



---

**Trends and patterns of public private investment in India: An analytical review (2005-2021)**

**Gulshan Kumar<sup>1</sup>, Som Prakash<sup>2</sup>**

<sup>1</sup> Associate Professor, Rajshree Institute of Management and Technology, Bareilly, Uttar Pradesh, India

<sup>2</sup> Assistant Professor, Rajshree Institute of Management and Technology, Bareilly, Uttar Pradesh, India

---

**Abstract**

India is a large country that ranks second in the world in terms of population and seventh in terms of geographical area. But India lagged behind economically and socially compared to the developed world. Government both at National Level & State Level are focusing to implement their projects through PPP Model. Government works with private sectors as a party to deliver fast and furious services under estimated time. India can enhance the expected economic growth through PPP Model. This paper focus on State wise, Sector wise, Authority wise and Year wise inflow of Public Private Partnership in India during December 2005 to December 2019 & Sector wise inflow of Public Private Partnership during 1<sup>st</sup> April 2020 to 31<sup>st</sup> March 2021.

**Keywords:** public private partnership, projects, economic development, government

---

**Introduction**

Public Private Partnership (PPP) is often described as a private business investment where two parties comprising government as well as a private sector undertaking form a partnership for a public purpose/benefit. While much is talked about the performance of Public- Private Partnerships, the coverage of the term Public Purpose or Public Benefits suffers from varied interpretations. PPPs combine the best of both worlds: the private sector with its resources, management skills and technology; and the public sector with its regulatory actions and protection of the public interest. This balanced approach is especially welcome in the delivery of public services which touch on every human being's basic needs. Public Private Partnership (PPP) project as per Government of India means a project based on a long term contract or concession agreement, between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges. The concession agreement is specifically targeted towards financing, designing, implementing and operating infrastructure facilities and the collaborative ventures are built around mutually agreed allocation of resources, risks and returns. These are collaborative efforts, between private and public sectors, with clearly identified partnership structures, shared objectives, and specified performance indicators for delivery of services. India has seen real progress over the last few years in attracting private investment into the infrastructure sectors. All levels of government are aiming to use public private partnerships (PPPs) more intensively to help meet gaps in the provision of basic services. It involves the private enterprise (in the involvement of management expertise and/or monetary contributions) in the government projects aimed at public benefit.

The government remains actively involved throughout the project's life cycle. The private sector is responsible for the more commercial functions such as project design, construction, finance and operations. These schemes are sometimes referred to as PPP, P<sup>3</sup>, or P3.

**Need for PPP in India**

Economic survey 2009-10 brings out the importance of PPP projects, "PPPs provide variety of benefits in terms of investing public capital to draw in private capital and undertake a bigger number of infrastructure projects, introducing Private sector experience and cost-reducing technologies further leading to efficiencies in operations and maintenance. Hence, other than financial implications, PPPs are unit tools to meet the fundamental obligations of governments to produce higher infrastructure services (with massive externalities), by increasing the answerability of the private sector as a service supplier."

The need of PPP may be defined by the following parameters:-

- Better Infrastructure
- Risk Sharing
- Optimum Allocation of Resources
- Value for Money
- Innovations
- Aid in Growth of other Sectors
- Catalyst for the Economy
- More Employment Generation
- Improve Image of Country
- Increase in GDP
- Attract FDI



**Fig 1:** Need for PPP in India

### Literature Review

Priya and Jesintha (2011) <sup>[1]</sup> viewed that PPPs help to guarantee proper maintenance of infrastructure by keeping assets in top form. Therefore many governments now provide broader PPP policies that encompass the interests of all parties so as to capture the salient objectives of each PPP project. However, the choices as well as the relative priority of each PPP objective depend on the government's priorities. Hans, A. (2017) <sup>[2]</sup> viewed that during 2007-12 GDP through infrastructure development rising to 7 percent in comparison with 5 percent in 2002-07. But this momentum could not be sustained as it will be go down till 5.6 percent during 2013-17. The success of PPP to a large extent depends on optimal risk allocation among shareholders, environment of trust among stakeholders and institutional capacity to undertake grooming and implementation of PPP Projects. Sharma, M., & Bindal, A. (2014) <sup>[3]</sup> viewed that varieties of problems have been encountered in executing various PPP models. Lack of information and knowledge in the private sector in developing countries was seen as a barrier to implementing PPP in developing countries. Samii, Wassenhove, and Bhattacharya (2002) <sup>[4]</sup> viewed that dependency, commitment and common goals, good communication and cooperation between partners, and similar working cultures are the essential factors for the success of PPP Projects. Devkar, G. A., Mahalingam, A., & Kalidindi, S. N. (2013) <sup>[5]</sup> argued that the policy discourse in India often mentions that one of the critical factors that impedes the roll-out of urban PPP projects are weak competencies present in Urban Local Bodies. ULBs often sought assistance from external agencies to supplement competency gaps. These external agencies primarily supplemented competencies up until the selection of the private operator. ULBs relied more on in-house competencies in order to manage service management and project lifecycle needs. In particular, while ULBs have been focusing on asset creation in conjunction with the private sector, they have not given enough attention towards the process of service delivery over the course of the concession period. This is reflected in the fact that effort was made to bridge

