

INFRASTRUCTURE DEVELOPMENT IN INDIA : THE ROLE OF PUBLIC-PRIVATE PARTNERSHIP

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Abstract

Public-Private Partnership is the most recent addition in the world of economic development and growth across the country. The government has started a number of schemes in joint collaboration with private sectors in order to give national economy an impulse and thus enhancing the pace of economic growth. Public Private Partnership has become the demand of developing India. There are many sectors and subsectors of Public Private Partnership in India i.e. Infrastructure, health, education, women empowerment, vocational education etc.

The development of physical infrastructure has today become the top priorities of the government. Therefore, the Public Private Partnership has become suitable answer to represent a logical, viable and necessary option for the Government. Keep in this mind, the Indian government has stated PPP schemes to enable to implement infrastructure projects and services via PPP. The Government of India is putting various PPP assistant plans like PPPAC, IIPDF, VGF, IIFCL, and making a lot of efforts to achieve all-round social, economic, political, cultural and national development for its people.

This paper highlights the concept and current status of PPP in India and analyses of various PPP projects supportive plans as well as discusses emerging areas/ scope of PPP in developing economies like India.

Key Words: PPP, Infrastructure development, Public services, PPPAC, VGF, IIPDF and IIFCL.

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. There private sector work as financing, maintaining, operating, construction and the other hand public sector provide full societal and environmental support to PPP projects. PPP projects develop a high quality physical infrastructure projects like roads, highways, ports, airports, metro and other sectors, And in service sectors, health, education, child development, skill development, sanitation, etc. All PPP projects improve the quality of life for the citizen. The public private partnerships are not simply tools for funding projects, but require full commitment from all partners at the completion of the project. The continued growth of national economy depends on the availability of qualitative, sustained infrastructure, and basic services. PPP is the best answer to address the requirements which are essentially required for the better and continued economy. The PPP or P3s is being encouraged for realization of infrastructure projects. Public-Private-Partnership in today's age is the best mode of implementing various government schemes in association or partnership with the private sector. In PPP projects, public and private both sectors have a significant role in providing services to the most of the projects with regard to strategy formulation and implementation.

The Government of India defines PPPs as, "A partnership between a public sector entity (sponsoring authority) and a private sector entity (a legal entity in which 51% or more of equity is with the private partner/s) for the creation and/or management of infrastructure for public purpose for a specified period of time (concession period) on commercial terms and in which the private partner has been procured through a transparent and open procurement system".

In recent years the concept of PPP is gaining much more momentum across the country just because it has been able to provide ample solution to the much needed projects which government cannot do on its own. PPP can provide solutions that can overcome barriers to development due to a lack of infrastructure. PPPs are not only of substantial help to the private sector only rather it allows governments to expand the provision of services by using market tools. It increases the number of services that can be provided within a given state budget and, more importantly, it increases their value in terms of quality and performance. The Government of India has also realized that it cannot serve to the demands of Indian citizen spread across the country alone. The trend of the Indian economic rise and almost hovering between 5-6% annual growths, the other countries of the world are looking at India as the potential centre for PPP. The liberal government policies have also helped in bringing the world closer to this country, as a result of these liberal policies, India is becoming a hub of PPP. In India there are some institutions, which play a significant role in making PPP effective and successful. These institutions are like Ministry of

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finance, department of economic affairs, PPP cell, and Public private partnership appraisal committee (PPPAC) for appraisal and approval of central sector, PPP projects, empowered institution (EI) for the projects posed for viability gap funding (VGF) support and India infrastructure project development fund (IIPDF), etc.

The forecasting strategy of the twelfth Plan encourages private sector participation directly or indirectly of PPPs, wherever desirable and feasible. The share of private sector in infrastructure investment will have to rise substantially from about 36.61 per cent anticipated in the eleventh Plan to about 48 per cent in the twelfth Plan. It is expected that competition and private investment will not only expand capacity, but also improve the quality of the service, besides minimizing cost and time overruns in implementation of infrastructure projects.

