Journal DOI: 10.36713/epra1013 | SJIF Impact Factor (2025): 8.619 ISSN: 2347-4378
EPRA International Journal of Economics, Business and Management Studies (EBMS)
Volume: 12 | Issue: 5 | May 2025 -Peer-Reviewed Journal

# THE ROLE OF PUBLIC PRIVATE PARTNERSHIP IN TRANSPORTATION AND COMMERCIAL INFRASTRUCTURE PROJECTS IN INDIA

**Dr. Ranjith Kumar[1], Neha Banu[2]**
[1]*Professor, School of Economics and Commerce, CMR University, Bangalore*
[2]*Research Scholar, School of Economics and Commerce, CMR University, Bangalore*

**Article DOI: https://doi.org/10.36713/epra21409**
**DOI No: 10.36713/epra21409**

**ABSTRACT**
*Transportation and Commercial Infrastructure plays a vital role in the urge for the development of the state and country. Due to the inefficient transportation facility many incidents are taken place including traffic jams, accidents and others which lead to a problematic situation for the community people and also lack of commercial infrastructure also main aspect of the economy development. India being the most developing nation among the other among the other nation in the world with regards to the commercial and transportation facility. But the backward region of the India has need to concentrated so that all the people of the state find convenience and easy accessibility for the businessmen. The public sector all alone is unable to fulfill the requirement so the government of India requires the collaboration with the private parties for the efficient completion of the project which enhances the quality and productivity of the project. Thus, this paper aimed to study the need and compare the projects between the transport and social and commercial infrastructure.*
**KEYWORDS:** *Public Private Partnership (PPPs), Transport, Commercial Infrastructure, India, Private Parties and Development of the economy.*

## 1. INTRODUCTION

The Transportation Facility is an important aspect for country's economic development due to several main factors including Economic benefit such as growth, Marketplace approachability and another factor is social benefit such as its reachability and opportuneness, the other major factor is Environmental Benefit such as Diminished carbon footprint and overcrowding. Transportation is currently the main concern of the community and government of India. India being the most development country in the world in terms of transportation facility but still there are few portion of the state that need to concentrate for the wellbeing of the community. Proper transportation will help the commuters for easy accessibility to the market place irrespective from which boundary of the state the individual belongs to and it also avoid reduction of traffic problems in the cities. Nevertheless, the resource that is been required to complete the projects in terms of the capital and experts is not affordable all alone by the public finances alone. This is why the government requires the support of private partners in accomplished the task. Thus, the government of India requires using the strategy of public private partnership in their project.

On the other hand, In order to enhance the proper allocation and cooperation of human resource the commercial infrastructure is very essential in the current scenario. The commercial facility is a must for enhancing the economic stability and wellbeing of the society. But alone the public sector is unable to fulfill with proper commercial infrastructure that is why there is a need to joined hands with private partners.

Thus, public private partnership helps to finance, design, and operate the transportation and commercial project. This collaboration of Public private partnership is providing immense access to capital, efficiency, guarantee and innovation and many more. These partnerships open the doors for many better outcomes and faster completion of the projects. At conclusion, the collaborative parties end up in sharing proper sharing of expenses, risk and finances.

## 2. REVIEW OF LITERATURE

1) Nagesha Gopalkrishna and Gayithri Karnam (2015), talks about the preference of public private partnership in infrastructure projects. This article makes an attempt to analyses the performance of four National Highway project in the state of Karnataka. For which both qualitative and quantitative project

has been utilized and there by the findings highlights that the project 1,3 and 4 has a positive Value for money and also suggested to tone up the public private partnership policy in India.

