector in India point towards the conclusive stance taken by the economy towards such partnerships. To harness the private sector investments, the enabling environment generated by the central and the state governments in such projects has generated a very conducive environment for such partnerships. Yet the PPPs have not been an outright success in some instances and cases. The literature and the particular case studies on the subject indicates that most of the problems that have been detected and experienced in

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<sup>2</sup> World Bank

these have emerged along the way and the fact remains that these problems could not be imagined or envisaged by both the parties at the time of entering into the contract. This fact makes it more vulnerable to bottlenecks that PPPs are long term in nature. It is because more the time concerned, larger is the probability of a problem cropping up.

The every formulation of PPP contract is unexampled. No two PPP contracts are the identical. It is thus not that easy to standardize a PPP format. This is due to the fact that the parameters involved in structuring of PPP cannot be the same every time and therefore a PPP can vary on various grounds such as the nature and type of infrastructure demanded, the sector involved, the model followed etc. The stake of the Central and State governments and the revenue, risk and responsibility sharing in the project are circumstantial and are likely to differ from one contract to another. Thus aside from distribution of the construction of the infrastructure by the public and the private sector which can be on financial and technical grounds nothing else can be standardized for such partnerships.

According to a research article 'How to improve PPP projects in India: learning from the past', any PPP project has to essentially pass through four vital phases of project preparation, project procurement, project operations and development. Careful handling, planning and clear cut demarcating lines of work are necessary at every stage. The building of contracts can only define the formal mechanism of fulfilling the contract. However it is hard to incorporate solutions, steps and methods to circumstantial issues which may crop up while the project is in process in a PPP contract.

Currently there is no PPP regulation in India. Enough thought has probably not been given to this aspect, since the whole concept of public private partnership is quite new in our country. However the National PPP Policy 2011 draft has been put up for more comments and suggestions. The above problem of non-standardization of PPP contracts can to some level be taken care of by developing an independent regulatory PPP body. This may lead to a better and more robust participation by the private sector and also invite more international funding.

With regards to PPP projects, it has been felt that the *tendered projects are often unviable*. Particularly this has been felt in the national highways sub-sector. The unviability arises as result of project planning beyond the scope of the bidders, insufficient viability gap funding and expanded risk to the provider because of certain terms in the concession agreement.

*The lack of transparency* is one of the most discussed problems related to PPPs. Though a lot of effort has been made to boost transparency during the bidding process and award of contracts, people in general seem to nurse this grouse of non-transparency in PPPs which is certainly not without reason. The whole process of creating a PPP arrangement is very lengthy and ridden with a lot of formalities. There have been many cases where the private party has acquired undue political favours from their public sector counterpart making the entire process seem dubious. The problem of lack of transparency is also extendable to user based projects in which case the complete contract smells of some sort of underhand nexus or collusion among the government and private sector. This is essentially true in case of user charged projects such as road construction. In such projects the toll tax is charged from the users of the road also the public at large is kept in the dark as to the date of commencement of

the charge, the right amount to be charged, date of expiry for such charges, the date of handing over the project to the government etc. This is by reason of no such information is available at the toll tax points. Considering the travellers are more or less in haste and the amount charged is also not unduly large, these problems go unreported and at times conveniently unnoticed. Though the magnitude of the problem is not extremely large, one does feel the pinch of the tax. Thus this kind of a complication is not just restrained to being a PPP contract problem but would also fall in the jurisdiction of the Consumer's Act because the toll tax is ultimately being borne by the user of road services. In particular context of India, this lack of transparency has often culminated into violence in some states like Maharashtra.

A dispute which has come to the forefront is regarding project preparation. Many projects lack technical research and diligent studies. Project plans are of poor quality as well as lack attention to details. This creates complication related to scope changes also variations during project execution. Literally what may appear feasible on the paper in black and blue may practically be ridden with lots of problems at the time of certain launch and advancement of the project. Many a times due to wrong and inaccurate estimations, the project gets delayed causing time and cost overrun. Usually the tasks related to land acquisition and other essential clearances lie with the government. This is because the government as result to its authority as well as position is capable to accomplish these things in better way. On the other hand the technical along with operational part of the project is managed by the private sector. Case studies report that delays are caused mainly because of problems come across in acquiring land as well as making it available to the private sector. This delay result in further time and cost overrun making the project unviable as far as revenue generation is concerned. Land acquisition should be complete before the project is awarded and tendered as per the suggestion by Global best practices. Withal in India figures submit in most of the cases that only 30% of the land is really acquired when the project is awarded. The delay in land acquisition is believed as the only largest factor responsible for dismal faring of PPP projects in some cases also the most notable reasons for this are the dependence on the government authority, the undervaluation of land price as well as ambiguous definition of unencumbered land.

