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# INFRASTRUCTURE DEVELOPMENT IN INDIA: AN OVERVIEW

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## ABSTRACT

*Infrastructure is the backbone of economic progress of a Country. It implies basic support system that facilitates economic development of a country. The extent and quality of infrastructure determines the level of cost competitiveness, Comparative advantage of a country. Infrastructure generates positive externalities and helps in economic transformation of a Country. Infrastructure services such as roads, railways, ports, airports, and telecommunications are often monopolistic in nature. They usually involve higher costs and long run payback periods and investments are typically bulky and lumpy. Infrastructure is the base for economic development, boosting productivity, attracting investment, and generating employment, enhancing connectivity, trade and the capacity to increase consumption providing a boost to GDP of a country. In almost all countries, Infrastructure services have been provided by public sectors. In India, if infrastructure bottleneck is removed, it is estimated that India's GDP Growth could be higher by two percentage. In India, the major shift on Infrastructure occurred during 1990's when along with economic reforms, the sector was opened for private and foreign investment under perspective planning. Over the years, India has made significant progress in infrastructure development. The Contribution of public and private sectors in total infrastructure investment in India has increased many folds. At present government is prioritizing infrastructure development through initiatives like PM Gati-Shakti National master Plan and Bharatmala scheme with the objective of integrated Planning and Coordinated execution of development projects across different sectors of the economy. The strategies for infrastructure development need to be consider a wide range of options and tradeoffs. There is a need for coordinated and comprehensive strategy development of infrastructure for economic development of India.*

*Keywords: Cost Competitiveness, comparative advantage, externalities, Bulky and Lumpy Investment, Tradeoffs, GDP, Economic prosperity, Bharatmala scheme.*

## INTRODUCTION

Over the past decade, the total infrastructure Investment in India has significantly increased with public and private sectors contributions shaping the growth trajectory. Investing in high quality infrastructure is crucial for accelerating economic growth and sustaining it in the long run, Empirical Growth evidence states that infrastructure has a salutary effect on the productivity and efficiency of Indian manufacturing firms. Further it plays a significant role in poverty Reduction and promotes both rural and agricultural development. Since 2015, Infrastructure continues to be central to India's growth strategy, with public capital expenditure following a sustained upward trajectory and gaining further momentum in recent years. Large-scale investments across roads, railways, ports, power, aviation and digital infrastructure have strengthened connectivity, expanded capacity and improved logistics efficiency, generating strong multiplier effects for growth and productivity. This phase has been characterized not only by rapid asset creation but also by a shift towards integrated, system-level development. Reforms in infrastructure financing spanning project finance regulation, Public-Private Partnership (PPP) frameworks, asset monetization and capital market instruments are crowding-in private investment. At the same time, India's infrastructure base is broadening to include digital public infrastructure (DPI), clean energy, resilient water systems and emerging sectors. Sustaining investment momentum while aligning infrastructure with efficiency, sustainability and competitiveness will continue to remain key towards supporting India's medium-term growth and its long-term vision of Viksit Bharat up to 2047.

## OBJECTIVE AND METHODOLOGY

The objective of the paper is to overview the infrastructure development in India using secondary resources such as Economic Survey, Government Reports and Books etc.

## INFRASTRUCTURE AS THE ENGINE OF GROWTH

The decisive role of infrastructure investment in India's growth strategy has been a defining feature in recent years. Since FY20, Union Budget priorities reflect a sustained shift toward large-scale public capital expenditure, supported by integrated planning, and the systemic modernization of logistics and connectivity networks. The period between 2020 to 2025 is marked by the accelerated expansion of traditional infrastructure, such as highways, railways, ports, and energy systems, as well as by the expansion of digital public infrastructure (DPI), data systems, and assets aligned with renewable energy. Between FY19 and FY22, India's capital expenditure increased by 92 percent and 89 percent from FY22 to FY26, recognizing the strong multiplier effects that infrastructure generates on the economy. Public expenditure on infrastructure has a high multiplier effect, estimated by studies to be around 2.5 to 3.5 times the GDP over the medium term. This means, for every rupee spent by