2) Nagesha Gopalkrishna and Gayithri Karnam (2016), talks about how the current worlds is adopting the concept of public private partnership mode compare to the traditional mode for the economic and social infrastructure development. The study aims to analyses the higher efficiency towards the public private partnerships compared to the traditional method efficiency. The findings shows that the mean and technical score of the project under PPP is much higher compared to the traditional method because of proper allocation of risk distribution between the partners and the period of completion of the project.
3) Upinder Sawhney, Tanvi Kiran (2017), Explore around the nature of public private partnership in social and commercial project , For which Indicator analysis approach has been utilized which help to build a strong profile on social and commercial project. Further BOT model has been selected among the various types of PPP variants and hence the study provides a detailed analysis which includes both qualitative and quantitative information with respect to social and commercial projects.
4) Ajit Kumar Sinha, Kumar Neeraj Jha (2019), This paper talks about the problem faced by the banks a, lenders and financial institution with respect to financing of Public private partnership in Road transportation project Therefore systematic review of literature method is conducted and thereby the data has been collected from various completed project from 2018-2019. The findings highlight that the financial problem has led to unwarranted time and over running of cost factor which also led to time consuming to acquiring the land and in return it increases the increase of finance cost.
5) Laura Panadès-Estruch (2021), Study evolves around the Public private partnership transportation projects in the Caribbean sub region. For the purpose of the study they utilized desk based research which is been supported by national and international sources to convey the outlook towards the under research area for sponsorship. The finding of the study highlights that they are progressing but still the projects are under work in progress stage.
6) Jose Oliveros – Romero, Vidal Patrick Paton-Cole (2022), Focus on Lungi bridge project acquired with public private partnership model. The ultimate aim is to reflect on the seven problems that are incurred during the implementation of the plan under public private partnership. The paper is based on case study method and the finding reflects the risks that are addressed due to the public private partnership option with non-sovereign guarantee.
7) Jude Chidiebere Anago (2022), evolves around the obstacles that are keeping changing to determine the reasons and importance behind the changes. For the purpose of the study they have conducted Deployed X-inefficiency theory and later the finding shows that they fail to upgrade the public private partnership project in terms of efficiency and its sustainability which incorporate struggles for successful implementation of PPP project in Portugal and Spain . the study recommended to incorporate technical accessibility and also to focus on private finance weaknesses.
8) Daniel W.M Chan, Dher Abdul Hadi Sadeq, Aqeel Mohammed Fadhil, Matteo Cristofaro, Hadi Sarvari (2022), Explores the development of the economy by restructuring and extension of road transportation. The study aims to cover the gap that is existed in the literature survey, for which they have utilized Delphi Survey Method based in Iran. The Findings shows that the obstacles that confronted are below the average and it is difficult to implement public private partnership in Road infrastructure.
9) Tiep Nguyen, Leonie Hallo, Indra Gunawan (2023), This paper explores the risk that is being involved in transportation infrastructure under Public private partnership strategy. The study used literature review and exploratory factors are been considered to highlight the major categories. The finding shows that there is lack of expertise in the complex project also trust and resistance problem and factors affecting uncertainty.
10) Giulio Mangano, Gabriel Castelblanco, Alberto De Marco, Filippo Maria Ottaviani (2025), talks about the major factor that is impacting the duration of the concession time of public private partnership for transport projects for which they have approached a triangulation method and the result determined that the ppp has to restrict the concession period towards societal resistance and high occurance of traffic under concert.

## 3. RESEARCH GAP

As per the prior study reviewed, there were a vast number of studies analyzed the public private partnership approach in various field of infrastructure. But there are only few studies that are conducted and the project has implemented in transport and commercial project in India. Thus, the need and performance between the transportation and commercial project has to be analyzed in this study.

## 4. OBJECTIVES

- To understand the need of PPP in Transport and Commercial infrastructure

Journal DOI: 10.36713/epra1013 | SJIF Impact Factor (2025): 8.619 ISSN: 2347-4378
EPRA International Journal of Economics, Business and Management Studies (EBMS)
Volume: 12 | Issue: 5 | May 2025 -Peer-Reviewed Journal

## 5. ANALYSIS AND INTERPRETATION

The project that has been undertaken by public private partnership in the state. The following table represents and compare the progress of the PPP in the state development

**Table 1:1: Table showing all the public private partnership in transportation and Commercial project in the state of Karnataka**

| Sl.No | Project Name | Location | Sector | Total Project Cost (In Rs. Crore) | VGF Approved (In Rs. Crore) |
|---|---|---|---|---|---|
| 01 | Development of modern food silo for storage of wheat on DBFOT at Whitefield, Bangalore (Karnataka) - Proposed by FPD | Karnataka | Social & Commercial Infrastructure | 28.52 | 5.70 |
| 02 | Development of Advanced Training Institute(ATI) in Bellary in Karnataka State | Karnataka | Social & Commercial Infrastructure | 19.65 | 3.93 |
| 03 | Development of Road from Nelamangala to chikkaballapura section of SH-74 in state of Karnataka | Karnataka | Transport and Logistics | 168.04 | 33.61 |
| 04 | Improvements of Road from Yelahanka to Karnataka/AP border Section of SH9 on DBFOT (Toll) basis | Karnataka | Transport and Logistics | 380.85 | 76.17 |
| 05 | Two laning with paved shoulders, Gotur - Kagewad sections of SH-44 (km 0.00 to km 3.12) and SH-53 (km 2.30 to 0.0 under DBFOT | Karnataka | Transport and Logistics | 174.00 | 34.80 |