Various other kinds of approvals from External Finance Committee, Public Investment Board and Cabinet Committee for Economic Affairs etc. are also needed for PPPs simultaneously with the above delays. These relate to the ministerial and administrative levels of the government. On the other hand the government agencies in India suffer deeply from the concept of timelessness.

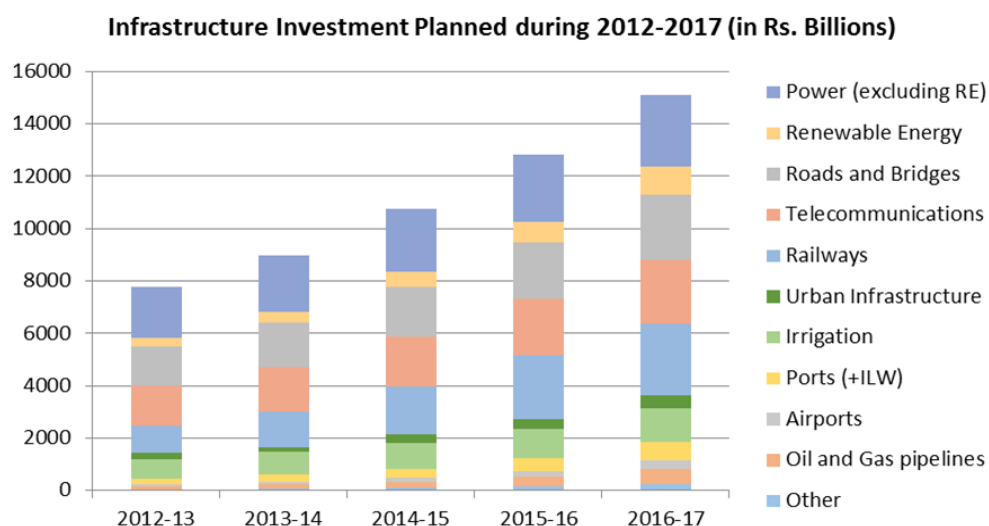
Further no one on an individual basis is ever taken accountable for any lapse. In case of PPPs, effectiveness in performance and sticking to time schedule should be built the joint accountability and responsibility of the government as well as the private sector.

The non-adherence to the moral code of conduct has been encountered as an additional problem. It should be brought to mind all the time that for the public sector creation of infrastructure whether social or economic is a priority for the government with a social



welfare motive also whereas for the private sector it is just another business proposition. It will follow only behind its primary objective of generating returns has been accomplished and it can and never will be the other way round even if the social objective is implied. Problems and bottlenecks are felt at almost every level of PPPs right from conceptualization, planning, execution and implementation to make long things short. Searching solutions to these issues is further a very time consuming process because the sectors involved are themselves characterized by their very divergent objectives of revenue maximization and social benefit. Furthermore vested interests as well as non-compromising attitudes of bureaucrats, local politicians and administrators create more man-made obstacles causing the projects to languish.

It has been lately felt that funding of PPP projects is going to show up as a major issue in the future. Private sector is hugely dependent upon the commercial banks for debt and funding also many of these banks have already come to their sectorial exposure limits. In India the infrastructure project companies are at present in a highly leveraged condition and as such in addition availability of finance would not be simple.



**TABLE I.**

Year	Commercial lending by Banks in India	Year Financing Amount	(Rs. in billion) Increase % Increase
2006	1128		
2007	1433	305	27.04
2008	2051	618	43.13
2009	2699	648	31.59
2010	3798	1099	40.72
2011	5266	1468	38.65

Self-generated (figures of financing taken from Handbook of Statics, RBI 2010-11)

It can be seen from the above table that there has been a large increase in the funding of infrastructure PPP project India. From 1128 INR billion in 2006 it has risen up to INR 5266 billion in 2011. The average growth during this period is around 35.70% in funding. Most of the financing for infrastructure is in the sectors of telecommunication, power, roads, and

ports. According to RBI Annual Report 2010-2011, the share of infrastructure lending as a percentage of gross bank credit has increased from 2.2% in 2001 to 13.4% in 2011. However with significant number of infrastructure project in the pipeline banks are finding it increasingly difficult to finance such project.