Projected Investment in Infrastructure—Twelfth Five years Plan

							(Rs. Crore at Current Prices)
Sectors	Total 11th Plan	12th Plan Projections					Total 12th Plan
		2012-13	2013-14	2014-15	2015-16	2016-17	
Grand Total	24,24,277	7,51,012	8,87,454	10,61,316	12,85,573	15,89,308	55,74,663
Centre	8,56,717	2,50,758	2,80,662	3,15,217	3,54,296	4,00,129	16,01,061
States	6,80,056	2,06,944	2,30,045	2,55,645	2,83,201	3,13,928	12,89,762
Private	8,87,504	2,93,310	3,76,747	4,90,455	6,48,077	8,75,251	26,83,840
Grand Total	24,24,277	7,51,012	8,87,454	10,61,316	12,85,573	15,89,308	55,74,663
Public	15,36,773	4,57,702	5,10,707	5,70,862	6,37,497	7,14,057	28,90,823
Private	8,87,504	2,93,310	3,76,747	4,90,455	6,48,077	8,75,251	26,83,840
GDPm p	3,36,04,450	1,01,50,618	1,16,45,987	1,33,58,028	1,53,47,089	1,76,61,485	6,81,63,208
Investment as % of GDPm p	7.21	7.4	7.62	7.95	8.38	9.00	8.18

Source: (Volume I, Twelfth Five Year Plan (2012– 2017) Planning Commission (Government of India) 2013.

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The total public sector investment in infrastructure envisaged in the Twelfth Plan is Rs.16, 01,061 crore from the Centre and Rs.12, 89,762 crore by the States. Investment by the private sector, which includes PPP projects, makes up the balance of Rs.26,83,840 crore, which is 48.14 per cent of the required investment during the twelfth Plan, a much higher share than the anticipated 36.61 per cent during the eleventh Plan.

LITERATURE REVIEW

Chambers, 2006 analysed that rural India needs business to invest in industries such as finance and insurance; in ventures that bring new infrastructure such as telephony and roads. This is where telecommunications can help. Where physical infrastructure may not reach easily, the Internet can. Broadband access is the ideal platform to connect a geographically diverse country such as India. This high-speed Internet technology holds tremendous potential, such as distance learning, telemedicine, supply chain management, customer relationship management.

Desai, 2006 focused that even though PPP models allow for exclusive rights over public assets, it is free from the evil of monopoly business such as high user charges or low service quality. This happens when government follows a competitive bidding process to decide on lowest user charges or provide viability gap funding to safeguard consumer interests. Contracts are designed to ensure service quality.

Abdel Aziz, 2007 examined the principles that need to be addressed in order to ensure the successful implementation of a PPP program include: to understand the objectives of using private finance when selecting a PPP arrangement, to properly allocated risks to the private sector, to establish a broad and comprehensive PPP legal framework, to assess the value for money when selecting a delivery system, to create a PPP unit for policy development and/ or implementation, to maintain the transparency in the selection process, to standardize the procedures and contracts, and to use performance specifications.

GOI, 2007 & Datta, 2009 sight that if we judge by the way many governments are currently committing themselves to PPP approach, it is evident that the Public Private Partnership (PPPs) has become a popular way of providing public sector infrastructure and services. These partnerships must supplement the scarce public resources for improving the investment in infrastructure sectors, and at the same time improving efficiencies and reducing costs.

Mahalingam A, 2008 focused on India's infrastructure needs, PPPs are a necessity and not just an option. However, there are a myriad of issues that need to be addressed and resolved in order to facilitate a better understanding on how to develop infrastructure efficiently and seamlessly via

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PPPs.

Chaudhary L & Bogart D, 2009 have emphasized that over the last decade, there has been a substantial increase in public-private partnerships across the world in many different sectors such as infrastructure, banking, etc. India's historical experience suggests that for these partnerships to succeed, state actors need the proper incentives to cut costs and improve efficiency. Public good investments should also be a key consideration. As the Indian case illustrates, public and private authorities will have different incentives to implement improvements and innovations with broader effects.