**(Source:** (https://www.pppinindia.gov.in/vgf-inprinciple-statewises/Karnataka)

**Table 1.2: Table representation Public private partnership project between different states in transportation and commercial project during the year 2023-2024**

| Sl.No | Project Name | Location | Purpose of Assistance | Sector | Total Project cost (Funding Approved in Rs. In Crores) |
|---|---|---|---|---|---|
| 01 | Selection of Transaction Advisor for Development of Housing Units for Delhi Police at Dheerpur , Delhi on an appropriate PPP mode | Delhi | Project Transaction Advisory | Social and Commercial Infrastructure | **3.78** |
| 02 | Development of Integrated Sports Complex (Sports Village) in Bheemli, Visakhapatnam, Andhra Pradesh | Andhra Pradesh | Project Transaction Advisory | Social and Commercial Infrastructure | **2.23** |
| 03 | Development of International Standard Tourism / theme Destination in Punjab on Pathankot Dalhousie road around Ranjit Sagar lake | Punjab | Project Transaction Advisory | Social and Commercial Infrastructure | **0.10** |
| 04 | Development of International Standard Tourism/Theme Destination in Punjab on Pathankot- | Punjab | Project Transaction Advisory | Social and Commercial Infrastructure | **0.10** |

Journal DOI: 10.36713/epra1013 | SJIF Impact Factor (2025): 8.619 ISSN: 2347-4378
EPRA International Journal of Economics, Business and Management Studies (EBMS)
Volume: 12 | Issue: 5 | May 2025 -Peer-Reviewed Journal

| | | | | | |
|---|---|---|---|---|---|
| | Dalhousie road around Ranjit Sagar Lake on PPP mode | | | | |
| 05 | Development of Medical college & Hospital at Namsai Arunachal Pradesh under Aspirational District on PPP mode. | Arunachal Pradesh | Project Transaction Advisory | Social and Commercial Infrastructure | **1.44** |
| 06 | Outsourcing of Megapode Resort | Andaman and Nicobar | Project Transaction Advisory | Social and Commercial Infrastructure | **1.48** |
| 07 | Hiring of Transaction Advisor for undertaking infrastructure development of assets belonging to Assam state Housing Board on PPP mode | Assam | Project Transaction Advisory | Social and Commercial Infrastructure | **2.05** |
| 06 | Development of Shri Anandpur Sahib ji to Shri Naina Devi ji Passenger Ropeway Project from Village Rampur, District Rupnagar in Punjab to Naina Devi Ji Temple, District Bilaspur in Himachal Pradesh on PPP mode. | Himachal Pradesh | Project Transaction Advisory | Transport & Logistics | **1.70** |
| 07 | Hiring of Transaction Advisor for Development of Truck Terminal & Automobile Hub in Leh Ladakh on PPP mode | Ladakh | Project Transaction Advisory | Transport & Logistics | **3.00** |
| 08 | Hiring Transaction Advisor for the proposal of Andhra Pradesh Metro Rail Project | Andhra Pradesh | Project Transaction Advisory | Transport & Logistics | **5.00** |

**(Source:** (https://www.pppinindia.gov.in/iipdf_projects)

**Table 1.3: Table representing the project compare between during the year 2022-2024**

| Sl.No | State | Year | Total No. of Projects Undertaken | Total Project cost in Rs in Crores |
|---|---|---|---|---|
| **01** | **Punjab** | 2023 | 03 | 0.76 |
| | | 2024 | 06 | 0.69 |
| **02** | **Andhra Pradesh** | 2023 | 02 | 2.23 |
| | | 2024 | 01 | 5.00 |
| **03** | **Arunachal Pradesh** | 2023 | 01 | 1.44 |
| **04** | **Himachal Pradesh** | 2023 | 02 | 3.4 |
| **05** | **Assam** | 2023 | 01 | 2.05 |
| **06** | **Karnataka** | 2023 | 02 | 0.86 |
| | **Total Cost of Projects undertaken** | | | **16.43** |