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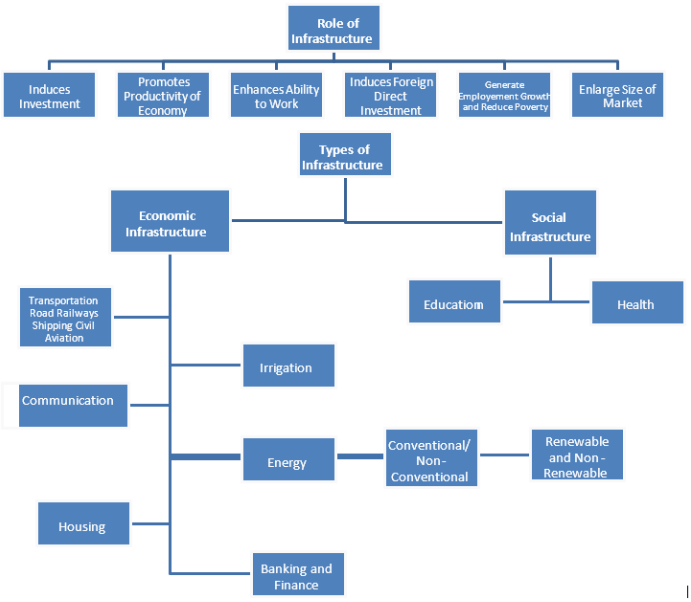
the government in creating infrastructure, GDP gains worth ₹2.5-₹3.5 accrue. The scale and consistency of this investment momentum have positioned infrastructure as a cornerstone of India's growth engine.

**Role of Infrastructure:** Public Infrastructure is the backbone of any economy enhancing connectivity, trade and overall quality of life. Infrastructure facilitates economic development, generates employment and boost to GDP of an economy.




**Economic infrastructure**: serves as a driving force for production activity in the economy, accelerates the pace of production, facilitates the movement of raw materials to Industries and finished Goods to the market for Consumption. Ensure the smooth functioning of economy by facilitating and channelizing saving and investment, providing credits to firms and enterprises.

**Social infrastructure:** social infrastructure serves as a driving force for social development of a Country. It facilitates education and provides skilled labour force for economic growth. Underdeveloped or Developing Countries lacks in basic infrastructure facilities like roads and highways, results in high cost of transportation of Goods and low manufacturing output and low growth. India's social sector expenditure as a percentage of GDP is shown in the following Table 1:

**Table1: Trends in social sector Expenditure [Centre and state governments) as a percentage of GDP**

| Item | 2013-14 | 2023-24 |
|---|---|---|
| Expenditure on social services of which | 8.7 % | 7.8 % |
| (i) Education | 3.2 % | 2.7 % |
| (ii) Health | 1.15 % | 1.9 % |
| (iii) Others | 1.5 % | 3.1 % |

The expenditure on social services (Education, Health and Other services) by Centre and states combined as a proportion of GDP slightly decreased from 8.7% in 2013-14 to 7.8% in 2023-24. For education, it decreases from 3.2% to 2.7% in the same period while that health and others it increased from 1.15% in 2013-14 to 1.9% in 2023-24 and 1.5% to 3.1% in case of others in the same period.

**SIGNIFICANCE OF INFRASTRUCTURE:**

Infrastructure raises the productivity of human and physical capital, reduces poverty and generates employments, enhance manufacturing Growth, promotes regional equality, facilitates private investment and create a better investment climate in the Country.

