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Public- Private Partnership in India-An Overview

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Abstract—*Public Private Partnership is booming throughout the world. This paper addresses what Public Private Partnership is and talks about the difference between PPP and Public Sector Procurement and also summarizes the same between PPP and Privatization. It highlights the various types of modules of PPP. It highlights the growth and development of infrastructure in India through PPP and highlights the risks and advantages*.

Keywords— *Public-private partnerships (PPP), difference between PPP and public sectors, difference between PPP and privatization, development of infrastructure in India through PPP, Modalities of PPP, and characteristics of PPP*.

I. INTRODUCTION

Infrastructure is an important aspect when it comes to economic growth as well as the inclusive growth of a country. The lack of proper infrastructure not only holds back the economic development, but it also causes additional costs in terms of money and time of the people for accessing necessary social services such as healthcare and education etc.

A Public-Private Partnership (PPP or 3P or P3) is a relationship between the public and private sectors, in which the private organization/management takes a functional role in a public project through a long-term contract with the public authority. It helps provide the government and local authorities an alternative method of funding and implementing various types of projects hence is gaining momentum all around the globe.

The rise of PPP can be dated back to 1980s, when the government in countries like United Kingdom and Chile, post success of privatization in sectors like electricity, telecommunication and sanitation, sought to extend benefits of privatization to sectors deemed exceedingly difficult to privatize, such as transportation, schools, and hospitals under suitable PPP models. (NITI Aayog Blog- Aman Hans, Rebooting Public Private Partnership in India 2017).

Conventionally, the government is responsible for providing various services and infrastructure, but this led to a negative of public ownership.

The huge infrastructure investment requirement, the fiscal constraints and the mounting liabilities forced the governments of different countries to think of innovative ways of financing and developing infrastructure. The state-owned infrastructure utilities suffered with low labor productivity, poor service quality, thefts, revenue shortages, inadequate investments, deteriorating equipment. Many countries implemented far reaching reforms over the past two decades restructuring, encouraging private participation, and establishing new approaches for regulation in the infrastructure sectors (Kessides, 2004). Hence, private firms were invited to maintain, build and operate various public services. Large number debt ridden countries see PPP as a viable option to provide public services, in turn public agencies will still be able to channel its tight budget to other projects due to this reason PPP has gained popularity amongst the developing and developed countries.

In PPP projects both, the public and private sectors have a significant role in providing services to the projects. The private sector works on funding, managing, maintaining, operating and the construction of the project whereas the public sector provide support in dispute resolution, monitor the project delivery and give other forms of support and incentives to the private agency.

II. PUBLIC PRIVATE PARTNERSHIP VS PUBLIC SECTOR PROCUREMENT

In Public Sector Procurement the Public Agency establishes the design, specifications, time to construct and the cost of the construction of the particular project and calls for bids on the basis of the design and specifications, the agency funds the entire cost of construction. The maintenance and operation of the project is entirely handled by the agency, and the contractor takes no responsibility for the long-term performance of the project after the construction warranty period has expired.

In Public Private Partnership the public agency specifies it needs as outputs- which the project is required to provide. The private sector is responsible for the design, building, operation, and maintenance of the project and also to reach the output specifications put down by the public agency.

III. PUBLIC PRIVATE PARTNERSHIP MODALITIES AND CHARACTERISTICS

The various models of P3 operate on various conditions of private sector, regarding the level of investments, the technical conditions, the ownership control, cash flows, type of project, the time duration of the project etc.

TABLE 1. Modalities of Public Private Partnership and its characteristics

PPP Modality Type	Characteristics /Main Features	Ownership
1. Operation and Maintenance	a. The maintenance and operation of a public facility is outsourced to a private firm. b. Greater control of the private firm over the facility. c. Payment for this contract is a via a fixed fee OR lump sum OR a performance-based fee.	Government
2. Build- Operate-Transfer	a. Government finances the facility. b. The facility is built by the private company. c. Private facility operates and maintains the facility on concession and transfers it at the end of	Government

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	O&M concession. d. Suitable for projects that involve a significant investment and operating content. e. Most suitable for toll roads.	
3. Build- Own-Operate-Transfer/ Develop-Build-Finance-Operate	a. The facility is funded by the private company. b. The facility is built by the private company. c. Private company operates the facility on concession and transfers it to the government at the end of concession period. f. Suitable for projects that involve a significant investment and operating content. d. Ideal solution for most of the projects.	Private company until transfer of the facility
5.Build-Operate-Own	a. Similar to BOOT, but the facility is not transferred to the Government. b. The operation and maintenance is outsourced to another private company. c. The government does not provide direct funding in this model; it may offer incentives such as tax-exempt status.	Private company
6.Management Contract	a. This involves contracting to the private sector most or all of the operations and maintenance of a public facility or service b. The service provision remains with the public authority but day to day management control is vested with the private sector. c. The private sector is not required to make capital investments. d. Management Contracts are prevalent in India.	Government

IV. PUBLIC PRIVATE PARTNERSHIP AND PRIVATIZATION

Public Private Partnership involves the private management of a public facility through a long-term contract between the private company and the public agency, both parties having a balanced partnership. Whereas, privatization is defined as the process of shifting the ownership or management of a service from the government to the private agency.