competency gaps in project development (either through in-house or outsourced means), but not in long-term project governance. Biswas, W. (2016) <sup>[6]</sup> suggested the Central Government and State Government both done their best in the development of different sectors like Railways, Road Transport, Health Care, Power Sector in collaboration with PPP Sector. It is very important to go for such public private partnership that would enhance our economic development. Even some noteworthy evidence shows that more the PPP projects launched in a country higher is the rate of GDP growth. PPP are becoming private finance initiative where the government avails advantage of the skills, expertise, ideas and knowledge of private sector management by giving long term franchises which clearly mention the responsibility and accountability of private sector partner. Barowalia, A. J. (2010) <sup>[8]</sup> suggested PPP is a tool for all-round development and the benefits depend on how such tools are utilized by the policy and decision-makers.

### Objectives of the Study

The Study is based on the following objectives:-

1. To discuss the need for Public Private Partnership in India.
2. To analyze State wise, Sector wise, Authority wise and Year wise inflow of Public Private Partnership in India during December 2005 to December 2019.
3. To analyze Sector wise inflow of Public Private Partnership in India during financial year 2020-2021.

### Research Methodology

The study is based on published sources of data collected from various sources. The data were gathered from the secondary sources such as journals, articles published online on various websites.

### Scope of the Study

The scope of the study is restricted to the study of PPP in India from 2005 to 2021. It is also restricted to State wise PPP, Sector-wise PPP, Authority-Wise FDI and Year-Wise PPP in India.

## Evaluation of Public Private Investment in India

**Table 1:** Total Number of Projects during 20th December, 2005 - 17th December, 2019

Number of Projects	324
Total Project Cost	Rs.381996.72 crores

Source: www.pppinindia.com

### Interpretation

Table 1 depicts that 324 projects of Rs. 381996.72 crores were recommended by the Public Private Partnership Appraisal

Committee during 20<sup>th</sup> December 2005 to 17<sup>th</sup> December 2019. It reflects that Public Private Partnership plays a very important role in the development of Indian Economy.

**Table 2:** State Wise Projects recommended based on Number & Value of Projects during 20<sup>th</sup> December 2005 to 17<sup>th</sup> December 2019.

S.No.	State	Number of Projects	Total Project Cost (In Rs. Crore)
1	Andaman and Nicobar Islands	2	770.00
2	Andhra Pradesh	22	21220.48
3	Assam	5	4078.53
4	Bihar	13	12262.44
5	Chhattisgarh	4	3466.07
6	Delhi	8	9492.58
7	Goa	5	4936.30
8	Gujarat	16	21692.01
9	Haryana	12	16046.20
10	Himachal Pradesh	5	6419.73
11	Jammu & Kashmir	8	20927.55
12	Jharkhand	3	3777.43
13	Karnataka	23	20501.62
14	Kerala	12	10869.44
15	Lakshadweep	1	302.00
16	Madhya Pradesh	20	20758.90
17	Maharashtra	29	51176.94
18	Meghalaya	1	536.00
19	Multi State	15	29251.76
20	Orissa	21	25436.82
21	Punjab	12	10981.77
22	Rajasthan	21	18839.77
23	Tamil Nadu	26	21879.95
24	Uttar Pradesh	25	31248.81
25	Uttarakhand	2	1021.61
26	West Bengal	13	14072.41
	Total	324	381966.72

Source: www.pppinindia.com

### Interpretation

Table 2 depicts the following points regarding State Wise no. and values of the projects

- Highest projects in the terms of number and value both were in the state of Maharashtra i.e. 29 projects worth Rs. 51176.94 Crores.
- Lowest projects in the terms of number and value both were in Lakshadweep worth Rs. 302 Crores.
- Eight states have more than 20 projects each.
- Seven states have more than 10 projects but less than 20 Projects including Multistate Projects.
- Eleven States have less than 10 projects each.
- Second highest in the terms of number and value both were in the state of Uttar Pradesh i.e. 25 projects worth Rs. 31248.81 Crores.
- Second lowest in terms of no. of projects and value of project both were in the state of Meghalaya worth Rs. 536 Crores.
- Eight states in terms of value of projects were more than Rs. 20000 Crores.
- Six states in terms of value of projects were more than Rs. 10000 Crores but less than 20000 Crores.
- Ten states in terms of value of projects were less than Rs. 10000 Crores.
- Nine states in terms of value of project were less than Rs. 5000 Crores.