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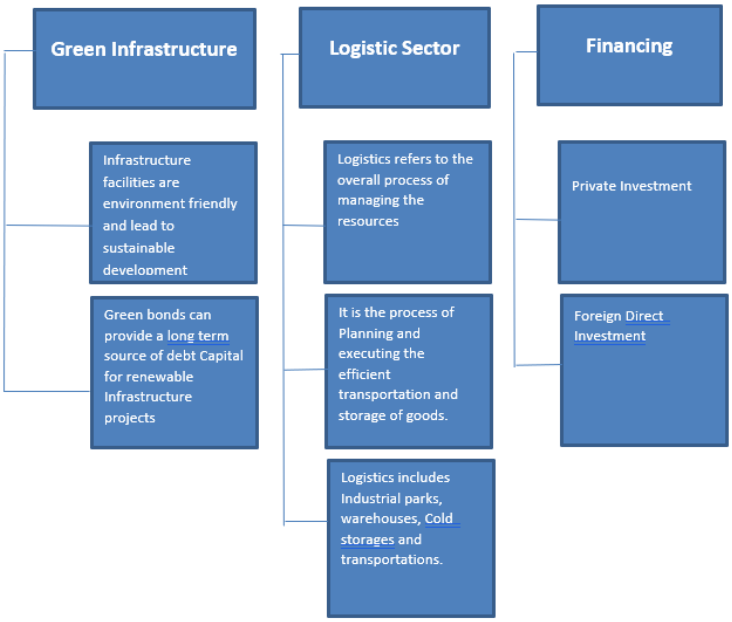
**NEW HORIZONS OF INFRASTRUCTURE**




## STRATEGIES FOR INFRASTRUCTURE ENHANCEMENT

Since Independence, India has evolved through different phases. Transitioning from a state-led centrally planned model that Emphasized private sector participation, integrated Planning and Technology driven, multi-model connectivity.

**KEY PHASES AND STRASTEGIES:**

**1) Post-Independence Era (1947-1990):** state-led planning and focus on Heavy Industries. Centralized Planning: India adopted soviet inspired model for five-year planning with the planning commission overseeing national development. The initial focus was on large scale projects such as Dams and irrigation systems, and power plants to ensure food security and energy generation. The government established public sector enterprises in strategic and heavy industries with the objectives of achieving self-reliance, and reducing imports and expansion of the Railway network and establishment of Highways, road and bridges.

**2) Economic Liberalization Era (1991-2001)** Liberalization era emphasis on private investment. The Government encourages private sector investment in Infrastructure to bridge the funding gap by introducing public-private partnership (PPP) model.

**3) Modern Era Technology-Driven Integrated Multi-Model** The model focus on sustainable urban development, improving basic urban services and integrated technology in city management, enhancing regional air connectivity, incorporate climate resilience and sustainability with Net-zero carbon emissions in railways and increased use of renewable energy.

## INFRASTRUCTURE DEVELOPMENT IN INDIA

Infrastructure is essential for rapid, sustainable and inclusive growth. Basic infrastructure facilities provide the base for economic Growth. Presently, Government focus on reforms in the area of Physical, digital and regulatory infrastructure. In order to increase the private sector participation in creation of new investment, India took initiative like public-private partnership (PPP), National Infrastructure pipeline (NIP) and National monetization pipeline (NMP). In addition to this, as a part of the structural reforms with the objective to enhance efficiencies and Cost Competitiveness, Gati-Shakti and National Logistic policy were also introduced. Reforms related to infrastructure investment ensures economic growth and economic efficiency.

**1 National Infrastructure Pipeline (NIP):** Government has launched National infrastructure pipeline (NIP) for 2020-25 to facilitate infrastructure projects. NIP boost the economy, generate better employment opportunities and derive the competitiveness of the Indian economy. Public private partnership in infrastructure is the main source of investment in the sector. The NIP launched with the projected infrastructure investment of Rs. 111 Lakh crore during the period 2020-2025 to provide world class infrastructure across the country and improve the quality of life of peoples. It also envisages to improve

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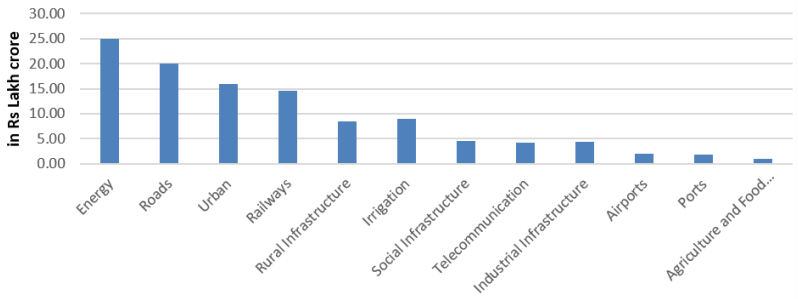
project preparation and attract investment in domestic and foreign markets. Figure 1 shows the industry wise breakup of pipeline.

