



PRAGATI (Pro Active Governance And Timely Implementation) And Infrastructure Led Growth In India: An Empirical Assessment

¹ Dr Yamuna Kilaru, ² Dr G. Steeven Raju,

¹ Lecturer in Economics, ² Lecturer in Economics,

¹ ASD Government Degree College for Women(A), ² Ideal College of Arts and Sciences (A)
Kakinada, India

Abstract: Over the last decade, India has undertaken an unprecedented expansion in public infrastructure investment, recognising its central role in boosting gross domestic product (GDP), generating employment, and producing strong multiplier effects across the economy. Central government capital expenditure on infrastructure increased more than fivefold—from approximately ₹2 trillion in 2014–15 to ₹11.1 trillion in 2024–25. This article examines the institutional innovation of PRAGATI (Pro Active Governance and Timely Implementation) as a governance mechanism that enhances the efficiency, timeliness, and economic impact of large scale infrastructure spending. Drawing on official Government of India data, PRAGATI review outcomes, and sectoral evidence from transport, energy, and urban infrastructure, the paper empirically analyses the relationship between infrastructure capital expenditure, project execution efficiency, GDP growth, and employment creation. The findings suggest that PRAGATI, complemented by the PM Gati Shakti National Master Plan, has significantly reduced coordination failures, mitigated cost and time overruns, and strengthened the growth multiplier of public investment.

Index Terms - PRAGATI, infrastructure investment, capital expenditure, GDP growth, employment, governance, PM Gati Shakti.

1. Introduction

Infrastructure has long been recognised as a foundational driver of economic growth, productivity enhancement, and structural transformation. In emerging economies such as India, infrastructure gaps constrain logistics efficiency, industrial competitiveness, and inclusive development. Since 2014–15, the Government of India has placed infrastructure investment at the core of its macroeconomic strategy, sharply increasing capital expenditure while simultaneously reforming project governance systems. A key innovation in this context is PRAGATI (Pro Active Governance and Timely Implementation), launched in 2015 to ensure high level monitoring, inter governmental coordination, and time bound resolution of project bottlenecks.

This article analyses PRAGATI as a governance instrument that amplifies the economic returns to infrastructure spending. It situates PRAGATI within the broader framework of infrastructure led growth and empirically assesses how improved implementation efficiency enhances GDP and employment outcomes.

2. Infrastructure Investment, Growth and Employment: Review of Literature

Economic theory emphasises infrastructure as a quasi public good with high spillover effects (Aschauer, 1989). Endogenous growth models highlight how infrastructure raises the marginal productivity of private capital and labour. Empirical studies for developing economies show infrastructure multipliers ranging from 1.5 to over 2.5, particularly during periods of slack demand.

For India, recent studies indicate that public capital expenditure has a higher output multiplier than revenue expenditure, especially when directed toward transport, energy, and digital infrastructure. However, literature also underscores that inefficiencies, coordination failures, and project delays can substantially erode these gains, leading to cost overruns and delayed economic benefits. Governance mechanisms such as PRAGATI address this implementation gap.

3. Institutional Framework: PRAGATI and PM Gati Shakti

PRAGATI is a digital, real time monitoring platform that integrates project level data from central ministries, state governments, and implementing agencies. Chaired personally by the Prime Minister on a monthly basis, PRAGATI meetings focus on large, delayed, or strategically important projects. Bottlenecks related to land acquisition, environmental clearances, forest permissions, and inter state coordination are resolved through direct, time bound directives.

By December 2025, PRAGATI had reviewed and facilitated the acceleration of projects with a cumulative investment exceeding ₹85 trillion. The mechanism directly inspired the PM Gati Shakti National Master Plan (launched in 2021), which extends PRAGATI's coordination principles upstream into the planning stage using a GIS based, multi sectoral data platform.

4. Data and Methodology

4.1 Data Sources

The empirical analysis draws on:

- Central government capital expenditure data (2014–15 to 2024–25).
- Sectoral infrastructure investment data (transport, energy, urban infrastructure).
- PRAGATI review statistics on project values, delays, and resolutions.
- National accounts data on GDP growth and employment trends.

4.2 Methodological Approach

The study employs a descriptive and correlational approach, supplemented by multiplier based analysis. Trends in infrastructure capital expenditure are compared with GDP growth, employment elasticity, and project execution indicators (time and cost overruns).

