

Public private partnership for infrastructural growth assignment

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Public-private partnership for infrastructural growth- is it the best model?

Private-public partnership for infrastructure growth- Is it the best model?

The paper reviews the concept of PPP, its importance and relevance in furthering infrastructural growth in a developing nation like India. Thereafter the application of this theoretical overview is seen in the study of various successful projects in which PPP was implemented- one of the best examples being the Tirupur Project in Tamil Nadu.

The objective of the paper is to bring forth the uniqueness of PPP and how in spite of it being an excellent model for infrastructural growth in each project a different PPP model is relevant. CONTENTS 1. Introduction to Infrastructure in India 2. Private Public Partnership (PPP) Reasons behind importance of PPP model in India 3. Relevance of PPP model in infrastructure sector for India 4. Success of PPP in India 5. Concerns and Risks Associated with PPP 6. Conclusion References 1. Introduction to Infrastructure in India

Infrastructure has been defined as “ comprising those basic services without which primary, secondary and tertiary productive activities cannot function. ” It includes non-tradeables such as 1. Transportation services- road, railways, ports and civil aviation 2. Telecommunication 3. Power 4. Water supply 5. Sanitation 6. Solid waste management. Currently, the Indian economy is positioned to grow at an annual rate of 9% over the next five years. However, this speedy growth needs an equally robust infrastructure to support it, which unfortunately is lacking.

Infrastructure development is considered as the key driver to sustain the momentum of current and potential economic growth. Growth in

infrastructure is bound to boost the Indian economy, which in turn will work wonders for urbanization. The increase in the infrastructure is undoubtedly of prime importance, as recognized by both the private sector and the Government. Since independence, several models to improve infrastructure financing have been implemented. In the 1950 through the 1980, the plan process helped the public sector attain the commanding heights of infrastructure sector.

But since the 1980s the public sector's role in providing and financing infrastructure has sort of diminished because of the absence of competition and effective communication. So far, the bulk of infrastructure has been in the public sector which is largely subsidized by the government. Since, the launching of the reforms the government is trying to reduce its borrowing which implies further subsidization and that is not possible. There is a wide gap between the potential demand for infrastructure for high growth and the available supply.

In India, the planning commission has estimated that an investment of USD 320 billion will be required for infrastructure development during the 11th plan period. The government concedes that this target is unattainable through government funding alone. The task of finding such large amounts and thereafter deploying them productively calls for a close partnership between the public and private sectors, with a vital role reserved for foreign capital. To finance this large short fall, the domestic saving rate needs to be increased by a minimum of 26. 7%. Besides, this has to be supplemented at the margin by FDI.

However, this “ margin is indeed very important since the role of foreign investment has to be read not only as a gap filler between saving and investment but also as a means for bringing better technology and management. The paper is divided into six broad sections. The first section, gives an introduction to the topic. The second section, Private Public Partnership (PPP) gives a theoretical explanation of PPP and the importance of PPP model in a developing nation like India. The third section, analyzes the relevance of PPP in India. The next section specifically studies various success stories of PPP in the Indian context.

The fifth section, refers to the concerns and risks associated with PPP. Finally the last section is the conclusion that sums up the entire paper.

2. Private Public Partnership (PPP)

A PPP essentially aims at creating a structure in which better value for money can be achieved through involvement of the private sector without undermining the government overall responsibility to the taxpayer for the quality of the service provided. It allows public ownership of infrastructure as well as ensure adequate rate of return on investment for the private participants.

2.1 Reasons behind importance of PPP model in India

Limitations of government resources and capacity to meet the infrastructure gap- Governments are increasingly constrained in mobilizing the required financial and technical resources and the executive capacity to cope with the rising demand. Rapid economic growth, growing urban population, increasing rural-urban migration, and all-round social and economic development have compounded the pressure on the existing infrastructure, and increased the demand-supply gap. While the

infrastructure gap is rising, government budgetary resources are increasingly constrained in financing this deficit.

