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"Significance of Public Private Partnerships in INDIA"

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Abstract - This paper refers to the current scenario of PPP projects in India. Public–private partnership (PPP) is an approach adopted to enhance the economic value of infrastructure outputs, and it encompasses a broad spectrum of public sector infrastructure. Many researchers find the application of PPP to improve the efficiency of infrastructure delivery. This study aims to review the existing PPP, and problems in research for PPP infrastructure projects. As a result, better project completion and reduced delays on infrastructure projects by including time-to-completion as a measure of performance and therefore of profit. This paper also focuses on the role of current government for infrastructure development.

Key Words: **PPP, Public sector, private sector, infrastructure, economic growth**

1. Introduction

As per the government of India, PPP means an arrangement between a government or statutory entity or government owned entity on one side and a private sector entity on the other for the provision of public assets and/ or related services for public benefit, through investments being made by and/or management undertaken by the private sector entity for a specified time period, where there is a sustainable risk sharing with the private sector and the private sector receives performance linked payments that conform or are benchmarked to specified, predetermined and measurable performance standards.

Most governments define broad PPP program objectives when formulating and documenting their PPP policies. The choice and relative priority of these objectives cascade from the government's other policies and priorities. They can include:

- Enabling more investment in infrastructure, by accessing private finance
- Encouraging a whole-life-cost approach to infrastructure
- Putting a greater focus on the quality of service to the end-user
- Accessing additional management capacity through private operation of infrastructure
- Achieving value for money in the provision of infrastructure and public services
- Improving accountability in the provision of infrastructure and public services
- Harnessing private sector innovation and efficiency
- Stimulating growth and development in the country

Public Private Partnership (PPP) is infusion of private capital and management in provision of services that have traditionally been provided by the government. Adequate risk transfer from the government to the private sector is a key feature of PPPs along with the delivery of high-quality and cost-effective services to consumers and the government.

They refer to 'innovative methods used by the public sector to contract with the private sector, who bring their capital and their ability to deliver projects on time and to budget, while the public sector retains the responsibility to provide these services to the public in a way that benefits the public and delivers economic development and an improvement in the quality of life'. There are various types of PPPs, established for different reasons, across a wide range of market segments, reflecting the different needs of governments for infrastructure services.

Reforms of 1990 brought/started economic liberalisation in India. The role of government underwent transformation from provider to facilitator as a result. Initially it was in the form of privatisation but after following international experiences PPP was introduced in India.

The tendency of the private sector to undervalue social infrastructure, and the large sunk costs associated with providing much economic infrastructure, has been obstacle to privatization.

Emergence of PPP:

PPPs began to emerge significantly as a means of obtaining private sector capital and management expertise for infrastructure investment (both to carry on where privatization had left off and as an alternative where there had been obstacles to privatization. Emotional state of well-being defined by positive or pleasant emotions ranging from contentment to intense joy.

1.1 Current scenario of PPP in India

Impact of enabling environment on PPP projects:

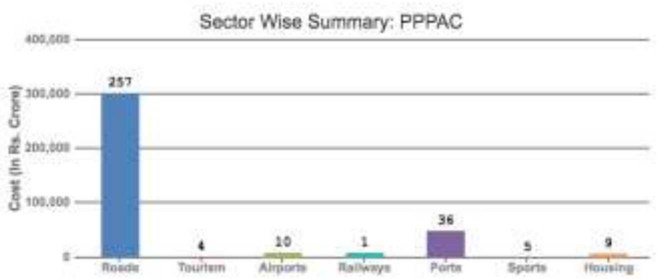
The impact of the above mentioned enabling environment was soon visible on the Indian economic scenario with increased number of PPP projects and increased amount of investment in infrastructure projects.

Period	Approximate Infrastructure investments	PPP infrastructure investment INR Billion	Estimated PPP %
10thPlan	9061	2252	25
11thPlan (Revised)	20542	7429	36
12thPlan (Projecte)	40992	20496	50

Source: Planning Commission projections of Investment in infrastructure during the Twelfth Five Year Plan

Table 1: Growth in PPP projects and investment

Table 1 reveals the huge increase in the amount of investment under PPP projects in India during the period of 10th, 11th and 12th plan. From 25% during the 10th plan it has risen to revised estimate of 36% during the 11th plan and to projected 50% during the 12th plan. This shows that the efforts taken for creating an environment conducive for PPP in India have borne fruits and manifested themselves in terms of increasing private sector participation in infrastructure development.



