

# FEASIBILITY CHECKING OF FACTORS FOR APPLICATION OF PUBLIC-PRIVATE PARTNERSHIPS IN REAL ESTATE FOR PRIVATE CONSTRUCTION FIRM

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**Abstract** -Real estate is one of the fastest growing sectors in India. Market analysis pegs returns from realty in India at an average of 14% annually with a tremendous upsurge in commercial real estate. A significant demand is also likely to be generated as the outsourcing boom moves into the manufacturing sector. Further, the housing sector has been growing at an average of 34% annually, while the hospitality industry witnessed a growth of 10-15% last year. In developing India, we are faced with the problems of infrastructure and shelter to accommodate growing migration of the people to urban areas. As per Govt. own estimates, there is a shortage of more than 25 million houses mostly in Low Income Group Category. This shortage is growing despite best efforts by the Government and the private sector. This huge shortage require more than Rs. 4,00,000 crores of investment. Problem of this magnitude cannot be handled either by Government or by Private Sector independently. Public-Private Partnership (PPP) is right approach to address this problem. Public-Private Partnerships (PPP) is seen as a solution for producing high quality and cost effective real estate service delivery. PPP enable the public sector to benefit from commercial dynamism, the ability to raise finances in an environment of budgetary restrictions, innovations and efficiencies, harnessed through the introduction of private sector investors who contribute their own capital, skills and experience.

## INTRODUCTION

The term “public–private partnership” describes a range of possible relationships among public and private entities in the context of infrastructure and other services. Other terms used for this type of activity include private sector participation (PSP) and privatization. While the three terms have often been used interchangeably, there are differences:

The public partners in a PPP are government entities, including ministries, departments, municipalities, or state-owned enterprises. The private partners can be local or international and may include businesses or investors with technical or financial expertise relevant to the project.

Privatization involves the sale of shares or ownership in a company or the sale of operating assets or services owned by the public sector. Sectors in which PPPs have been completed worldwide include:

- Commercial complexes
- IT parks
- Hotels
- Housing
- Slum rehabilitation programs
- Hospitals
- School buildings and teaching facilities

### • TYPES OF PPP

PPP are developed under several sorts of arrangements which are planned to suit the miscellaneous needs of the public sector. The General accounting office of the United states provided a list with most of these figures (United States General Accounting Office 1999). The following ones are the most representatives for infrastructures:

- **DBO:** Design-Build-Operate .A single contract is awarded for the design, construction, and operation of a capital improvement. Title to the facility remains with the public sector unless the project is a design/build/operate/ transfer or design/build/own/operate
- **DBOM:** Design-Build-Operate-Maintain is an integrated partnership that combines the design and construction responsibilities of design-build procurements with operations and maintenance. These project components are procured from the private section in a single contract with financing secured by the public sector. The public agency maintains ownership and retains a significant level of oversight of the operations through terms defined in the contract.
- **DBFOM:** Design-Build-Finance-Operate-Maintain the responsibilities for designing, building, financing, operating and maintaining are bundled together and transferred to private sector partners.
- **DBFOMT:** Design-Build-Finance-Operate-Maintain-Transfer is the same as a DBFOM except that the private sector owns the asset until the end of the contract when the ownership is transferred to the public sector.
- **BOT:** Build-Operate-Transfer. The private partner builds a facility to the specifications agreed to by the public agency, operates the facility for a specified time period under a contract or franchise agreement with the agency, and then transfers the facility to the agency at the end of the specified period of time. In most cases, the private partner will also provide some, or all, of the financing for the facility, so the length of the contract or franchise must be sufficient to enable the private partner to realize a reasonable return on its investment through user charges
- **BOO:** Build-Own-Operate. The contractor constructs and operates a facility without transferring ownership to the public sector. Legal title to the facility remains in the private sector, and there is no obligation for the public sector to purchase the facility or take title.
- **BBO:** Buy-Build-Operate. This is a form of asset sale that includes a rehabilitation or expansion of an existing facility. The government sells the asset to the private sector entity, which then makes the improvements necessary to operate the facility in a profitable manner.

#### • **NEED OF PPP IN REAL ESTATE**

Recent years have seen a marked increase in cooperation between the public and private Sectors. PPPs have demonstrated the ability to harness additional financial resources and operating efficiencies inherent to the private sector.

**Faster implementation** - The allocation of design and construction responsibility to the private sector, combined with payments linked to the availability of a service, provides significant incentives for the private sector to deliver capital projects within shorter construction timeframes.