Rising costs of maintaining and operating existing assets, inability to increase revenue and cut costs and waste, and rising constraints on budgets and borrowing, do not allow governments to make the required investments in upgrading or rehabilitating the existing infrastructure or creating new infrastructure. 2. Need for new financing and institutional mechanisms- The political economy of infrastructure shortages, constrained public resources, and rising pressure from citizens and civil society have combined to push governments and policymakers to explore new ways of financing and managing these services.

Since neither the public sector nor the private sector can meet the financial requirements for infrastructure in isolation, the PPP model has come to represent a logical, viable, and necessary option for them to work together.

3. Benefits and strengths – Apart from enabling private investment flows, PPPs also deliver efficiency gains and enhanced impact of the investments. The efficient use of resources, availability of modern technology, better project design and implementation, and improved operations combine to deliver efficiency and effectiveness gains which are not readily produced in a public sector project.

PPP projects also lead to faster implementation, reduced lifecycle costs, and optimal risk allocation. Private management also increases accountability and incentives performance and maintenance of required service standards.

Finally, PPPs result in improved delivery of public services and promote

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public sector reforms. 4. Access to project finance – The foremost benefit of adopting the PPP route is the ability to access capital funding from the private sector, considering that funding is getting increasingly limited from public sector budgets.

This allows the government to overcome their budgetary and borrowing constraints and raise finance for high-priority public infrastructure projects.

5. Rigorous risk appraisal and optimum allocation – The high degree of economic externality of public infrastructure, and the commercial and socioeconomic risks involved in developing and operating them, have made it difficult to appropriate returns from infrastructure investments.

The long gestation period of infrastructure projects also requires sustainable financial and operational capacity. Therefore, there is increasing reluctance in both the public and private sectors to absorb all the costs and assume all the risks of building and operating these assets alone. 6. Since the private sector assumes the risk of non-performance of assets and realizes its returns if the assets perform, the PPP process involves a full-scale risk appraisal. 7. This results in better cost estimation and better investment decisions. .

Relevance of PPP model in infrastructure sector for India Despite becoming the second fastest growing and the fourth largest economy of the world, India continues to face large gaps in the demand and supply of essential social and economic infrastructure and services. Increased demand has put the existing infrastructure under tremendous pressure and far outstripped its supply. Water: While 90% of the urban population has access to potable

water supply, the actual availability of water in the cities is only 5–6 hours a day.

Less than 60% of the households have sanitation and less than half have tap water on their premises. About 40 million people are estimated to be living in slums. Poor urban development is not only undermining the quality of life for India's urban citizens but also constraining local and national growth. Power: Over 40% of India's population, mostly rural, does not have access to electricity. Despite the increase in installed generation capacity, shortages in normal and peak energy demand have been around 8% and 12% on an average between 2000 and 2004.

India's average electricity consumption of 359 kWh in 1996–2000 was far behind other countries such as China (717 kWh) and Malaysia (2378 kWh). Less than 20% of India's enormous hydroelectric potential has been tapped. Transmission and distribution losses in India remain very high, at around 28–30%, as compared to other developing countries, where they are less than 10%. Roads and ports: India's road network continues to suffer from low capacity, low coverage, and low quality. 40% of villages do not have access to all-weather roads. Only 12% of the national highways are four-lane.

The traffic situation in the cities has worsened due to a massive increase in personal vehicles, inadequate city roads, and poor quality of public transport. Airport and seaport infrastructure and train corridors are strained under capacity constraints. Deficient infrastructure acts as a 'binding constraint' The infrastructure shortages are proving to be the leading binding constraint in sustaining, deepening, and expanding India's economic growth and

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competitiveness. It is widely believed that lack of good quality infrastructure is costing India 1-2% growth in gross domestic product (GDP) every year.

The Expert Group on Commercialization of Infrastructure estimated the loss due to poor roads and congestion at around Rs 200 billion per annum. The Economic Survey of India, 2005-06, estimates that power shortages implies an approximate GDP loss of around \$68 billion. The annual cost of environmental degradation, on account of lack of sewerage and solid-waste management systems and surface water harvesting is 4.5% of GDP. Water pollution accounts for 6% of the economic cost of environmental degradation. All this largely undermines global competitiveness.