Source: Department of Economic Affairs, PPP Cell, Infrastructure Division, From, 2005 - 2019

2. Eligible Sectors for PPP:

1. Roads and bridges, railways, seaports, airports, inland waterways;
2. Power;
3. Urban transport, water supply, sewerage, solid waste management and other physical infrastructure in urban areas;
4. Infrastructure projects in Special Economic Zones and internal infrastructure in National Investment and Manufacturing Zones;
5. International convention centers and other tourism infrastructure projects;
6. Capital investment in the creation of modern storage capacity including cold chains and post- harvest storage;
7. Education, health and skill development
8. Oil/Gas/Liquefied Natural Gas (LNG) storage facility (includes city gas distribution network);
9. Oil and Gas pipelines (includes city gas distribution network);
10. Irrigation (dams, channels, embankments);
11. Telecommunication (Fixed Network) (includes optic fiber/ wire/ cable networks which provide broadband /internet);
12. Telecommunication towers;
13. Terminal markets;
14. Common infrastructure in agriculture markets; and
15. Soil testing laboratories.

2.1 PPP Models

PPP arrangements are characterised by the identification of risks and their allocation among the parties to the arrangement. On the basis of the risk allocation, the various PPP models are designed. Many variants of PPP models are implemented across different projects essentially differentiated on the basis of the risk allocation framework employed within these projects. Given below are the basic PPP models that are prevalent in project development.

1. Build-Operate-Transfer (BOT): The BOT scheme refers to the initial concession by a public entity such as a local government to a private firm to both build and operate the project in question. After a set time frame, typically two or three decades, control over the project is returned to the public entity.

2. Build-Own-Operate-Transfer (BOOT): The private-sector partner is granted authorization to finance, design, build and operate an infrastructure component (and to charge user fees) for a specific period of time, after which ownership is transferred back to the public-sector partner.

3. Build-Own-Operate (BOO): The private-sector partner finances, builds, owns and operates the infrastructure component in perpetuity. The public-sector partner's constraints are stated in the original agreement and through on-going regulatory authority.

4. 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.

5. 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.

6. 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.

7. Buy-Build-Operate (BBO): This publicly-owned asset is legally transferred to a private-sector partner for a designated period of time.

8. Build-lease-operate-transfer (BLOT): The private-sector partner designs, finances and builds a facility on leased public land. The private-sector partner operates the facility for the duration of the land lease. When the lease expires, assets are transferred to the public-sector partner.

9. 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.)

10. 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.

2.2 Evolution of PPP in India

In India there is no exact date and year which could speak of the beginning of PPP but it is said that the PPP story began with private sterling investments in Indian railroads in the latter half of the 1800s. By 1875, about £95 million was put by British organizations in Indian "ensured" railroads. Then again we could follow it to the mid 1900s, when private makers and merchants developed in power sector in Kolkata (Calcutta Electric Supply Corporation) and in Mumbai with the Tata playing a prominent role in starting the "Tata Hydroelectric Power Supply Company" in 1911.

PPP story started with private sterling interests in Indian railways in the last 50% of the 1800s. A new wave in PPP was felt when a policy was made by the Central government in 1991 and it was decided to allow private participation in the Power sector which opened up the doors for independent power producers. The National Highways Act, 1956 was altered in 1995 to empower private support. In 1994, through a focused offering process, licenses were conceded to eight cell cellular telephone utility administrators in four metro urban areas and 14 administrators in 18 state circles.