The sector like Energy, water supply, Roads, urban infrastructure, Railways have a major share in NIP. Presently, the government provided investment for infrastructure development through the enhancement of capital expenditure. The steady increase in capital expenditure has support economic growth as capital assets, boost economic efficiency and potential Growth. Infrastructure investment witnessed a multifold increase after 2015 with more than five times increase in capital expenditure.

**Figure 1: Industry wise breakup of pipeline**




Soruce: Survey calculations based on data from Report of Task Force on National Infrastructure Pipeline for 2019-2025

**2 NATIONAL MONETIZATION PIPELINE:**

NMP was developed by NITI Aayog to provide a comprehensive view to investors and create assets through monetization and boost private investment in brownfield assets. NMP is an initiative to monetize public assets to fund new infrastructure by partnering with the private sector.

**3 NATIONAL LOGISTIC POLICY:**

NLP is an initiative to create a cost-effective, resilient and technology-driven logistic ecosystem by

2030. Its main aim is to reduce logistics costs in India below 10 percent of the GDP and Improve India's rank in the logistics performance index globally, presently, logistic cost in India have been in the range of 14-18 percent of GDP.

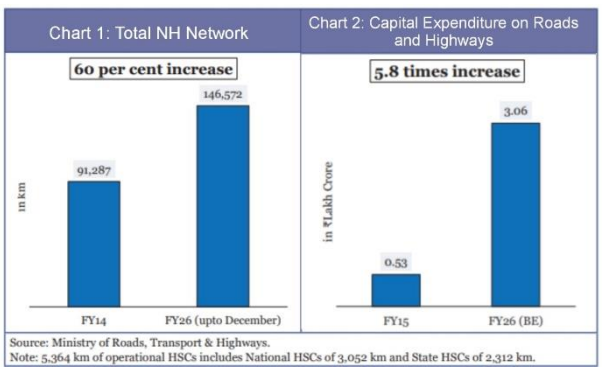
**4 PM GATI-SHAKTI MASTER PLAN:**

India needs infrastructure development to derive economic growth, improve quality of life and create employment. Robust infrastructure is essential for increasing productivity, making goods more competitive and providing better access to education, healthcare and employment opportunities. The country is focusing on improving physical, digital and social infrastructure through initiative like the PM Gati-Shakti National masterplan to achieve the Goal of inclusive and sustainable economic development. The plan is designed to integrated planning and coordinated execution of infrastructure projects. The plan aims to provide seamless and efficient connectivity for the movement of people, goods and services across various modes of transport, thereby enhancing connectivity and reducing travel time.

## PHYSICAL CONNECTIVITY INFRASTRUCTURE:

**ROADWAYS & HIGHWAYS**

The roads and highways sector continue to be a primary driver of India's infrastructure, transitioning from rapid capacity expansion to a focus on logistic efficiency and technological integration. Over the past decade, sustained investment and policy reforms have significantly expanded the National Highway (NH) network and improved construction pace, laying a stronger foundation for multimodal connectivity and economic integration. The key initiatives and reforms shaping the national highways programme are outlined in the following charts.




Source: Ministry of Roads, Transport & Highways.
Note: 5,364 km of operational HSCs includes National HSCs of 3,052 km and State HSCs of 2,312 km.