**Table 3:** Sector Wise Projects recommended based on Number & Value of Projects during 20<sup>th</sup> December 2005 to 17<sup>th</sup> December 2019

S.No.	Sector	No. of Projects	Total Project Cost (in Rs. Crores)
1	Airports	10	9017.00
2	Housing	9	7633.55
3	Ports	37	51911.30
4	Railways	2	9796.00
5	Roads	257	302388.00
6	Sports	5	0.00
7	Tourism	4	1220.87
	<b>Total</b>	<b>324</b>	<b>381996.72</b>

Source: www.pppinindia.com

### Interpretation

Table 3 depicts the following points regarding Sector Wise no. and values of the projects:-

- Highest projects in terms of number and value both were related to Roads i.e. 257 projects worth Rs. 302388.00 Crores.
- Lowest projects in terms of number and value both were related to Railways i.e. 2 projects worth Rs. 9796.00 Crores.
- Second highest projects in terms of number and value both were related to Port i.e. 37 projects worth Rs. 51911.30 Crores.
- Sports have 5 projects but there were no funds available for the development of this sector during this period.
- Airport, Housing, Railways and Tourism have funding of less than Rs.10000 Crores each during this period.

**Table 4:** Authority Wise Projects based on Number and Value of Projects during 20<sup>th</sup> December, 2005 - 17<sup>th</sup> December, 2019

S.No.	Authority	No. of Projects	Total Project Cost (in Rs. Crores)
1	Airports Authority of India	6	9017.00
2	Department of Economic Affairs (Currency and Coinage Division)	1	148.87
3	Ministry of Civil Aviation	4	0.00
4	Ministry of Home Affairs	8	7299.17
5	Ministry of Home Affairs	3	1072.00
6	Ministry of Railways	2	9796.00
7	Ministry of Road Transport and Highways	257	302388.00
8	Ministry of Shipping	38	52245.68
9	Ministry of Youth Affairs and Sports (MoYA&S)	5	0.00
	<b>Total</b>	<b>324</b>	<b>381996.72</b>

Source: www.pppinindia.com

### Interpretation

Table 4 depicts the following points regarding Authority Wise no. and values of the projects:-

- Ministry of Road Transport and Highways had highest no. of projects in numbers and value i.e. 257 projects worth Rs. 302388.00 Crores.
- Department of Economic Affairs (Currency and Coinage Division) had lowest no. projects in numbers and value both i.e. 1 project worth Rs, 148.87 Crores.
- Ministry of Shipping had second highest no. of projects in numbers and value both i.e. 38 projects worth Rs. 52245.678 Crores.
- Ministry of Youth Affairs and Sports and Ministry of Civil Aviation had 5 and 4 projects each respectively but no funds were available for these projects during this period.
- Airport Authority of India, Department of Economic Affairs, Ministry of Home Affairs and Ministry of Railway Affairs had less than funding of Rs. 10000 Crores each during this period.

**Table 5:** Year Wise Projects recommended based on Number and Value of the Project during 20<sup>th</sup> December, 2005 - 17<sup>th</sup> December, 2019

S.No.	Financial Year	No. of Projects	Total Project Cost (In Rs. Crores)
1	2019-20	4	5014.00
2	2018-19	8	9730.38
3	2017-18	4	7851.78
4	2016-17	9	12401.28
5	2015-16	17	28674.10
6	2014-15	18	29070.77
7	2013-14	25	55326.29
8	2012-13	25	25641.53
9	2011-12	52	53248.60
10	2010-11	33	26010.24
11	2009-10	53	57854.97
12	2008-09	48	53381.78
13	2007-08	13	11227.46
14	2006-07	15	6533.54
	<b>Total</b>	<b>324</b>	<b>381996.72</b>

Source: www.pppinindia.com

### Interpretation

Table 5 depicts the following points regarding Year Wise no. and values of the projects:-

- Highest no. of projects in terms of number and value were recommended in year 2009-10 i.e. 53 projects worth Rs. 57854.97 Crores.
- Lowest no. of projects in terms of number and value were recommended in year 2019-20 i.e. 4 projects worth Rs. 5014.00 Crores.
- Second highest projects in terms of value worth Rs. 55326.29 Crores were recommended during the year 2013-14, yet the no. of projects in term of number were very low i.e. only 25 projects. So we can say that heavy amount was invested in lower no. of projects during 2013-14.
- Third highest investment in terms of both in no. of projects and value of the project were made during the year 2011-12 i.e. Rs. 53248.60 in 52 projects.
- In year 2008-09, 2009-10, 2011-12, 2013-14, Investments were made more than Rs. 50000 Crores each year in different

projects.