**Reduced whole life costs** - PPP projects which require operational and maintenance service provision provide the private sector with strong incentives to minimise costs over the whole life of a project, something that is inherently difficult to achieve within the constraints of traditional public sector budgeting.

**Better risk allocation** – A core principle of any PPP is the allocation of risk to the party best able to manage it at least cost. The aim is to optimise rather than maximise risk transfer, to ensure that best value is achieved.

**Investment in Real Estate-** Sometimes its there is an urgent need for new social structure such as hospitals and healthcare equipment, prisons, education facilities and housing.

#### • **NECESSITY OF THIS TOPIC**

The real estate sector is largely fragmented. The scope for the development of real estate is tremendous. But, the availability of funds or rather economical availability and use of fund is desired. To achieve this, Public Private Partnership is a desirable solution. There is a large scope of use of PPP Model in various areas of Real Estate sector. But the success of this lies in its correct way of implementation. Therefore, there is a need to find out the best practices in use of PPP Model. This can only be done through detailed analytical and critical studies of existing and ongoing projects. Hence, this research found this topic worth studying.

- **OBJECTIVE OF STUDY**

- 1) To Study the Concept of Public Private Partnership [PPP] and its success factors from the various literatures like, Journal papers, books, News papers. etc.
- 2) To collect the data from various projects regarding success and failure of projects, various factors etc. and To Check the PPP pattern is feasible for Private Project on the basis of Government Projects.
- 3) To identify and analyze the critical factors necessary for successful implementation of PPP in real estate both Government and Private Organization.
- 4) To gives Suggestion & Recommendations on Critical success.

- **CHANGING SCENARIO OF INDIAN REAL ESTATE:**

The property market in India has traditionally been unorganized and fragmented. However, the recent past has seen a consolidation of positions in the market. The Indian real estate market is slowly and gradually getting organized to become one of the largest contributors to the economy. With a lot of investment flowing in from various sources, the real estate sector has got more attention from the government and things are getting organized. A sense of confidence has been infused amongst the investors which has further augmented the investment. The transactions have become a lot more transparent and property is being considered as a safe investment option. Allowing Foreign Direct Investment (FDI) and encouraging NRI investment in the real estate market of India has provided major boost to the industry.

Some of the reasons that have led to the real estate boom in the country are: Booming economy- accelerated GDP to 8% pea; India's emergence as an attractive off-shoring destination & availability of pool of highly skilled technicians and engineers; Development of large captive units of major players, Rise in disposable income and growing middle class - increasing the demand for quality residential real estate and real estate as an investment option, Entry of professional players equipped with expertise in real estate development; Relaxation of legal rulings and processes by the governing bodies encouraging investments in real estate, Improvement in infrastructure facilities etc.

The market structure, segmentation, growth drivers, key trends and opportunities for real estate are further discussed in the following chapter.

- **ROLE OF PUBLIC PRIVATE PARTNERSHIPS:**

Public-Private Partnerships is seen as a solution for producing high quality and cost-effective real estate service delivery. According to the World Bank (2007), benefits from PPPs can be achieved in four main areas: increasing efficiency in the execution of projects; enhancing implementation capacity; reducing risk for the public sector; and mobilizing financial resources by freeing scarce public funds for other uses.

Despite these benefits, PPPs are not widely used within the real estate sector. This indicates that there are issues and reservations associated with their use. This research aims to identify such issues and address the concerns.

**As per Tharun Shastry L,** Infrastructure is a fundamental sector that every country needs to develop in order to achieve overall development, but governments in developing countries have limited resources for it. This has also been the case with India due to the sluggish pace of Indian economic growth. To overcome this challenge, the Government of India has been striving hard to mobilise investments for infrastructure in order to double its GDP from 3.986% to almost 9%. This implies that nearly \$450bn will be the requirement to develop Indian infrastructure in the next 5 years (2012-2017). Considering India's infrastructural needs, PPPs are not just an option, but a necessity. It has been seen that PPP has many merits such as large investment in public (both urban and rural) infrastructure, efficient service delivery, cost-effectiveness, contracts that are performance-based, sharing of risks, effective use of assets and opportunities of long-term investment.