Over the last ten years, there has been significant progress in the development of national highways, increasing by 1.6 times from 2014 to 2024. The Bharatmala Pariyojana has significantly expanded the national highway network, increasing the length of high-speed corridors by 12 times and 4-lane roads by 2.6

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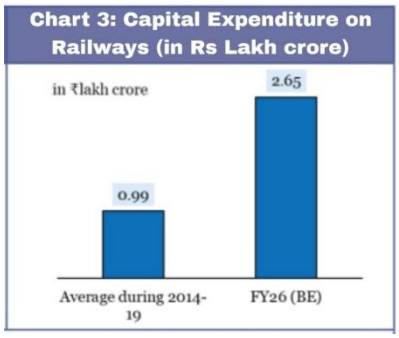
times between 2014 and 2024. Further, the efficiency of highway construction has improved due to the systematic push through the corridor-based National Highway development approach. The average pace of NH construction increased by ~3 times from 11.7 km per day in FY14 to ~34 km per day by FY24. The remarkable improvement of the NH network has brought about substantial advancements in logistics efficiency. The investment in roads has increased more than 6 times from 2013-14 to 2024-25.

## RAILWAYS

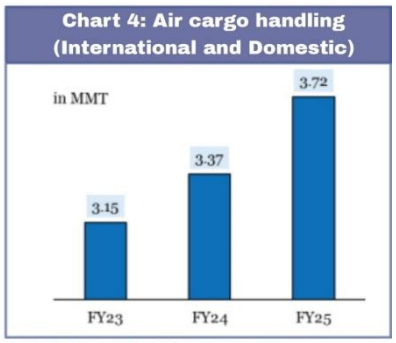
Indian Railways continue to play a pivotal role in India's infrastructure landscape by expanding network capacity, modernizing assets, and strengthening multimodal connectivity. Capital expenditure on railway infrastructure, focus on new lines, doubling and multi-tracking, rolling stock augmentation, signaling, and safety-related works. Chart 3: depicts the capital expenditure on Indian Railways from 2014-2024.




Indian Railways is undergoing a transformation, driven by sustained capital investment, rapid network expansion, near-universal electrification and a corridor-based approach to capacity creation.

### CIVIL AVIATION

India has emerged as the world's third-largest domestic aviation market. The number of airports increased from 74 in 2014 to 164 in 2025. Number of aircrafts have increased from around 400 in 2014 to 732 in 2024. Chart 4 showing the capital expenditure on air cargo handling.

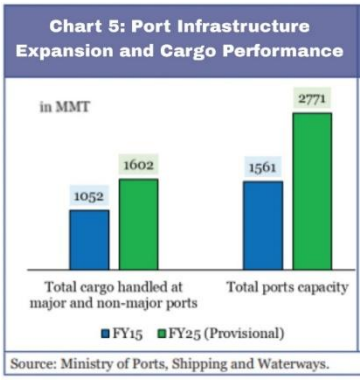


Source: Ministry of Civil Aviation.

India's civil aviation sector is on a sustained growth trajectory, supported by a conducive policy environment, rising demand and steady infrastructure expansion. While the sector remains sensitive to global economic cycles and the need for continuous capacity upgradation, the current passenger volumes represent only a fraction of India's potential. Further, India currently operates approximately 0.11 airports per million people.

### PORTS AND SHIPPING

India's maritime sector has undergone significant modernization and is emerging as an essential pillar of logistics competitiveness, industrial growth and global supply chain integration. Under Maritime India Vision 2030 and Maritime Amrit Kaal Vision 2047, substantial progress has been made in upgrading port infrastructure, enhancing regulatory frameworks, improving operational efficiency, and increasing private sector participation. Chart 5 depicts the expansion of port infrastructure and cargo performance from F.Y. 2015-2025.



Source: Ministry of Ports, Shipping and Waterways.

PPP and captive operators are projected to handle 80 per cent of all cargo at major ports by 2030. A pipeline of 48 PPP projects worth approximately ₹23,000 crore has been identified for the next five years (FY26 to FY31). These projects will further enhance the capacity and efficiency of India's Major Ports.

### INLAND WATER TRANSPORT

Up to November 2025, 32 National Waterways (NWs) are operational, Cargo movement through Inland Water Transport (IWT) has also risen significantly from 18 MMT in 2013-2014 to 146 MMT in 2024-2025, driven by several reforms such as Cargo movement on NW-1 increased by 220 per cent, rising from 5.05 MMT (2014-15) to 16.38 MMT (2024-25).