5. Empirical Evidence

5.1 Growth in Infrastructure Capital Expenditure

Table 1: Central Government Infrastructure Capital Expenditure (₹ Trillion)

Year	Capex (₹ Trillion)	Annual Growth (%)
2014–15	2.0	—
2016–17	2.5	12.0
2018–19	3.4	16.5
2020–21	4.4	29.0
2022–23	7.4	35.4
2024–25	11.1	38.0

The data show a sustained acceleration in infrastructure spending, with an average annual growth rate exceeding 30 per cent in the post 2020 period.

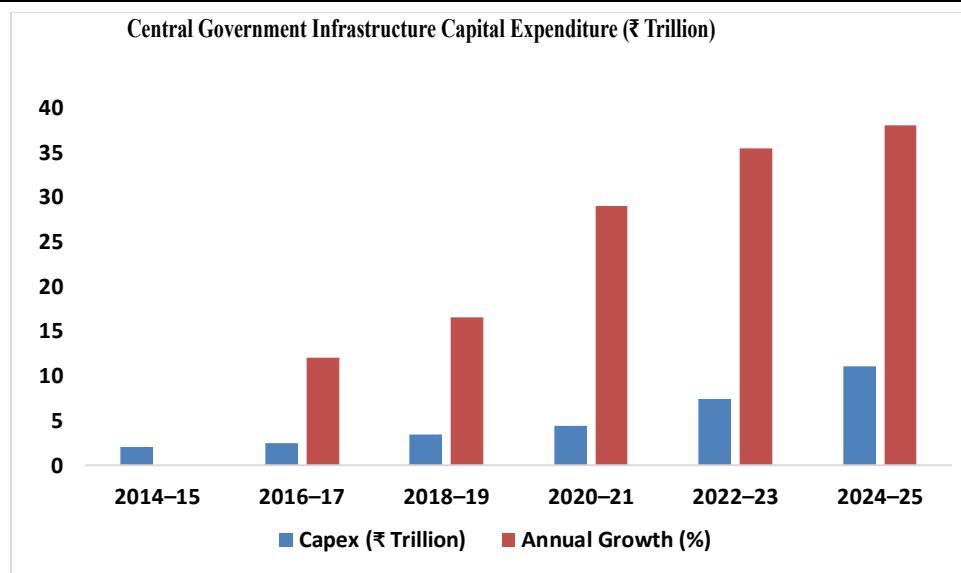


Figure 1. Showing Infrastructure & Capital Expenditure Spending

Table 2. Time Series (CapEx 2020-21 to 2024-25)

From publicly available Budget data and analytical reports, this table shows *actual and budgeted capital expenditure*:

Fiscal Year	Capital Expenditure (₹ crore)	CapEx as % of GDP
2020-21 (A)	4,26,317	2.1%
2021-22 (A)	5,92,874	2.5%
2022-23 (A)	7,40,025	2.7%
2023-24 (RE)	9,50,246	3.2%
2024-25 (BE)	11,11,111	3.4%

Data sourced from Budget tables and summary analyses of Finance Ministry figures.

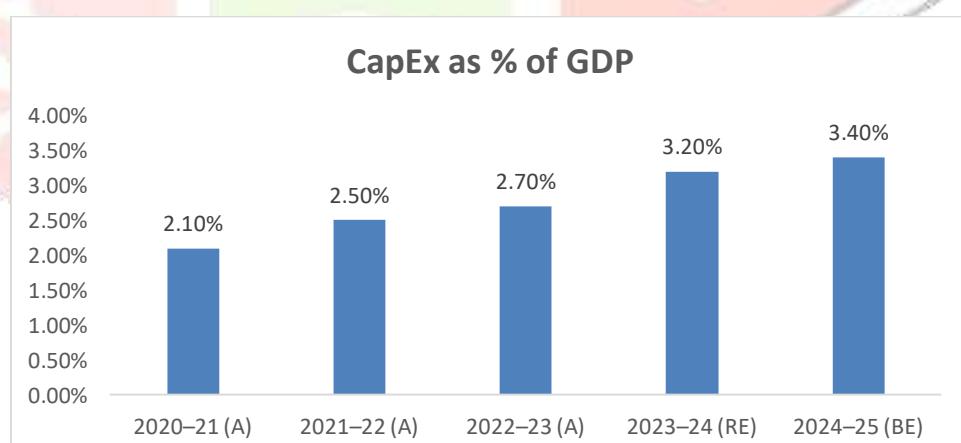


Figure 2 Showing Trend comparison of infrastructure capex growth and real GDP growth

Capital expenditure (CAPEX) plays a crucial role in contributing to national investment and enhancing the stock of physical assets within the economy. It leads to the creation of long term assets, which not only generate revenue for many years but also improve the overall operational efficiency of economic activities. CAPEX is fundamental to expanding production capacity, thereby serving as a catalyst for accelerated economic growth. This growth, in turn, supports job creation and enhances labour productivity. In 2024-25, CAPEX was ₹10.52 trillion, surpassing revised estimates.