Haldea G, 2013 analysed that there is a broad consensus in India that Public Private Partnership is the way forward for the creation of world class highways. Since an enabling framework is a pre-requisite for attracting competitive private investment, the model documents, the appraisal process and the viability gap funding scheme have been adopted as the supporting pillars of a strong and sustainable PPP framework in the highway sector.

Saravanan P, discussed that PPP deal as well assessing the risks associated with them in an infrastructure framework. Each of these models can be investigated further for risk, return patterns and the advantages gained in government and the private enterprise to arrive at well-structured PPP contracts.

OBJECTIVES OF THE STUDY

- To understand the concept and current status of Public Private Partnership (PPP) Projects in India.
- To analyse effectiveness of various assistance schemes and emerging areas of PPP projects.
- To focus on the scope of PPP projects in Indian Infrastructure.
- To point out the challenges and barriers of PPP projects in India.

RESEARCH METHODOLOGY

This research paper is purely based on secondary data collected from various sources. All the data generated from Government of India official website and the official website of the committee on infrastructure, Planning Commission, ministry of finance and Investment Commission of India. The other major tools for the collection of the information has been from available literature as, journals, books, and news of Govt. of India and states Govt. related to the PPP.

RESULT & DISCUSSION

1. PPP and Privatization:

PPP and Privatization are seen by many people as the same entity. However, both the words are not at all similar and cannot be used as synonyms. There lies a vast difference between these two terms which best can be explained on the basis of responsibility, In the case of funding projects and its implementation, the entire responsibility for its success or failure lies with the private entrepreneurs. It is the private entrepreneur who has to be made responsible if the projects or services didn't click. But in case of PPP, the full responsibility lies with the government and in case of failure the government has to own responsibility. And on the basis of ownership, the right of ownership under privatization is transferable and can be transferred to private entrepreneurs with both the gains (Profits) and Risks associated with projects. But in case of PPP, the legal ownership of assets is retained by the public sector. It is non-transferable. In case of risk & reward, under privatization, the private partner enjoys full profits, but at the same time is responsible for the losses an entrepreneur suffers. But in PPP this is advantage of private sector that, risks and rewards are shared between both sectors.

2. Public Private Partnership Appraisal Committee (PPPAC):

PPPAC has been approved on 27th October 2005 at a meeting of the Cabinet Committee on Economic Affairs (CCEA). In the below figure we select last five years different sectors PPP projects which are approved by PPPAC. (Rs in Crores)

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Sectors	2008-09		2009-10		2010-11		2011-12		2012-13	
	No. of Projects	Total Project Cost	No. of Project	Total Project Cost	No. of Projects	Total Project Cost	No. of Projects	Total Project Cost	No. of Projects	Total Project Cost
Highway	90	86336.29	123	123691.5	168	168190	179	175013.6	224	235437.5
Railway	1	8500.00	1	8500.00	1	8500.00	1	8500.00	1	8500.00
Ports	7	3683.25	10	11346.90	10	11346.9	18	18383.00	26	22477.70
Civil Aviation	2	1000.00	2	1000.00	2	1000.00	2	1000.00	2	1000.00
Tourism	1	148.87	1	148.87	1	148.87	1	148.87	1	148.87
Housing	0	0	0	0.00	17	8342.05	17	7299.00	17	7299.00
Sports	0	0	0	0.00	5	2475.00	5	2475.00	5	2475.00
Total	101	99668.41	137	144687	204	200003	223	2128195	276	277338

Source – Annual Report, Ministry of Finance (Budget Division, 2008-13), GOI

The above figure shows that PPPAC has approved projects during the 2008-09, 2009-10, 2010-11, 2011-12, and 2012-13 financial years. In 2008-09 PPPAC has approved total 101 no. of projects, total amount of Rs.99668.41 crore between them highway was the top most sectors for which Rs.86336.29 crore allotted for the 90 projects. Till now 2012-2013 (up to December 2012) PPPAC Rs. 235437.56 crore allotted for 224 approved of highway projects. So the highway sector has been minting top position. Along with other sectors like In Railway approved one project an amount of Rs.85000.00 crore, In Port sectors 26 projects approved an amount of Rs. 22477.70 crore, In civil Aviation sector 02 Project approved an amount of Rs. 1000.00 crore, In Tourism sector 01 approved an amount of Rs. 148.87 crore, In housing sector 17 projects approved an amount of Rs.7299.00 crore and in sports stadia sectors 15 projects approved an amount of Rs. 2475.00 crore. On the basis of the figures, we conclude that the PPPAC has been doing a substantial job in the field of PPP and is transforming Indian economy. The huge amount spent on projects under PPP seldom speaks volume its success.