California Debt & Investment Advisory Commission (2007) states three main points of differences between Privatization and Public Private Partnership:

Ownership – Under Privatization, the ownership of public owned assets is fully transferred to the private sector while in PPP the public agency retains the ownership of the assets, oversight of O&M of the assets and controls the amount of private involvement.

Contract structure – Under Privatization once the asset is sold the public agency‘s involvement is limited to nonexistent except possibly in a regulatory role while in PPP the contractual agreement determines the level of participation of both partners.

Risk – Under privatization, private sector has sole responsibility in general while in PPP there is shared responsibility between partners.

V. PUBLIC PRIVATE PARTNERSHIPS IN INDIA

India has had a significant PPP models in the 19th Century, the Great Indian Peninsular Railway Company operating between Bombay (now Mumbai) and Thana (now Thane) (1853) is one of the earliest examples of PPP in India.

The Bombay Tramway Company running tramway services in Bombay (1874) and the power generation and distribution companies in Bombay and Calcutta (now Kolkata) are a few more remarkable examples of the same. (UN-ESCAP).

The preferred forms of PPP models are the ones in which the ownership of underlying assets remains with the public entity during the contract period and the project gets transferred back to public entity on contract termination, but the final decision on the form of PPP is determined using the Value for Money Analysis.

Some of the most commonly adopted forms of PPP in Indi include management contracts, build-operate-transfer (BOT) and its variants — design-build-finance-operate-transfer (DBFOT) and operate-maintain-transfer (OMT).

The objectives of Public-Private Partnership according to National PPP Policy of India:

1. Harnessing private sector efficiencies in maintenance and service delivery.

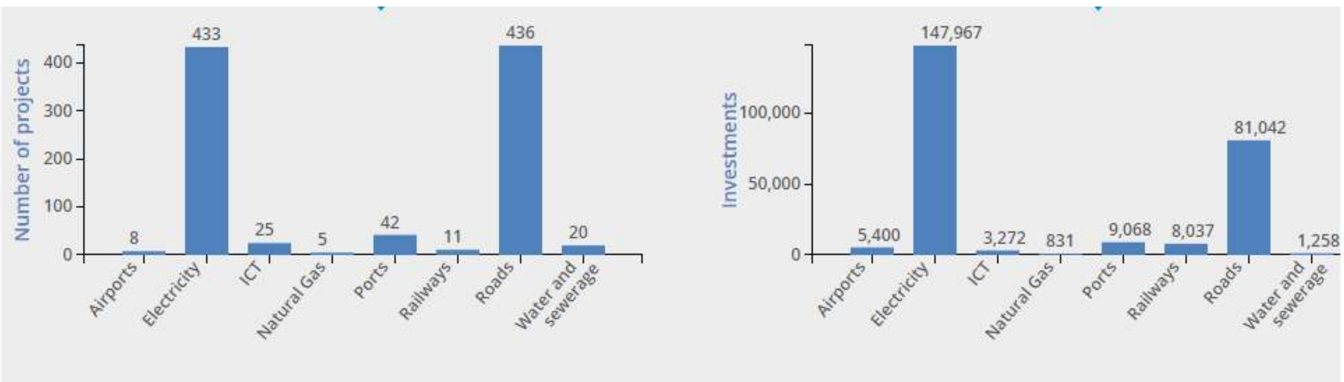

Fig. 1. Projects reaching financial closure and Investment in projects by sector (Source: PPI Database, Snapshots, India

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2. Creating opportunities to attract innovation and technological improvements.
3. Facilitating affordable and improved services to the users in a responsible and sustainable manner.

1) Indian Infrastructural Projects under Public Private Partnership (Sector wise):

A. Electricity/Energy:

The total number of projects from the year 1991-2018* in the sector of Electricity is 433 and the total investment made is 147,967.270M.

S.no	Project Name	Modality Type	Location	Investments (Millions)	Year
1	ACME Jaipur	250MW Solar Power Plan BOO	Madhya Pradesh	201.900	2018
2	Mahindra Solar Power Plant	BOO	Rewa, Madhya Pradesh	197.200	2019
3	Telangana Solar PV Plant	BOO	Telangana	52.100	2017

B. Airports

The total number of projects from the year 1991-2018* in the sector of Airports is 8 and the total investment made is 5,400.100M.