The asset liability mismatch is a further off shoot of the financing problem. This suggests that long duration infrastructure loans need to be financed by short duration deposits. The infra loans have maturity and repayment schedules ranging up to even 15 years although the borrowings and deposits of banks which are accounted to finance the same have much shorter maturities. This hiatus among the two constructs an asset liability mismatch which if left untended can result in liquidity issues. The above issues related to funding and financing will manifest themselves in the coming years and a fear is disclosed that we may not be able to manage the similar pace of growth in PPP as we have achieved till now.

### **DRIVING KEY SOCIAL AND ECONOMIC SECTORS THROUGH PUBLIC-PRIVATE PARTNERSHIPS**

PPPs have been heavily promoted in key sectors such as education and healthcare with the aim of improving efficiency and innovation in the generation and performance of public services. However, the infrastructure for improvement in these sectors comes from the ICT sector, where many PPPs have been established to respond in faster and more inventive ways to the ever-increasing demands of customers. PPPs in the ICT field are driven primarily by mobile applications and more affordable Internet access. The success of an ICT-centric PPP project depends largely on the establishment of economically viable business models and self-sustaining schemes for the delivery of e-services, because most private participants are interested in PPPs only if there is a possibility of a return on their investment (and the associated risk that is deemed worth taking). However, global initiatives- such as the Digital Opportunity Task Force, the Global Knowledge Partnership, and the World Summit on the Information Society - have increased awareness of the vital role that PPPs play in providing access to ICT for all as an instrument for social, industrial, and economic innovation. Schooling and education is, in general, largely provided and financed by governments,<sup>10</sup> but unmet demand for education coupled with shrinking government budgets requires that in many parts of the world public-sector organizations develop partnerships with the private sector if educational needs are to be met. The main rationale behind these PPPs is that private companies can stimulate equitable access to education and, ideally, can improve learning outcomes. In low-income countries, excess demand for schooling results in private supply when the state cannot afford schooling for all.

### **WHAT MAKES A PPP SUCCESSFUL?**

The introduction of micro insurance PPP can be influenced by many distinctive factors, some of which facilitate the process while others prove to be obstacles. Both types can occur within the PPP collaboration itself and in areas beyond the partnership's immediate influence. The participants discussed a number of factors that can reduce the obstacles and provides support for PPP to evolve in a successful manner. The following factors as mentioned are by no means exhaustive:



- **Courage and transparency:** While transparency is in the welfare of the public, it can develop a “high risk/low reward” situation for those implementing challenging projects. From a personal and business point of view there are significant risks when implementing such projects as many experience initial setbacks. A considerable amount of courage is required on the part of the management and staff to stick by them. A crucial role is played by Transparency in being able to learn from others and distribute the lessons learnt.
- **Involvement of top management and the board:** Top-level assistance is essential when implementing innovations, expressly those that might entail potential risks and require deviating from the frequent procedures. Structured dialogue among the implementing units and management has proved to be of great success because it provides timely feedback for corrective action or suggestions for effective as well as efficient delivery.
- **Ownership of all stakeholders:** In order to magnify ownership, a more bottom up approach should be encouraged to secure the involvement of all the relevant stakeholders. This across the board involvement will decrease the risk of goal deviation and facilitate the channels of dialogue, which are necessary to the success of PPP.
- **Independent organizational structures for implementing PPP:** Independent agencies, such as the ‘Co-operative Company of Collective Interest’ (SCIC) in France, gives private and public stakeholders a framework for managing PPP, which in turn will increase transparency, trust and control. With regard to the risk of information asymmetry, these agencies are more likely to identify and correct them. This structure should provide PPP stakeholders with enough institutional flexibility to give them the freedom to work within their individual mandate while also serve the common interest.
- **In conclusion,** the most essential factor is the smooth cooperation among the various partners as well as a common understanding of the objectives, roles and responsibilities.

## CONCLUSION

As in India PPP are all new concepts as according to the other countries. All the projects are running under PPP model are based on the concept that the private sector contributes capital and expertise in return for the opportunity to make profits. PPP need time to nurture and grow if they are to become sustainable. PPP work on a large scale involving many organizations including many stake holders this magnitude requires an adequate time for the project to get complete, PPP should have large time bounded so they can go for long run. In the running time Private Partnership of education is effective efforts for government to run the large educational institutes. Over the last 15 to 20 years, however, new forms of private participation should developed in public services and including education institutes and also The Public Private Partnership (PPP) have emerged as a very viable and possibly sustainable

mode of creating the much needed infrastructure for our country. Along with the advantage and disadvantage there are some ups and downs are also suffer in the forms of various bottlenecks and challenges. We should also need to put light on policy formulation by introducing more transparency, development of national sense and rising above vested interest.