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3. Viability Gap Funding (V.G.F.):

The GOI announced Viability Gap Funding (VGF) scheme in budget 2005-06. This major scheme promotes PPP in various infrastructure sectors include roads, seaports, airports, railways, convention centres. Keeping in mind the success of the projects many more new sectors like storage, internal infrastructure in national investment and manufacturing zones. This scheme aims to support infrastructure projects which are economically justified, but short of financial viability. The total VGF provided under the scheme is up to 20% of the total capital cost of the project. Empower institution (Under the finance ministry) sanctioned Viability Gap Funding up to Rs.100 crore for each project. The Empowered Committee sanctioned proposals up to Rs.200 crore, And the Empowered Committee with the approval of the Finance Minister sanctioned proposal amounts exceeding Rs.200 crore.

Si. No.	Sector	No.of Projects	Total Project Cost (Rupees in Crore)	VGF (Rupees in crore)
1	Road	131	57449.79	1130.40
2	Education	10	207.40	41.48
3	Power	2	664.70	132.90
4	Metro	2	19474.00	3894.08
5	Airport	1	354.65	70.93
	Total	146	78150.54	15448.79

Annual Report, Ministry of Finance (Budget Division) GOI

It is evident from the above table shows that under the scheme since its constitution, 146 projects have been granted approval with Total project cost of Rs. 78150.54 crore and VGF amount support of Rs.15448.79 crore under the Scheme and Viability Gap Funding (VGF) Rs.902.96 crore has been disbursed. In case of sector wise road sector projects (131) have highest benefited from VGF Scheme and education sector projects (10) have second highest. And power, education and airport sector also have 2, 2 and 1 VGF Scheme project. But in terms of VGF amount metro sector have top benefited Rs. 3894.08 crore and second topper road sector Rs. 1130.40 crore. After that power, airport and education sector also have Rs. 132.90, 70.93 and Rs. 41.48 crore amount VGF scheme. The Government has provision of Rs. 10,000.00 crore for the 12th Five Year Plan (20 12-17).

4. India Infrastructure Project Development Funds (IIPDF):

The ministry of finance in 2007 establishment of a mechanism to support the project development expenditure on PPP projects to accelerate the process of project preparation. This IIPDF assist up

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to 75% of the project development expenses as ordinarily. The IIPDF assists the PPP projects in stage of identification and preparation.

Year	Amount allotted (Rs. in Crore)
2008-2009	1.32
2009-2010	7.55
2010-2011	7.00
2011-2012 (December 2011)	2.56

Source – Annual Report, Ministry of Finance (Budget Division) GOI

The above table shows that year wise IIPDF amount allotted for PPP projects. IIPDF assistance amount Rs.60.06 crore. Rs.1.32 crore, Rs.7.55 crore and Rs.7.00 crore respectively has been disbursed under the scheme in 2008-2009, 2009-2010 and 2010-2011. Around Rs.2.56 crore has been disbursed during 2011-2012, up to December 2011. These entire amounts have been allotted on 49 projects approved. An amount of Rs.4.00 crore has been provisioned for the FY 20 13-14.

CHALLENGES IN PPP IN INDIA

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.

Lack of information: The PPP program lacks a comprehensive database regarding the project to be awarded under PPP. An online database, consisting of all the project documents, including feasibility report, concession agreement and the status of various clearances are required.

Project development: The absence of adequate project development by authorities leads to reduced interest by the private sector, mispricing and many time delays at the time of execution.

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 target into projects.

Financing availability: With commercial banks reaching the sectoral exposure limits, and large Indian infrastructure companies being highly leveraged, funding the PPP project is getting difficult.