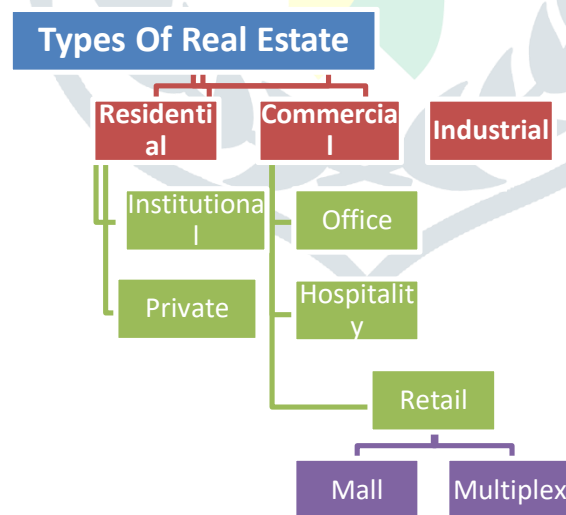
Though a mixed economic approach is followed by India, which is reliant on public private involvement in economic activities, Public Private Partnership in infrastructure is now more than a decade old. It seems to create considerable value to the Indian Government and its citizens with respect to enhancement in time efficiency, greater convenience, increased reliability and saving costs along witheasy availability of information.

**As per Pantouvakis**, PFI/PPPs have become a major procurement system for financing, building and managing construction in recent years. As the trend is expected to be maintained well into the 21st century, it is worth investigating how effectively the topic is addressed by the research community and what may or should be the future research directions. There was no indication found that the research effort is correlated to the relative significance of PPPs in a specific geographical area (country). Research is initiated on an ad-hoc basis and the effort expended in of unequal weight and relevance. It seems that the choice of the topic is based on the preferences of the researcher, his intuition and his environment.

**As per Samta Singh**, The PPP arrangement has been accepted as a substitute to the overall burden of the Indian Government for the expansion of world-class infrastructure development. The time is right to discuss the sudden arrival and pertinence of PPPs in India's development strategy and investigate real alternatives for economic change. PPPs in India had its own share of obstacles and difficulties but it has been realised that the need of PPP is immense which has been discussed in detail in the research paper. The research paper also tried to bring about the evolution of PPP in India and the advantages it serves to the Government and to the investor.

**As per Zhao Yu, Cao Fuguo**, PPP provides better services at a lower cost. Especially under the cash basis accounting, PPP allows the government to obtain immediate investment while will not immediately cause a larger deficit, nor need to increase tax burden or cut off other expenditure. PPP benefits those government departments that are facing financial constraints and fearing the opposition of taxpayers or beneficiaries. Hence, some government departments may use PPP to meet their investment desire, even though they have realized that the cost of PPP may be higher than that of traditional procurement. Therefore, although people hope to enjoy the value for money brought by PPP, PPP cannot be used without restriction and its long-term impact should be controlled ahead of schedule.

The evaluation of financial affordability is a good start for this goal. Setting an expenditure ceiling is still the best choice now before the problem of what expenditure proportion is reasonable and efficient has not been resolved. At present, the evaluation mechanism of financial capacity is still not mature, which weakens its functions at standardizing PPP development, preventing financial risk and maintaining financial sustainability, and cannot fully guarantee the government ability of fulfillment on contract. To achieve the sustainable development of PPP and finance and economy, it is necessary to establish a sound evaluation mechanism, advance the government accounting reform, and comprehensively consider the influence of budgetary adjustments, especially accelerate the pace of legal construction. The Indian realty sector, if channelized properly, could catapult the growth of several other sectors in India through its backward and forward linkages.



## • INDIAN REAL ESTATE SCENARIO

Urban India is undergoing a transition in terms of physical form, demographic profile and socio-economic diversity. In the last fifteen years, post liberalization of the economy, Indian real estate business has taken an upturn and is expected to grow from the current 14 billion \$ to a 102 billion \$ in the next 10 years (NAREDCO). This growth can be attributed to favorable demographics, increasing purchasing power, existence of customer friendly banks & housing finance companies, professionalism in real estate and favorable reforms initiated by the government to attract global investors.

- **MARKET OVERVIEW**

The Indian real estate industry is expected to touch US\$ 50 billion by 2010. Real estate accounts for approximately five per cent of the GDP and this share is expected to increase to six per cent in the next five years. Growth has been driven primarily by the IT/ITeS sector with an increase in the demand for office space, growing presence of foreign businesses in India, the global strides of Indian corporate and a rapidly increasing consumer class.

The real estate sector is in its early growth stage and can be segmented into residential, commercial, retail and hospitality asset classes.

