



The Role of Road Transport in the Indian Economy From 2015 to 2025

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Abstract:

Road transport plays a decisive role in India's economic development by acting as the backbone of connectivity for agriculture, industry, trade, and services. This study examines the contribution of road transport to the Indian economy during the period 2015–2025, a decade marked by large-scale infrastructure expansion and major policy reforms. Using secondary data from government reports, World Bank publications, and official statistics, the paper analyses the impact of road transport on GDP growth, employment generation, logistics efficiency, and sectoral development. Government initiatives such as PRAGATI, PM GatiShakti, Bharatmala Pariyojana, and the National Logistics Policy have significantly improved highway and expressway infrastructure, reduced travel time, and enhanced inter-regional connectivity. Major expressway projects like the Delhi–Mumbai Expressway, Mumbai–Nagpur Samruddhi Mahamarg, and Purvanchal Expressway illustrate the shift towards high-capacity, access-controlled road networks. The study finds that road transport contributes nearly 3.5–4.0 percent to India's GDP and carries the majority of passenger and freight traffic, thereby lowering transaction costs and supporting productivity across sectors. Improved road infrastructure has strengthened agricultural marketing, facilitated industrial supply chains, and generated substantial employment. Overall, the paper highlights road transport as a critical driver of inclusive and sustainable economic growth in India.

Keywords: Road Transport, Indian Economy, Infrastructure, Economic Growth, Employment.

Introduction:

Over the last ten years, India has made significant progress in building and upgrading its infrastructure through a coordinated and comprehensive strategy. This development has been supported by major policy reforms and large-scale national programmes that focus on long-term growth. Improved infrastructure has strengthened physical connectivity across the country, increased economic efficiency, lowered transportation and logistics costs, and improved the delivery of public services. Government initiatives such as PRAGATI, PM GatiShakti, the National Logistics Policy, Bharatmala, Sagarmala, and the UDAN scheme have played an important role in creating an integrated and

competitive infrastructure network. The expansion of highways and expressways, large-scale railway electrification, development of new airports, introduction of ropeway projects in difficult terrains, and adoption of digital planning and monitoring platforms highlight this transformation. Overall, India's infrastructure development reflects a strong commitment to inclusive, sustainable, and balanced growth, supporting the long-term vision of achieving a developed nation status by 2047.

PRAGATI (Pro-Active Governance and Timely Implementation) is a flagship governance initiative introduced by the Government of India on 25 March 2015 to improve the execution of public programmes and large infrastructure

projects through technology-driven monitoring. The platform facilitates direct interaction between the Prime Minister, senior officials of the Union Government, and Chief Secretaries of States through regular video conferences, supported by digital dashboards, real-time data, and geo-spatial tools. As of April 2025, PRAGATI has held 46 review meetings, during which hundreds of strategically important projects have been assessed. In the latest meeting held on 30 April 2025, eight major infrastructure projects with an investment exceeding ₹90,000 crore were reviewed. Overall, more than 360 projects have come under the purview of PRAGATI since its inception. The core aim of this initiative is to promote anticipatory and accountable governance by accelerating project implementation, resolving inter-ministerial and Centre–State coordination challenges, and simultaneously addressing public grievances. By integrating decision-making, monitoring, and grievance redressal on a single platform, PRAGATI has emerged as an effective mechanism for ensuring timely completion of infrastructure projects and improved delivery of government services. The National Logistics Policy (NLP), introduced on 17 September 2022, aims to strengthen India's economic growth by developing a well-coordinated, efficient, and affordable logistics system. The main objective of the policy is to reduce logistics costs, improve service efficiency, and use digital data for better planning and decision-making. At present, logistics costs in India are estimated at around 13–14 percent of GDP, which is higher than in many developed countries. By lowering these costs, the policy seeks to make Indian goods more competitive in both domestic and global markets. Reduced logistics expenses also enhance operational efficiency across various sectors, encouraging greater value addition, productivity, and business expansion. India has shown steady improvement in logistics performance in recent

years. According to the World Bank's Logistics Performance Index (LPI), India's rank improved from 54th position out of 160 countries in 2014 to 38th position out of 139 countries in 2023. The World Bank has recognised India's progress in its 2023 LPI report, highlighting investments in physical infrastructure such as roads, ports, and railways, along with improvements in digital systems for supply chain management. These developments have helped strengthen connectivity between ports and inland economic centres, contributing to a more efficient logistics ecosystem.

Objectives of the Study:

1. To analyze the importance of road transport in India's economic development.
2. To examine the role of road transport in trade, industry, and agriculture.
3. To study employment generation through the road transport sector.

Research Methodology:

The study is based on secondary data. Data sources include government reports, Ministry of Road Transport and Highways (MoRTH), World Bank publications, journals, books, and research articles.

Expansion of National Highways and Expressways:

Delhi–Mumbai Expressway:

The Delhi–Mumbai Expressway is a major greenfield, access-controlled expressway that is currently under construction and partially operational. It has a total length of about 1,350 km and is designed as an eight-lane highway, with provision for expansion up to 12 lanes in the future. The expressway connects New Delhi, the national capital, with Mumbai, the financial capital of India, and reduces the travel time

between the two cities from nearly 24 hours to about 12 hours. The expressway links the Sohna Elevated Corridor near Delhi to the Jawaharlal Nehru Port (JNPT) near Mumbai, passing through important cities such as Dausa, Kota, Ratlam, Vadodara, and Surat. It traverses the Union Territory of Delhi (12 km) and the states of Haryana (129 km), Rajasthan (373 km), Madhya Pradesh (244 km), Gujarat (426 km), and Maharashtra (171 km).