India aims to increase the Inland Water Transport modal share from 2 per cent to 5 per cent and raise cargo traffic to 200+ MMT by 2030 and 500 MMT by 2047 under the Maritime Amrit Kaal Vision.

## ENERGY SECTOR

### POWER

The power sector continues to expand, with the installed capacity rising by 11.6 per cent year-on-year to 509.74 GW as of November 2025. To improve financial sustainability and operational efficiency of distribution utilities, the Revamped Distribution Sector Scheme was launched in 2021 with an outlay of ₹3.03 lakh crore.

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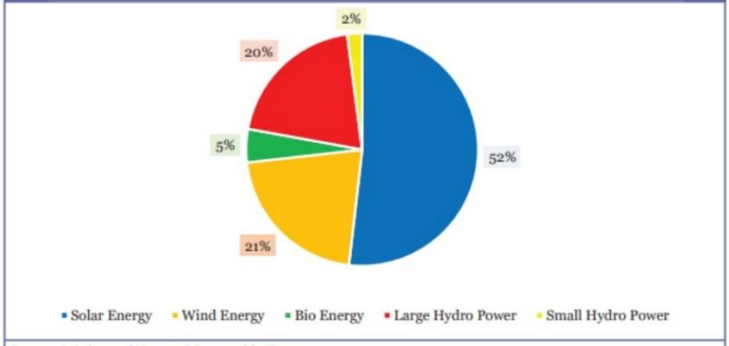
### RENEWABLE ENERGY

India's energy landscape is undergoing a structural transformation, with renewable energy (RE) now constituting around 49.83 per cent of the total installed power generation capacity as of 30 November 2025. The country maintains a dominant global presence, ranking third in overall RE capacity and installed solar capacity and fourth in installed wind capacity. Total RE capacity witnessed a more than threefold increase over the last decade, surging from 76.38 GW in March 2014 to 253.96 GW by November 2025.This substantial growth reflects the effectiveness of national renewable energy policies, large-scale project execution, and strong private sector participation in advancing India's clean energy transition. Chart 6 shows the total installed RE capacity.

To sustain India's renewable energy momentum, challenges such as high capital costs, land acquisition delays, and grid availability need to be addressed through appropriate instruments including innovative financing mechanisms and optimized project execution. Further, large-scale integration of Battery Energy Storage Systems (BESS) and Pumped Storage Hydropower (PSP) can address the inherent variability of renewables, ensure grid stability and peak-load management, and enable reliable, large-scale adoption of renewables to support the transition to a clean, secure, and resilient power system.

**Chart 6: Total Installed RE Capacity: 253.96 GW (Nov'25)**




Source: Ministry of New and Renewable Energy.

## FUTURE-READY DIGITAL INFRASTRUCTURE

### TELECOMMUNICATIONS

India's telecommunications sector expanded rapidly over the last decade, accompanied by a sustained improvement in tele-density from 75.23 per cent to 86.76 percent. Furthermore, internet and broadband subscriptions have also witnessed a multi-fold growth over the last decade, underscoring the transition from basic connectivity to data-intensive digital usage across households and enterprises. Chart 7 presents expansion of telecom access and Chart 8 shows expansion of internet and broadband connectivity.

**Chart 7: Expansion of Telecom Access**

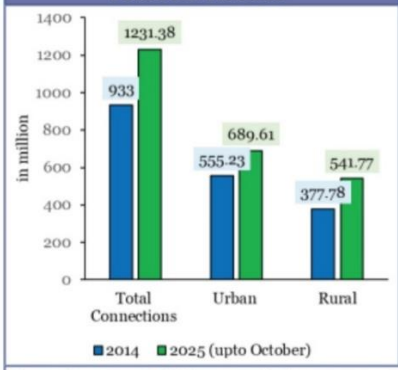
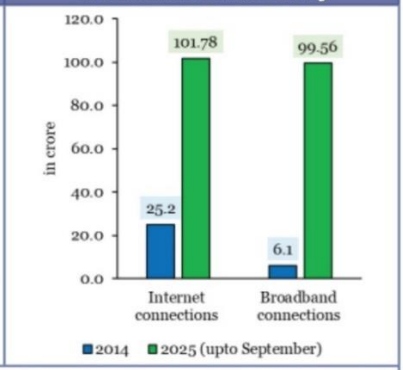



**Chart 8: Expansion of Internet and Broadband Connectivity**




Source: Department of Telecommunications.