The Major shift in PPP was experienced in true sense when the Infrastructure Development Finance Company (IDFC) was incorporated on 30 January 1997 in Chennai under the initiative of the then Finance Minister P Chidambaram. The firm, promoted by the government of India, was laid down upon the recommendations of the "Expert Group on Commercialisation of Infrastructure Projects" under the chairmanship of Rakesh Mohan. This was the government's serious initiative towards allowing private participation in infrastructure development by utilizing their expertise, capital and managerial skills. There were enactment of many other legislations in various fields which brought a remarkable change in the PPP arena. Notable among them are the Electricity Act, 2003; the amended National Highways Authority of India Act, 1995; the Special Economic Zone Act, 2005; and the Land Acquisition Bill etc. Various new sources of funding projects by Asian Development Bank (ADB), Viability Gap Funding (VGF), India Infrastructure Finance Company Limited (IIFCL), India Infrastructure Project Development Fund (IIPDF) under Economic Affairs department etc paved the way for movement of PPP projects forward. The Prime Minister's office, Planning Commission of India, Department of Economic Affairs, different service sector departments of the government have all played an active role. Various states have also shown enthusiasm in PPP and the notable among them are Maharastra, Madhya Pradesh, Karnataka, Tamil Nadu, Gujarat, Punjab, Delhi, Andhra Pradesh etc. The period between 1997 and 2016 marks two decades for PPP and present NDA government is very enthusiastically taking the reins of PPP forward towards a shining India.

It is evident from the figures and available data that the PPP sector in India is on a high growth trajectory. The success of this sector is also amplified by the interest taken by the government to boost such partnerships.

Roads and Highways: With an extensive road network of kilometres, India has the second largest road network in the world (3.3 million kms). Indian roads carry about 61% of the freight and 85% of the passenger traffic. A large component of highways is to be developed through public-private partnerships o Several high traffic stretches already awarded to private companies on a BOT basis Two successful BOT models are already in place – the annuity model and the upfront/lumpsum payment model Investment opportunities exist in a range of projects being tendered by NHAI for implementing the NHDP – contracts are for construction or BOT basis depending on the section being tendered. Prime Minister's Rural Roads Program, National Rail Vikas Yojana, National Maritime Development Program (NMDP), airport expansion programs. Delhi-NOIDA Bridge Project 49: The US$100 million Delhi-NOIDA Bridge Project, implemented on a BOOT framework on the basis of a 30-year concession, is India's first major PPP initiative.

Railways: World's fourth largest rail network and the second largest in Asia, Indian Railways has recently attracted immense global attention due to its successful turnaround to profitability. Investment in India Railway for 2008-09 was USD 7.91 billion. Indian Government is expanding the rail network to increase capacity for domestic cargo. The investment is expected to be about Rs. 22,000 crore (USD 4.525 billion).

Power: As per available database the total demand for electricity is expected to be more than 950 GW in India. With a projection of an investment of Rs. 171 billion in the power sector by the Planning Commission of India Rs. 60 billion is expected to come from the private sector. According to Sushil Kumar Shinde, Union Power Minister2future requirement for investment in power is around Rs. 300 billion. For this purpose foreign direct investment under the automatic route is also being sought.

Urban Infrastructure: The creation of urban infrastructure is related to construction of urban roads, urban transport, water supply, sewerage, solid waste management, traffic support infrastructure, renewal and redevelopment of slums etc. The local municipal administration in cities and urban areas are in constant need of funds for carrying out these activities. The changing dynamics of Indian population and its migration towards and concentration in the urban areas has created a never ending demand for roads, water, proper sanitation, solid waste and garbage management and other civic amenities.

Ports: Indian Government plans to bring a new orientation to encourage the private sector to come forward in developing port activities and operations. Many international port operators are invited to submit competitive bid for BOT terminals on a revenue share basis. The National Maritime Development Plan (NMDP) has been set up by the Indian government to improve facilities at all the 12 major ports in India. A Rs.41,200 crores (US $ 5 billion) project plans to lay 6 lane roads over 6,500 kms of National Highways on the Design Build Finance and Operate (DBFO) basis.

Airports: There is a heavy demand for investment in the aviation infrastructure. Both passenger traffic and cargo traffic are expected to grow at a Compound Annual Growth rate (CAGR) of 15% and 20% respectively during the next few years. Currently the Indian private airlines like Sahara, Jet Airways, Spice jet and Kingfisher account for around 60% of domestic passenger traffic and to meet the international standards the government is focused on development and modernization of airports in the near future.

Building of Social Infrastructure: While the building of economic infrastructure has been quite successful in public private partnerships, the same cannot be said about the social infrastructure. Therefore in these sectors particularly related to education and health, there is still a lot of scope for such partnerships. The figures given in the Table 4 and 5 clearly indicate that both in the number of projects and their value, education and health sector together have only 25 projects out of 758 projects with a combined percentage share of 0.96% in value and are therefore lagging behind with a place at the bottom end of the ladder in PPP participation.