Mumbai–Nagpur Expressway (Samruddhi Mahamarg):

The Mumbai–Nagpur Expressway, also known as the Samruddhi Mahamarg (officially Hindu Hrudaysamrat Balasaheb Thackeray Maharashtra Samruddhi Mahamarg or ME-2), is a fully operational, access-controlled expressway in Maharashtra. It is 701 km long and has six lanes, which can be expanded to eight lanes in the future. The expressway connects Mumbai, the financial capital of Maharashtra in the western part of the state, with Nagpur, the winter capital located in the eastern Vidarbha region. By reducing the travel time between Mumbai and Nagpur to about 8 hours, the total project cost, including the land acquisition cost, is around ₹55,000 crore. It is among the country's longest greenfield road projects.

Eastern and Western Peripheral Expressway:

The two projects of Peripheral Expressways around Delhi, comprising 135 km Eastern Peripheral Expressway (EPE) was inaugurated by Prime Minister Shri Narendra Modi on May 27, 2018. The EPE was constructed by NHAI. Further, Kundli-Manesar Section of the Kundli-Manesar-Palwal (KMP) Western Peripheral Expressway inaugurated on November 19, 2018.

Purvanchal Expressway:

The Purvanchal Expressway is a major 340.8 km, 6-lane expressway in Uttar Pradesh, India, connecting the state capital Lucknow to

Ghazipur near the Bihar border, built by UPEIDA and inaugurated in November 2021 for faster travel and economic development, featuring an emergency airstrip for IAF jets, linking eastern UP with Delhi via other expressways, and designed for high-speed traffic with strict prohibitions on two/three-wheelers.

Contribution of Road Transport to the Indian Economy:

Road transport plays a crucial role in India's economic growth by directly contributing to GDP, employment, trade, and regional development. It also supports agriculture, industry, and services by providing essential physical connectivity across the country. Because of its wide reach and flexibility, road transport acts as the backbone of India's transport system and overall economic activity.

Contribution in GDP of India:

Road transport plays a vital role in India's economy and makes a significant contribution to Gross Domestic Product (GDP). The transport sector as a whole contributes around 4.5–5.0% to India's GDP, and road transport accounts for nearly 65–70% of this contribution, making it the dominant mode of transport in the country. In value terms, road transport alone contributes about 3.5–4.0% of GDP. India has one of the largest road networks in the world, with a total length of over 6.6 million km, facilitating the movement of nearly 87% of passenger traffic and around 60–65% of freight traffic. Efficient road connectivity reduces transportation costs, supports trade, and improves productivity across agriculture, industry, and services. According to official estimates, road freight transport contributes more than ₹10–12 lakh crore annually to economic activity through logistics, vehicle manufacturing, fuel consumption, and allied services. Road transport is also a major source of employment, directly and indirectly supporting

over 22 million jobs, including drivers, mechanics, transport operators, and logistics workers. Investments in highways and expressways under programmes such as Bharatmala Pariyojana have further strengthened GDP contribution by stimulating construction activity and regional development.

Employment and livelihoods:

The road transport sector is also a major source of employment. It provides direct and indirect jobs in freight transport, passenger services, vehicle repair and maintenance, logistics, and roadside businesses. Large infrastructure programmes such as Bharatmala generate substantial employment during construction and operation phases, creating millions of person-days of work.

Role in Agriculture Development:

Road transport facilitates the movement of agricultural produce from farms to local mandis, wholesale markets, agro-processing units, and export hubs. Better road connectivity expands market reach, reduces post-harvest losses, and enhances farmers' bargaining power by enabling access to competitive markets. Empirical studies show that regions with improved rural roads experience higher farm-gate prices and improved agricultural incomes. Efficient road transport connects farms with ports, airports, and logistics hubs, enabling the smooth movement of export-oriented agricultural products. Improved last-mile connectivity is essential for meeting quality standards, reducing transit time, and enhancing the global competitiveness of agricultural exports.

Role in Industrial Development:

Road transport plays a pivotal role in India's industrial development by providing last-mile connectivity, reducing transaction costs, and integrating production centers with markets. Roads carry nearly 65% of the country's freight

traffic and about 90% of passenger movement, making them the backbone of industrial logistics. Efficient road networks enable timely movement of raw materials to factories and finished goods to markets, which is especially crucial for time-sensitive and high-value industrial products. Industrial competitiveness is closely linked to logistics efficiency. In India, logistics costs are estimated at 13–14% of GDP, significantly higher than the global benchmark of 8–10%. Improved highways, expressways, and industrial corridors help reduce transit time and fuel costs, directly enhancing industrial productivity.

Conclusion:

The analysis clearly demonstrates that road transport has emerged as a central pillar of India's economic transformation between 2015 and 2025. Expansion of national highways and expressways, supported by strong policy frameworks and governance reforms, has significantly improved connectivity, reduced logistics costs, and enhanced economic efficiency. Road transport's dominant share in passenger and freight movement underscores its importance in linking rural and urban markets, production centres, ports, and consumption hubs. The sector's contribution of nearly four percent to GDP and its role in supporting over 22 million livelihoods highlight its macroeconomic and social significance. Improved road infrastructure has positively impacted agriculture by reducing post-harvest losses, improving market access, and increasing farmers' incomes. Similarly, industrial development has benefited through faster movement of raw materials and finished goods, leading to greater competitiveness and productivity. Initiatives such as PRAGATI and the National Logistics Policy have strengthened project implementation, coordination, and digital integration, further improving outcomes. However, sustained investment, maintenance, and

environmentally sustainable practices are essential to maximize long-term benefits. In conclusion, road transport is not merely a mode of mobility but a strategic instrument of economic development, regional balance, and inclusive growth in India's journey towards becoming a developed nation by 2047.

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