**Source:** (https://www.pppinindia.gov.in/iipdf_projects)

Journal DOI: 10.36713/epra1013 | SJIF Impact Factor (2025): 8.619 ISSN: 2347-4378
EPRA International Journal of Economics, Business and Management Studies (EBMS)
Volume: 12 | Issue: 5 | May 2025 -Peer-Reviewed Journal

**Graph 01: Representation of total state involved in transportation and social and commercial project during 2023-2024**

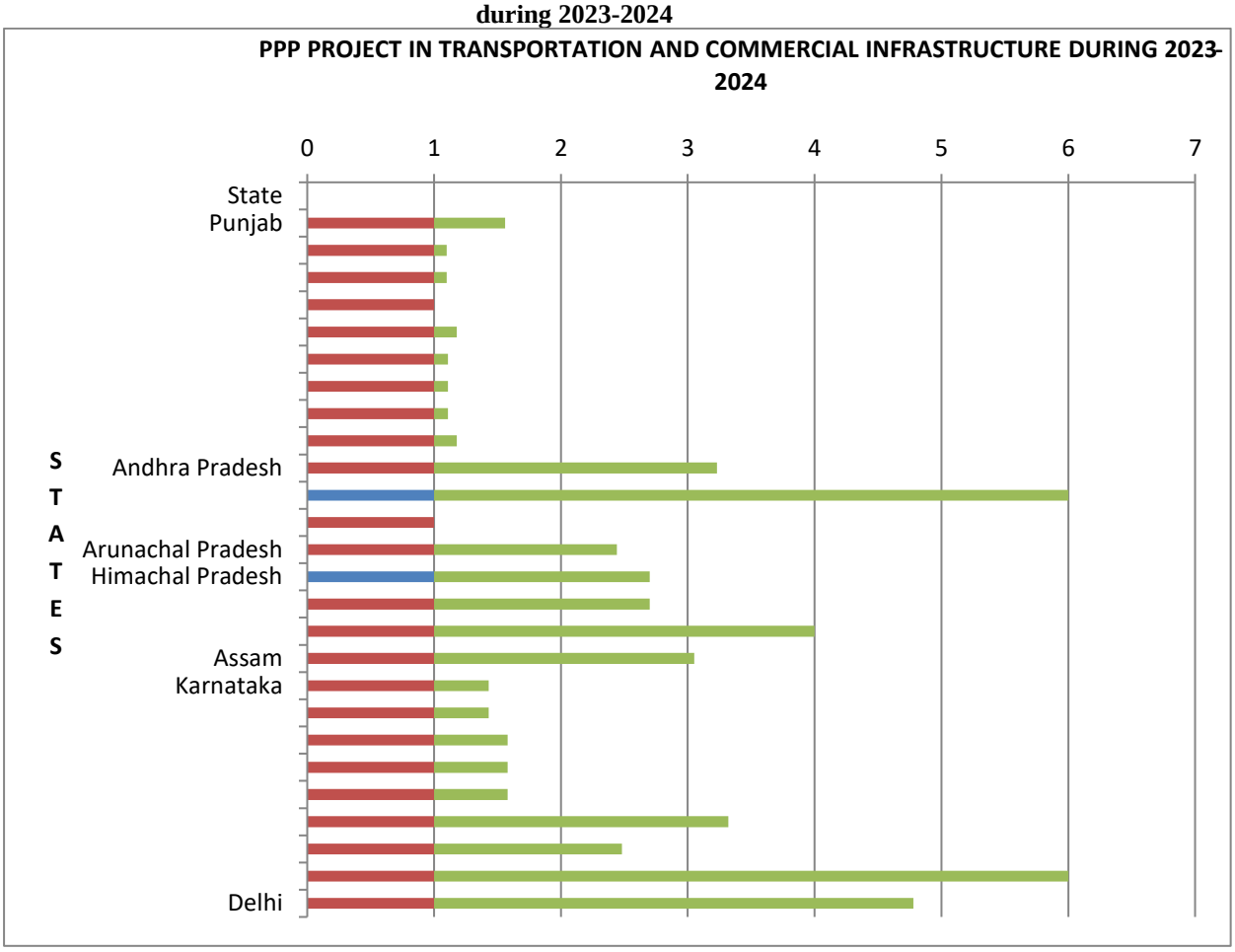



**Table 1.4: Table showing Public private partnership project in various other multi dimension sector**

| Sl.No | PPP Project | Location | Sector | Total Funding Approved |
|---|---|---|---|---|
| 01 | Creation of PPP-PMU cell in planning and Monitoring Department of Union Territory of Jammu and Kashmir. | Jammu and Kashmir. | | 4.11 |
| 02 | Development of Centre for Fintech excellence, facilities for students and faculty on appropriate PPP mode in Indian institute of Management, Mumbai | Maharashtra | Education | 4.04 |
| 03 | Development of Hi-Tech Horticulture Technology Park (HHTP) in the state of Karnataka | Karnataka | | 0 |
| 04 | Establishment of Project Management Unit (PMU) in PPP Cell of State's Finance department, Government of Andhra Pradesh. | Andhra Pradesh. | - | 5.00 |
| 05 | Hiring of consultant firm on single source tender/ nomination | Delhi | - | 0.40 |
| 06 | Hiring of Transaction Adviser for Development of a Data Center at Tuem, Pernem, Goa | Goa | Communication | 4.72 |
| 07 | Hiring of Transaction Advisor by Greater Vishakhapatnam Smart City Corporation Limited Govt. of Andhra Pradesh for undertaking Development of Floating Solar Photovoltaic | Andhra Pradesh | Energy | 2.81 |

Journal DOI: 10.36713/epra1013 | SJIF Impact Factor (2025): 8.619 ISSN: 2347-4378
EPRA International Journal of Economics, Business and Management Studies (EBMS)
Volume: 12 | Issue: 5 | May 2025 -Peer-Reviewed Journal

| | | | | |
|---|---|---|---|---|
| | (FSP) on Meghdrigedda and Mudarsarlova reservoirs in Vishakhapatnam on PPP mode | | | |
| 08 | Hiring of Transaction Advisor by Greater Vishakhapatnam Smart City Corporation Limited Govt. of Andhra Pradesh for undertaking Development of sewerage system in Madhurawada and Bheemli areas in Vishakhapatnam on PPP mode | Andhra Pradesh | Water and Sanitation | 4.53 |