Sharp declines in wireless data prices were associated with an exponential rise in average monthly data consumption, highlighting the role of affordability in driving mass digital adoption.

### INFORMATION TECHNOLOGY

As per industry estimates, as of June 2025, India's installed data Centre capacity stood at around 1,280 MW, with about 130 privately operated data Centres and 49 data Centres run by government agencies at the central and state levels. The sector

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remains largely private-led and deregulated, facilitated by policy initiatives under Make in India and Atmanirbhar Bharat to strengthen domestic electronics and semiconductor manufacturing across the data Centre value chain.

**SOCIAL AND EMERGING SECTOR INFRASTRUCTURE**

India's infrastructure development has increasingly transitioned towards a service-delivery–oriented paradigm, wherein physical assets are closely aligned with social outcomes, economic inclusion, and strategic capability building.

**RURAL DRINKING WATER AND SANITATION**

Jal Jeevan Mission (Har Ghar Jal): India has attained a significant milestone under the Jal Jeevan Mission, with over 81 per cent of rural households now having access to clean tap water. Up to December 2025, more than 15.76 crore rural homes have received safe drinking water through household taps, marking a major step towards achieving universal water security in rural India. The Mission, launched in 2019 and supported by an initial central outlay of ₹2,08,652 crore, has enabled States and Union Territories to implement water supply schemes, develop infrastructure, and promote efficient water management practices. In addition, it has strengthened local governance, enhanced community participation, and raised awareness on water conservation, thereby improving health, sanitation, and the overall quality of life in rural communities. To achieve 100 per cent coverage, the Mission has been extended until 2028 with an enhanced allocation of ₹67,000 crore in the Union Budget 2025-26.

**WATER RESOURCES MANAGEMENT SECTOR**

The Namami Gange Programme is a comprehensive river-conservation initiative aimed at rejuvenating the Ganga basin. It focuses on ensuring clean (Nirmal Dhara) and continuous (Aviral Dhara) flow, restoring natural habitats, reviving biodiversity, and promoting sustainable water governance through integrated infrastructure and community participation. The improvement in the river's ecological health is evident from the significant increase in the Gangetic Dolphin population, which increased from approximately 3,500 in 2015 to 6,327 as per the 2021–2023 nationwide assessment.

**TOURISM**

The Government of India has revamped the Swadesh Darshan scheme as Swadesh Darshan 2.0 (SD 2.0), aimed at developing sustainable and responsible tourism destinations. Under this initiative, 53 projects worth ₹2,208.87 crore have been sanctioned. The National Mission on Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive (PRASHAD) has been launched as a Central Sector Scheme to support integrated development of selected pilgrimage and heritage sites. The scheme aims at infrastructure development including upgradation of tourist arrival areas with tourist facilitation centres, approach roads and parking, provision of basic amenities and development of utility infrastructure such as solid waste management, water supply, and sanitation, landscaping, etc. Total of 54 projects have been sanctioned with an estimated cost of ₹1,726.74 crore, since its launch in January 2015.

**SPACE SECTOR**

India currently operates 56 active space assets, including 20 communication satellites, eight navigation satellites, four scientific satellites, 21 earth observation satellites and three technology demonstration missions. The year 2025 has witnessed a significant achievement of India's space program, characterized by indigenous technological breakthroughs and expanded global footprints. India became the fourth nation to achieve autonomous satellite docking via the Space Docking Experiment mission.