- **Outlook**

Current household shortage is close to 19.4 million units, predominantly in middle- and low-income group. Mortgage finance is expected to increase penetration into the urban housing finance sector.

### Demand and its Impact

Demand Pull factors	Resultant impact
Robust and sustained macro-economic growth	Increasing occupier base
Upsurge in industrial and business activities, especially, new economy sectors	Significant rise in demand for office/industrial space
Favorable demographic parameters	Demand for newer avenues for entertainment, leisure and shopping
1. Significant rise in consumerism 2. Rapid urbanization 3. Availability of a range of financing options at affordable interest rates	Creation of demand for new housing
Supply Push factors	Resultant impact
Policy and regulatory reforms (100 per cent FDI relaxation)	Entry of a number of domestic and foreign players - increasing competition and consumer affordability
Positive outlook of global investors	Easy access to project financing options
Fiscal incentives to developers	Increases developers' risk appetite and allows large scale development
Simplification of urban development guidelines	Improved quality of real estate assets
Infrastructure support and development initiatives by the government	Development of new urban areas and effective utilization of prime land parcels in large cities

### CONCLUSION

It was observed that the existing literature and current research on PPPs is focused mainly on infrastructure projects. There are few instances of PPPs in real estate. Success factors for application of PPPs in Infrastructure projects are researched upon, but in real estate project there is no substantial research. Various challenges are faced for application of PPPs in real estate. The previous research works do not deal exhaustively on this area also.

Hence, this research paper aims to study 'Critical Success factors for application of PPPs in Real Estate' as this area is not explored to a wide extent. It aims to identify significant causes that can help in success or failure of PPP real estate projects.

The study is based on critical study of current projects on PPP basis, the reasons for their success or failure, if any. It aims to find out if there are any factors which are common in all projects. The study also aims on getting the view of industry practitioners to understand the challenges faced by PPP projects.

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**REFERENCES**

1. Shastry L Tharun (2014), "A Study on Public-Private Partnerships with Reference to Indian Infrastructural Projects", International Journal of Business and Management Invention ISSN (Online): 2319 – 8028, ISSN (Print): 2319 – 801X , www.ijbmi.org Volume 3 Issue 10, October. 2014,
2. J.-P. Pantouvakis and N. VANDOROS "A Critical Review of Published Research on PFI/PPPs in Construction" The ranking of construction management journals, Construction Management & Economics 2004
3. Samta Singh " Evolution and Need for PPP in India" Imperial Journal of Interdisciplinary Research. (IJIR) 2017
4. Zhao Yu & Cao Fuguo "Research on China's PPP Financial Affordability Evaluation" Journal of World Economic Research 2018.
5. Graeme Hodge & Carsten Greve "Contemporary public-private partnership: Towards a global research agenda" 14 March 2016
6. Graeme Hodge and Carsten Greve "Public-Private Partnership: A Contemporary Research Agenda" Paper for the Public-Private Partnership Conference Series CBS-Sauder-Monash Sauder School of Business, University of British Columbia, BC Canada 13-14 June 2013.
7. Jeffrey Delmon "Understanding Options for Public-Private Partnerships in Infrastructure" The World Bank Finance Economics & Urban Department Finance and Guarantees Unit January 2010.
8. LiYaning Tang, Qiping Shen & Eddie W.L. Cheng "A review of studies on Public-Private Partnership projects in the construction industry" International journal project management 2010.
9. Nayan Chakravarty, Goutam Sadhu, Sourav Bhattacharjee & Srinivas Nallala " Mapping private - public- partnership health organization : Indian Experience" International Journal of Medicine and Public Health | Apr-Jun 2015.
10. Jing Du, Hongyue Wu and Lei Zhu "Influencing Factors on Profit Distribution of Public-Private Partnership Projects: Private Sector's Perspective" Hindawi advances in civil engineering volumn 2018.
11. Sudhansu Sekhar Nanda "INFRASTRUCTURE DEVELOPMENT IN INDIA: THE ROLE OF PUBLIC-PRIVATE PARTNERSHIP" International Journal of Core Engineering & Management (IJCEM) September 2015.
12. Athena Roumboutsos, Ancor Suárez Alemán & Robert Ågren "Construction firms in public-private partnerships: a place to grow" Submit your article to this journal Article views 2017.
13. Alfan, H.W. "Public private partnership (ppp) as part of infrastructure management solution - a structural approach of delimiting ppp from other private sector participation models. 2014