| 09 | Hiring of Transaction Advisor for the proposal of Development of Non-Revenue Water (NRW) monitoring and management in water supply system in Visakhapatnam | Andhra Pradesh | Water and Sanitation | 0 |
| 10 | Hiring Transaction Advisor for the proposal of Enhance energy efficiency of water supply and wastewater systems for Greater Visakhapatnam Municipal Corporation (GVMC). | Andhra Pradesh | Water and Sanitation | 0 |
| 11 | Hiring Transaction Advisor (TA) for undertaking development of Tuivai 210 MW HEP on PPP mode | Mizoram | Energy | 1.77 |
| 12 | Support under the IIPDF Scheme for hiring Transaction Advisor (TA) for undertaking development of Tuivai210 MW HEP on PPP mode | Mizoram | Energy | 0 |

(Source: (https://www.pppinindia.gov.in/iipdf_projects)

- From the above tables it is clearly that all the states in the country as undergone some or the other projects for the development of the society under the PPP Strategy. Moving to the State of Punjab during the year 2023 it has got the Public private partnership approval for 3 projects for which the total project cost amounted to be Rs. 0.76 Crores but in the year 2024 , the state has approved totally 6 project which is clear increase in the No. of projects compared to the previous year.
- Andhra Pradesh in the year 2023, has approved for the 2 project under PPP collaboration where the project costed to Rs. 2.23 Crores but in the next year that is 2024 the state has approved for only 1 project which amounted to Rs. 5.00 Crores it is the indication of diminishing approval from the state involvement. As it is the state requirement to participating in collaborative projects more in the coming years for the betterment of the future.
- In the year 2023 the state of arunachal Pradesh has been involved in social and commercial project and got the approval to function under PPP collaboration the project costed Rs. 1.44 Crores .
- Himachal Pradesh has involved in 2 social and commercial project for which total cost of the project is Rs. 3.4 Crores
- The state of assam has participated with the PPP and in the year 2023 it has projected 1 project for which the overall cost is Rs. 2.05 Crores
- The state of Karnataka has been regular involvement with PPP project as in the year 2023 it has participated and got approval for 2 social and Commercial project amounted to Rs.0.86 crores