India's global competitiveness remains constrained and is adversely affected by lack of infrastructure, which is critical for improved productivity across all sectors of the economy. It also leads to impediment of growth. Lack of infrastructure is preventing the sectoral, regional, and socioeconomic broadening of the economy and its benefits, and is affecting inclusive growth in India. Infrastructure shortages have slowed the growth of manufacturing industries and agriculture, which are the labor-absorbing markets for the low skilled. Poverty levels remain significant.

Infrastructure is now seen as the necessary condition for growth and poverty alleviation. Rural roads, rural electrification and irrigation networks, power grids, and national highways have the potential to link poor rural producers to their power sources and markets in towns, cities, and ports. Greater investments in infrastructure are the answer. As such, there has been a growing emphasis on private sector participation. The projected investment

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requirements can not be met from government's budgetary resources. The scope for making improvements is limited by the state of public finances.

The combined deficit of the Union and state governments is around 10% of GDP. Governments can also not borrow arbitrarily, since their borrowing has been capped through the Fiscal Responsibility and Budgetary Management Act. Given the large resource requirements and the budgetary and borrowing constraints, GOI has been encouraging private sector investment and participation in all sectors of infrastructure. It has recognized that while public investment in infrastructure would continue to increase, private participation needs to expand significantly to address the existing deficit in infrastructure services.

PPP's provides benefits by allocating the responsibilities to the party- either public or private- that is best positioned to control actively that will produce the desired result. This is accomplished by specifying the roles, risks and rewards contractually, so as to provide incentives for maximum performance and the flexibility necessary to achieve the desired results. 4. Success of PPP in India After discussing the importance and relevance of the PPP model in India, the paper now substantiates the success of PPP models in India.

Of course, there are certain risks involved which will be discussed later.

There are quite a few PPP experiments on infrastructure in India. While many of them are successful, quite a few may need to be restructured. A few of the PPP projects can now be discussed. In India, where about 13% of the world's population that is un-served for water and 43% of the world's population that is un-served for sanitation resides, the Tirupur project is a

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great example of how private sector involvement in public service delivery can dramatically improve access to water and sanitation.

This project was set up as a joint venture between the Tamil Nadu Government and IL&F. It set up the New Tirupur Area Development Corporation Ltd (NTADCL) as an SPV (special purpose vehicle) to implement the first private water supply in the country at Tirupur. The total project cost is more than Rs 1, 000 crore, with the Government's contribution of Rs 55 crore leveraged by almost 20 times. The project risks are apportioned to international level private agencies on the basis of core competencies. Today, the area receives water 4-6 hours a day compared to alternate days before implementation of this project.

While opponents of private sector participation argue that it will result in increased tariffs and negatively impact the more than 260 million Indians living on less than a dollar a day, the fact is that most of the poor in India today do not have access to any piped water at all. In fact, in order to get water many of India's urban poor currently pay up to ten times more per litre of water from unregulated private water vendors than their more fortunate neighbours do from the public utility, and often this higher priced water is unclean.

The private sector can and does contribute sorely needed investment capital as well as vital technical and management expertise. In the case of Tirupur, the private sector raised the financing – Rs. 1, 023 crore – necessary to finish the capital-intensive project. This public-private partnership also took responsibility for the design, construction, operations and maintenance of

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the project. Navi Mumbai has shown how to improve water and sanitation services by using performance-based contracts to manage its water distribution and transmission system. The results have been astonishing.

Revenues were increased by almost 45% the year following the introduction of the new contracts! The city was also able to reduce unnecessary expenditures – over a two-year period the city reduced its annual energy consumption by Rs. 45 lakh on sewerage contracts alone. Significantly, customer complaints to the utility decreased to almost zero. In Vizag, rehabilitation of the 250-km canal and expansion of feeder canal capacity have been taken up. The Vizag project demonstrates the ability of the PPP framework to add value, by improving the efficiency of existing assets and expanding the range of services.