- In year 2010-11, 2012-13, 2014-15, 2015-16, Investments were made more than Rs. 25000 Crores but less than Rs.50000 Crores each year in different projects.
- In year 2006-07, 2007-08, 2016-17, 2017-18, 2018-19 and 2019-20, Investments were made less than Rs. 25000 Crores each year in different projects.
- In year 2010-11, Investments were made Rs. 26010.24 Crores in 33 different projects. During this year, the no. of projects were very high but amount invested in these projects were very low in comparison with no. of projects.

During 2020–21(1 April 2020 to 31 March 2021), 125 PPP projects, with a total cost of Rs 1,72,314 crore, were appraised by the Vertical. This includes 123 Central Government projects and two State projects. The sector-wise distribution of the PPP projects (including the projects under the VGF scheme) appraised is given in the table below:

**Table 6:** Sector Wise Projects recommended based on Number & Value of Projects during 1<sup>st</sup> April 2020 to 31<sup>st</sup> March 2021

S.No.	Project Appraised	No. of Projects	Total Cost(Rs In Crores)
1	Roads	69	63,279
2	Ports	12	3359
3	Eco Tourism	10	2232
4	Silos	1	401
5	Petroleum Reserves	4	27728
6	Ropeway	1	996
7	Telecom	9	29199
8	Railway Stations	6	7600
9	Railway Passenger Trains	12	30099
10	Metro	1	7420
	Total	125	172314

Source: Niti Ayog Report (2020-21)

### Interpretation

Table 6 depicts the following points regarding Sector Wise no. and values of the projects during the year 2020-21:-

- Highest projects in terms of number and value both were related to Roads i.e. 69 projects worth Rs. 63279.00 Crores.
- Lowest projects in terms of number and value both were related to Silos i.e.1 project worth Rs. 401.00 Crores.
- Second highest projects in terms of number and value both were related to Railway Passenger Trains i.e. 12 projects worth Rs. 30099.00 Crores.
- Road Sector was the only sector where Investment was more than Rs. 50000 Crores during the year 2020-21.
- Metro Sector was the only sector where no. of projects were very low in comparison with value of the project i.e. 1 project worth Rs. 7420 Crores during the year 2020-21.
- Petroleum Reserves were the sector where no. of projects were very low in comparison with investment in the project i.e. 4 projects worth Rs.27728 Crores during the year 2020-21.
- Petroleum Reserves, Telecom & Railway Passenger Trains were only the sectors where Investment more than Rs. 25000 Crores but less than Rs. 50000 Crores each during the year 2020-21.
- Ports, Eco Tourism, Silos, Ropeway, Railway Stations and Metro were the sectors where Investment less than Rs, 25000 Crores each during the year 2020-21.

### Conclusion

From the above description, we can say that PPP model is very much helpful in development of Indian Economy. In most of the sectors, Private Partnership with Government is doing well and opens the door for new success in every sector of the economy. Infrastructure, roads, ports, railways, petroleum, tourism, telecom, metro projects, housing, and sports almost in every sector PPP model play a very important role for the development of the Indian Economy. From December 2005 to December 2019, PPP model worked on 324 projects worth Rs. 381996.72 Crores. But only in 2020-21 PPP model invest in 125 projects worth Rs. 172314 Crores. As we can see that how fast PPP model attract the development of Indian Economy which is a good sign for future of India.

### References

1. Priya MS, Jesintha P. Public private partnership in India. Journal of Management and Science,2011:1(1):82-94.
2. Hans A. Rebooting public private partnership in India. NITI Aayog, 2017.
3. Sharma M, Bindal A. Public-private partnership. International Journal of Research,2014:1(7):1270-1274.
4. Samii R, Van Wassenhove LN, Bhattacharya S. An innovative public-private partnership: new approach to development. World development,2002:30(6):991-1008.

5. Devkar GA, Mahalingam A, Kalidindi SN. Competencies and urban Public Private Partnership projects in India: A case study analysis. *Policy and Society*,2013;32(2):125-142.
6. Biswas W. Public Private Partnership and Economic Growth with special reference to India–An overview. *International Journal of Management*, 2016, 7(3).
7. Sundaram SS. Public Private Partnership in India: Prevailing Challenges and Way Forward. *Emerging Economy Studies*,2015;1(1):90-95.
8. Barowalia AJ. Public private partnership in social sectors for harmonized development in India. *OIDA International Journal of Sustainable Development*,2010;1(4):29-37.