From the above tables and graphs it is clearly indicating that the Public private partnership projects is more involved in 2023 in social and commercial project and transportation project compared to 2024. Thereby, The respective state government has to increase the number of ppp projects in upcoming years for the betterment of the society and also Table 1.4 indicate that Public private partnership has been undertaken project in other fields such as communication sector, Energy Sector, Tourism Sector and others. Thus, Public private partnership can be more enduring in the future if properly implemented in the country.

## 6. FINDINGS

- India being the well-developed state in the country but still few parts of the urban society require better development.
- The government Of India has taken initiative towards the transportation infrastructure and social infrastructure for the welfare of the community of the state.
- The government is collaborating with the private partners to fix the problems of better highways for the convenience of the passenger basically with the motive to reduce the traffic in the society.
- Majority of the partnership project are seems to be successful due to strict policy and procedure
- Only few projects are been concentrated towards the social and commercial infrastructure till date.

## 7. CONCLUSION

Public private partnership is progressing a lot in the field of transportation and social commercial project by following the terms and conditions of the project. The government of India along with the private partners is facing the success in the completion of the project in terms of its accessibility, convenience and marketplace for the businessmen which indicate the good performance not only for the state but also for the country by eliminating the obstacles that comes in the way. Thus, the partnership between the government and private parties will lead to many more upgrading innovative projects which will last prompt development and examples for the upcoming projects in the short comings. The transportation and commercial sector in the state will face the transformation in the field if continuously evaluation and revising the terms and conditions of the projects.

## 8. REFERENCES

1. *Giulio Mangano, G. C. (2025). Exploring the drivers of concession period in transport public-private partnership. Built Environment Project and Asset Management, 193-210.*
2. *Tiep Nguyen, L. H. (2023). Investigating risk of public-private partnerships (PPPs) for smart transportation infrastructure project development. Journal environment project and asset Management.*
3. *Daniel W.M Chan, D. A. (2022). Barriers and solutions in adopting public–private partnerships in road transportation infrastructure projects for developing countries: results of a Delphi survey in Iran. Journal of Facilities Management.*
4. *Anago, J. C. (2022). How do adoption choices influence public private partnership outcomes? Lessons from Spain and Portugal transport infrastructure. International Journal of Managing Projects in Business.*
5. *Jose Oliveros – Romero, V. P.-C. (2022). Infrastructure development: Reflections on Sierra Leone Infrastructure scheme and the Lungi Bridge Project. Journal of Financial Management of Property and Construction, 127-144.*
6. *Panadès-Estruch, L. (2021). Public-Private Partnerships in transport: a critical assessment of the Caribbean. Public administration and policy: An Asia- Pacific Journal.*
7. *Ajit Kumar Sinha, K. N. (2019). Financing constraints of public-private partnership projects in India. Engineering, Construction and Architectural Manangement, 246-269*
8. *Upinder Sawhney, T. K. (2017). Understanding the Nature of PPPs in Social and Commercial Infrastructure Sector using Qualitative and Quantitative Indicators: Insights from Emerging India. The Emerald Handbook of Public–Private Partnerships in Developing and Emerging Economies, Emerald Publishing Limited, Leeds, 221-245.*
9. *Karnam, N. G. (2016). Are the indian national highway PPPs more efficient than Non -PPPs? An empirical Analysis through Data Envelopment Analysis. Journal of Infrastructural Development.*
10. *PPPIndia.Gov.In. (n.d.). https://www.pppinindia.gov.in/vgf-inprinciple-statewises/Karnataka.*

## WEBSITES

1. *https://www.pppinindia.gov.in/vgf-inprinciple-statewises/Karnataka*
2. *https://data.opencity.in/dataset/691da836-b7f0-452b-8c3f-b978d94bb9ab/resource/63b4c5fa-5912-4a0e-aa6d-ac23d10d2e2e/download/krdcl-nelamangala-devanahalli.pdf*