3. Challenges in PPP:

The formulation of every PPP contract is unique. No two PPP contracts are the same. It is thus difficult to standardize a PPP format. This is due to the fact that the parameters used in structuring of PPP cannot be the same every time and therefore a PPP can differ on various grounds such as the nature and type of infrastructure required, the sector involved, the model adopted etc. One of the most discussed problems related to PPPs is the lack of transparency. Though a lot of effort has been made to increase transparency during the bidding process and award of contracts.

There are many challenges for implementation of public-private partnership projects:

Commercial Viability - Projects as water supply and sanitation projects are yet to demonstrate their commercial viability to the public

Contractual and Capacities Imbalance - Insufficient experience of the partners, particularly of the public sector while contracting such projects, where we can notice an informational asymmetry operating in favour of private companies, which naturally use their endeavour and potential to negotiate better conditions for themselves;

Hidden Debt - from the macro-economic point of view, we can see a substantial disadvantage partnership has to be repudiated;

Transfer of Risk - from the private sector to the public sector possible a new set of risks, e.g. possible risk of bankruptcy of the private player;

Focus on Economic Benefits - PPP Projects tend to focus on the economic aspects of the project, sometimes to the detriment in the fact that as a consequence of the long-term character of PPP projects, the mandatory expenses grow and the hidden debt arises, and this debt will exist for a lot of years, and thus it can affect negatively the fighting power of the future governments and burden significantly the future generations.

Long Period - generally the preparation of individual PPP Projects may take up to 2- 3 years (depending on project size and complexity). This long gestation period along with its attendant uncertainties are a big dampener for private sector enthusiasm;

Breaking of Partnerships - considerably negative financial impacts in the case the of social and environmental aspects

Weakness in enabling policy and regulatory framework. Substantial work need to be done in making sector policies and regulations PPP friendly. A large number of these projects are in the States and without the active participation of the States it would not be possible to achieve satisfactory results.

Lack of Long Term Instruments The market presently does not have adequate instruments and capacity to meet the long-term equity and debt financing needed by infrastructure projects.

Lack of Bankable Projects Finding credible and viably structured projects continues to be a challenge. There is a lack of shelf of credible, bankable infrastructure projects, which could be offered for financing to the private sector. Some initiatives have been taken both at the central as well as the states' level to develop PPP projects these tend to be isolated cases and have demonstrated a marked lack of consistency.

Limited Capacity to Manage PPP in Public Sector There is also lack of capacity in public institutions and officials to manage the PPP process. Since these projects involve long term contracts covering the life cycle of the infrastructure asset

4. Advantages of PPP project to Government and Private sector

- Personal safety and security, friends and feeling in control of life were other top determinants for Indians to stay happy, said the "Global Happiness Survey" from market research firm Ipsos.
- Starting of new sources of capital
- Reduction in direct Public money spending
- State resources could be utilized in other key areas
- Better utilization of managerial efficiency and innovations of Private sector
- Planned development of infrastructure sectors
- All conditions, specifications, & agreements Pre-decided and frozen prior to inviting bids
- Fair chance to all eligible concessionaire to participate in the infrastructure development
- Pre-determined user charges/tariff and scope of revision from time-to-time.

5. Conclusion

PPP are arrangements between the public and private sector, aimed at project development or delivery of services that are traditionally provided by the public sector. PPPs bring the best of the private partner and the public entity into any project, as it involves optimum allocation of project risks and responsibilities among parties that are best placed to manage them. The government needs to work on PPP development — planning, designing, contracting, financing and monitoring. New models for PPP are required to be created to cater to the current challenging business climate. PPP agenda of the country is going to take time to evolve and develop. There needs to be a clear demarcation of the risks to be borne by public and private parties. In a well-structured PPP, each party is able to perform its task more efficiently than its counterpart; creating a win-win situation to both the public entity and the private partner. The government of our country has become aware about this stark reality and has been striving to create an enabling environment for investments in infrastructure building in our country. The public private partnerships (PPP) have emerged as a very viable and possibly sustainable mode of creating the much needed infrastructure for our country.

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