FINDINGS

The PPP assistant scheme like VGF, IIPDF, and IIFCL are revealing positive impact on infrastructure projects. These schemes attract to private sector in return on investment from PPP projects. Still, there is a need of healthy coordination & cooperation between central and state level government. The healthy coordination, speed up the development of infrastructure and delivery of services and it stops the unnecessary delay, litigation of projects. The investment in infrastructure sectors more than services projects. The national level of government is most appropriate, on the other hand, for some infrastructure services such as construction of highways, airports, seaports and power generation & distribution. Management should be handled to utilize a large amount of capital to develop the infrastructure which is feared to be critical in the development of economy. That's why well management would be needed there. In India still there are huge recruitment of developing Road infrastructure and Power generation sector, so in these sectors Governments must increase the % amount of viability gap funding. On the financing side, the Government should need to arrange an attractive financial institution and better infrastructure bond market would be succeed to rapid in development. There are no clear responsibilities between public and private sector in time of project implementation. The allocation of responsibilities between the levels of government should be cleared and corresponding authority in the subject matter should accompany the allocation of responsibility.

CONCLUSION

Thus, on the basis of the above findings, it can easily be suggested that the government of India must be ready with more funding and financing in the areas that have been listed above. The GOI should not hesitate in making private sectors a party to the development and growth. However the participation must be on a sustainable basis and giving mutual respect to the partners. The government should also evolve mechanisms to foster the process of delivery system fast and quick and if possible the bureaucratic hurdles should be minimized. This paper maintains that for effective and efficient functioning of PPP in the infrastructural and various PPP financial support schemes. Scheme like VGF, IIPD and IIFCL are very beneficial for PPP scheme.

REFERENCES

- A.M. Abdel Aziz, (2007) "Successful Delivery of Public-Private Partnerships for Infrastructure Development," *Journal of Construction Engineering and Management*, 133/12, 918-931.
- ADB (2006), *Workshop Report, Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India*.
- Annual Report, (2006 -2013), Ministry of Finance (Budget Division), Government of India.
- Archana, G. Gulati," PPP for rural ICT- from obligation to opportunity".

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- Chambers, J. (2006), An Emerging ‘Interactions Economy’, The Economics Times, September 18.
- Desai, J. (2006) Perspectives: Public-Private Partnership in Infrastructure, The Economic Times, July 4.
- Chaudhary L & Bogart D (2009) Public-Private Partnerships and Efficiency: A Historical Perspective from Indian Railways.
- Comptroller & Auditor General of India (2009) PPP Infrastructure Projects, Public Auditing Guidelines.
- Haldea G. (2013), Public Private Partnership in National Highways: Indian Perspective, Discussion Paper No. -11.
- Loomba Arti, (2012), Role of the PPP in infrastructure projects, a publication of TRANS Asian research journals, Vol.1 Issue 6.
- Linus A., et al, PPP in An Emerging Economy Evidence from Infrastructure And Manufacturing Sector of Nigeria, Ontario International Development Agency ISSN: 1923-6654
- Mahalingam A, (2008), PPP experiences in Indian states Bottlenecks ‘Enablers and key issues.
- Nataraj G. (2007), Infrastructure Challenges in South Asia: The Role of Public-Private Partnerships, ADB Institute Discussion Paper No. 80.
- Planning Commission (2004), Report of the PPP Sub- Group on social – sector PPP, , Government of India.
- Planning Commission (2012), the High Level Committee on Financing Infrastructure, Government of India. R.B.I. Occasional Papers Summer Vol.29 No.1.
- Sathanapriya M. and Jesintha P., (2011) “Public Private Partnership in India”, Journal of Management and Science, Journal of Management and Science Vol. 1, No.1, pp. 61-68.
- Saravanan P., Financing Sustainable Infrastructure, Assessing the Risks in Public Private Partnership Models.
- Thillai A.R., et al, PPP’s in road renovation and maintenance- A case study of the east coast road.
- Twelfth Five Year Plan (2012–2017) Faster, More Inclusive and Sustainable Growth Planning Commission, Government of India, Volume I.