S.no	Project Name	Modality Type	Location	Investment (Millions)	Year
1.	Mopa International Airport	BOT	North Goa.	289.000	2017
2.	Chhatrapati Shivaji Airport (Modernisation)	Build Rehabilitate Operate Transfer	Mumbai	332.40	2013

C. Water and Sewerage Projects:

The total number of projects from the year 1991-2018* in the sector of Water and Sewerage is 20 and the total investment made is 1,257.910M.

S.no	Project Name	Modality Type	Location	Investment (Millions)	Year
1.	Coimbatore Distribution Contract	Management Contract	Coimbatore	497.00	2018
2.	Haridwar Sewage Treatment Plant	Build-Operate-Transfer	Haridwar	26.880	2017
3.	Davanagere Drinking water Services	Management Contract	Davanagere	86.3	2017

D. Ports:

The total number of projects from the year 1991-2018* in the sector of Ports is 42 and the total investment made is 9,068.040M.

S.no	Project name	Modality type	Location	Investments (Millions)	Year
1.	Paradip East Quay Coal Terminal	BOT	Paradip Port	184.640	2018
2.	Paradip Clean Cargo Birth	BOT	Odhisa, Jagatsinghpur Distrct	64.900	2016
3.	Essar Iron Ore Port Terminal Modernization	Build Rehabilitate Operate Transfer	Vishakapatnam, Andhra Pradesh	108.600	2015

E. Roadways

The total number of projects from the year 1991-2018* in the sector of Roadways is 435 and the total investment made is 80,962.200M.

S.no	Project Name	Modality Type	Location	Investment (Millions)	Year
1.	Udaipur-Rajasthan NH-8 Toll road	Build-Rehabilitate-Operate-Transfer	Udaipur, Rajasthan to Gujarat Border	346.800	2017
2.	Shimla Bypass Road NH-22	Build-Rehabilitate-Operate-Transfer	Himachal Pradesh	232.320	2018
3.	Four laning of Pandoh-Takoli Highway	BOT	Himachal Pradesh	451.800	2018

2) Challenges in Public Private Partnership in India

A. Forest and Environmental Clearances: A large number of projects are delayed due to the lack of forest and environment clearances. There are also huge delays in conducting environment appraisal meetings and in constituting State-level Expert Appraisal Committees (SEACs) which slows down the project approval process.
B. The PPP program in India lacks a comprehensive database of the projects that can be awarded under PPP. An online database, comprising all the project documents, including feasibility reports, concession agreements, and status of various clearances and land acquisitions will be of great help to all bidders.
C. Land Acquisitions: Land acquisitions are a huge obstacle in the development of infrastructure under PPP projects. Projects have been delayed or stalled due to land acquisitions issues, mostly from the local authority/local communities.
D. Focus on Economic Benefits - PPP Projects tend to focus on the economic aspects of the project and less on the social and environmental aspects.
E. Project Sponsors of various PPP projects depend on commercial banks for financing the debt portion of the project. The infrastructure sector, more specifically the roadways sector has been facing financial constraints.
F. There has been aggressive bidding in the past decade. Aggressive bidding leads to cancellation or delaying of projects. It also results in low rate of participation from genuine bidders.

G. Underpricing has also been observed in various EPC (Engineering Procurement and Construction) projects in the roadways and ports projects in the last few years which leads to decline quality of the project and hampers the economy.

3) Advantages of Public- Private Partnership in India:

A. Increase in Gross Domestic Product: Development in the infrastructure will increase the economy of the country massively which will result in boost in the other sectors and consequently the GDP (Gross Domestic Product).
B. Public Private Partnership leads to faster completion of projects as the projects can be resolved by comprehensive team work.
C. Value for Money any appropriate risk transfer to the private sector over the life of the project from design/construction to operation/maintenance. (World Bank Group-PPPLRC)
D. 3P improves the image the country through booming infrastructure and attract investors

VI. CONCLUSION

Public Private Partnership is increasing at a rapid rate globally, as infrastructure investment and development are top priorities throughout. Growth in infrastructure leads to economic development, in turn. The resources provided by the government are sometimes not sufficient which in turn can be provided by private companies. This way the public partner looks after a few aspects and the private partner looks at the rest. According to the government around 824 projects have reached its financial closure since the year of 1990, as illustrated in the research paper. The research paper also tried to concentrate on the different modalities used in the PPP model. PPP has its own sets on obstacles that have to be identified and dealt with. It is also important to review the operation of PPP projects and to understand which projects are performing as intended and to learn the key points out of it. The government plays a principal role in PPP Projects and has to come up with strategies to become a better partner and the main outcome of Public Private Partnerships is the importance given to the quality along with long term performance hence both the Public and Private sectors should work hand in hand and promote the scope of Public- Private Partnerships in India.

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