Notably, the quality of expenditure, measured as the ratio of capital expenditure to revenue expenditure, has remained higher than 0.27 for the past three years, almost double the pre COVID average. Union government CAPEX was up 8.2% in July-November 2024 and is expected to pick up further pace. From the angle of aggregate demand in the economy, Real Private Final Consumption Expenditure (PFCE) numbers have been impressive. PFCE is the total value of goods and services purchased by resident households and non-profit

institutions serving households, adjusted for inflation to show the actual volume of consumption rather than just price changes. On the same lines, Government Final Consumption Expenditure (GFCE), which depicts the government's spending on goods and services used to directly satisfy the collective needs of its population has bounced back.

PFCE has reported 7.0% growth rate during Q1 of FY 2025 26 as compared to the 8.3% growth rate in the prior corresponding period, driven by a rebound in rural demand.

GFCE registering 9.7% growth rate in nominal terms during Q1 of FY 2025 26, over the growth rate of 4.0% in Q1 of FY 2024 25. Rebounding rural demand augurs well for consumption. Investment activity is expected to pick up, supported by higher public capex and improving business expectations.

5.2 Infrastructure Spending and GDP Growth

Trend comparison of infrastructure capex growth and real GDP growth demonstrates a strong positive association, particularly during recovery phases when public investment crowds in private investment.

PM Gati Shakti National Master Plan (NMP)

It is an approach for growth accelerating trustworthy infrastructure through synchronized, holistic, integrated, and comprehensive planning based on knowledge, technology and innovation. The approach is driven by 7 engines Railways, Roads, Ports, Waterways, Airports, Mass Transport, and Logistics Infrastructure.



5.3 Employment Effects

Infrastructure investment exhibits high employment intensity, particularly in construction, manufacturing of capital goods, logistics, and ancillary services. Estimates suggest that every ₹1 trillion of infrastructure spending generates approximately 1.2–1.5 million direct and indirect jobs.

5.4 Role of PRAGATI in Reducing Delays

Evidence from PRAGATI reviews indicates:

- Significant reduction in inter ministerial and inter state coordination delays.
- Faster resolution of land and environmental clearances.
- Avoidance of cost overruns through early identification of bottlenecks.

Projects such as major gas pipelines, metro rail systems, national highways, and energy corridors demonstrate measurable time savings attributable to PRAGATI interventions.

6. Discussion: Multiplier Effects and Governance Efficiency

The economic impact of infrastructure investment depends not only on the scale of spending but also on the speed and quality of execution. PRAGATI enhances the effective multiplier of public capital expenditure by:

1. Compressing project timelines, enabling earlier realisation of economic benefits.
2. Reducing uncertainty for private investors, thereby crowding in private capital.

3. Improving asset complementarity across transport, energy, and digital networks through coordination with PM Gati Shakti.

This governance led efficiency gain explains why recent infrastructure spending has had a disproportionately strong impact on GDP growth and employment.

7. Policy Implications

- High level, technology enabled monitoring mechanisms such as PRAGATI are critical complements to large fiscal outlays.
- Integrating planning (PM Gati Shakti) with execution monitoring (PRAGATI) maximises economic returns.
- Other developing economies can adapt the PRAGATI model to address coordination failures in infrastructure delivery.

8. Conclusion

India's experience demonstrates that infrastructure led growth is most effective when supported by robust governance frameworks. PRAGATI has emerged as a transformative institutional mechanism that ensures timely implementation, minimises delays, and enhances the growth and employment multipliers of public investment. Combined with record levels of infrastructure capital expenditure and the integrated planning framework of PM Gati Shakti, PRAGATI positions India as a global exemplar in data driven, coordinated infrastructure governance.

References

1. Aschauer, D. A. (1989). Is public expenditure productive? *Journal of Monetary Economics*, 23(2), 177–200.
2. Government of India. (Various years). *Union Budget Documents*. Ministry of Finance.
3. Government of India. (2021). *PM Gati Shakti National Master Plan*. New Delhi.
4. Government of India. (2015–2025). *PRAGATI Review Reports*. New Delhi.