The Mumbai-Pune Expressway, a 95-km, six-lane concrete expressway costing \$400 million was taken up on BOT basis. The Tamil Nadu Road Development Company (TNRDC) was formed as a joint venture between the Tamil Nadu Industrial Development Corporation and IL&FS to develop the road sector. Accordingly, the East Coast Road was developed, wherein the Government's contribution was leveraged by 12 times. In 1997, the Jawaharlal Nehru Port Trust (JNPT) signed an agreement with P&O Australia for development of a two-berth container terminal on BOT basis for 30 years.

P&O completed the project before schedule and commenced operations at the new terminal Nhava Sheva International Container Terminal (NSICT) in 1999.

5. Concerns and Risks Associated with PPP Here, the argument that public private partnerships result in higher water tariffs needs to be

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addressed. It has to be noted that this will only happen when tariffs are too low in the first place and operating costs are not being recovered. The fact is there must be revenue to cover operating costs, and it either comes from tariffs or government subsidies.

Thus, the positives of PPPs for infrastructure development are particularly attractive to developing countries such as India, given the enormous financing requirements and equally large funding shortfall. However, PPPs should be regarded only as one amongst the range of alternatives for providing infrastructure facilities. Also, the PPP approach might be more successful in some sectors than others. The emphasis on PPP should also not preclude other options, including traditional public sector models. Moreover, there are certain problems associated with PPP.) Control – A problem with PPP may be the potential problem of control by the government. Control could be exercised either directly by way of government representatives on the boards of the companies or indirectly through regulations. 2) Political Problems – Public Sector Units (PSUs) in India have had a history of political problems and hence there is a potential for similar problems arising in airport privatization. The Left Front and the Employee Unions have opposed the move to privatize the airports.

However, the formation of JVs for Delhi and Mumbai airports has proceeded. Another problem has been the allegations of foul play in the selection of JV partners. One of the losing bidders (Reliance) has approached the courts in India against the decision. The High Court dismissed the plea and airport privatization efforts continued. 3) Agency Problem – The government is still

in the learning mode as privatization is still in the early stages. A recent example is the proposed change in concession agreement for future airport privatization processes.

The change proposes changing the revenue sharing from revenue based to tariff based. This would prevent the problem of cost padding (artificially increasing costs to depress revenues and hence reducing the payment to the government). 6. Conclusion To conclude, there are stories of success discussed to learn from. However, private investors are still reluctant to enter the infrastructure field because of risks, real or perceived. Weak investment conditions give rise to risks that private investors find difficult to manage on their own.

In PPP, the objective is to optimize, not maximize, the assignment of risk to the private partner in order to strike a viable risk-reward balance. There are certain sectors where PPP is not viable. This can be from both ends, in the sense, that there are areas where only public sector management, ownership and operation is viable (like rural roads), while there are others where only private sector is appropriate (like the mobile phone sector). The latter is generally possible when competitive markets exist, so that private sector can do projects on their own without government participation.

The various PPP structures depend on enabling conditions as private investors would obviously look into legal and regulatory framework, institutional capacity, political commitment, macroeconomic situation sustainability. The better-rated the enabling conditions, the more willing are private investors to assume the greater risks and financing commitments

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involved in concessions and tariff. It is the government who has to initiate and drive the PPP program. It needs to build the capacity for PPP. It may use advisor, where necessary.

It needs to undertake proper planning: •to identify and prioritize projects to avoid supply crisis •to ensure availability of complementary infrastructure •to be in the driver seat in soliciting proposals We would like to end by saying that PPP projects are certainly an excellent model for infrastructural growth for developing nations. The less developed nations are all sailing in the same boat – lacking proper infrastructure hampering the growth of the nation. Here, PPP can make a very strong impact. Lessons need to be drawn from the developed nations in the implementation for PPP for furthering infrastructure.

However, each and every PPP project is different. No specific PPP model (BOT , BOO etc) can be applied to all infrastructure sectors. Each project is essentially unique. Also, there are certain risks associated with the PPP model. But it is easy to see that the benefits easily surpass the risks involved to make PPP emerge as n efficient way to solve a developing nation's infrastructure problems. Finally, this paper brings out the need for PPP implementation in developing nations and leads to further areas of research in the area of private public partnerships. REFERENCES 1. Blackwell Synergy 2.

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