**URBAN AFFAIRS AND HOUSING**

- Under the Smart Cities Mission (SCM), total projects are 8,076, amounting to ₹1,64,706 crore, of which 7,401 projects amounting to ₹1,54,351 crore have been completed, as per the data provided by 100 Smart Cities.
- Under Swachh Bharat Mission – Urban 2.0, there has been a 97% increase in the urban waste collection from 2014-15 to 2024-25.
- The waste processing percentage has increased from 18% in 2014-15 to 78% in 2024-25.
- During 2004-14, 13.46 lakh houses were approved under schemes like JNURM & RRY. This increased substantially (9 times) in 2015-2024, when 118.64 lakh houses were approved under PMAY-U.
- During 2004-14, 8.04 lakh houses were built and marking a 11x increase, during 2015-24, 88.32 lakh houses were completed.

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## CHALLENGES AND OPPORTUNITIES –

There has been a quantum jump in infrastructure build-up in the last ten years. However, there are some areas for corrective and collective actions.

**(1) Land Related:** Despite the large build-up of connectivity infrastructure and energy related assets, both the sectors reported the need for corrections in the delay in land acquisition, and land-related clearances. Issues are also raised about slow on-boarding of digital land records. In the case of airport development, Greenfield airport projects are time-intensive due to the need for appropriate site selection, land acquisition and necessary approvals. Addressing challenges related to land in physical infrastructure requires coordinated action at different tiers of the Government.

**(2) Need to improve private participation:** The addition to the stock of infrastructure in the last five years owed predominantly to public sector financing. Private sector participation is not forthcoming to the extent desired. Literature suggests that many factors are impeding private participation in infrastructure building. Some of the important ones are the following:

a. Lumpy capital investment and long payback period and difficulty in mobilizing large equity and debt at affordable cost. Many novel PPP financing models like hybrid annuity model, have been introduced to mitigate this constraint. But private sector participation through these modes has so far been limited to only certain sectors like roads and water.

b. Project structuring issues related to risk estimation, allocation and mitigation

c. Delays in getting clearances and land acquisition

d. Lack of an independent regulator for infrastructural sectors, etc.

e. Contractual issues and inadequate arrangements for dispute resolution and arbitration, leading to prolonged litigation.

The question of climate and environmental sustainability is increasingly becoming important in infrastructure building.

**(3) Lack of aggregation of financial flows into infrastructure:** Infrastructure financing structure is complex with the involvement of multiple stakeholders, including all tiers of the Government, public sector enterprises, commercial banks and non-banking financial companies, special purpose vehicles, capital market players, development financial institutions and foreign investors. The instruments of resource mobilization are many, i.e., credit, bonds, equities, hybrid instruments like mutual funds, foreign capital inflows and instruments like Infrastructure Investment Trusts and Real estate Investment Trusts.

**(4) Lack of total picture of physical progress in infrastructure projects:** The last decade witnessed earnest efforts on the part of the Government to build institutions and structures that monitor progress in infrastructure and disentangle bottlenecks. However, there is no single source that gives an inventory of infrastructure projects in the country, undertaken at different levels so as to evaluate progress sector ally and sub-sector ally vis-à-vis corresponding targets. Overcoming this limitation involves coordination of central, state and the third tiers of the Government working with project authorities, including public sector enterprises and private partners.

## SUGGESTIONS

- There is a need to improve data capture and reporting mechanisms for investments in infrastructure across instruments and sectors as well its composition across different projects on a granular level.
- India needs a continued step-up of infrastructure investment over the next two decades to sustain a high rate of growth.
- Our infrastructure programme supports a variety of PPP models like build operate-transfer (toll and annuity), design-build-finance-operate-transfer, hybrid annuity model and toll-operate-transfer. The government has instituted many debottlenecking and facilitatory mechanisms like the National Infrastructure Pipeline, National Monetization Pipeline and PM-Gati Sakti that have made progress. Financial market regulators have introduced reforms to encourage private participation. Yet, the uptake of private enterprise is limited in many core sectors. The strategy to step up private participation needs coordinated action of all stakeholders involved - governments at different tiers, financial market players, project management experts and planners, and the private sector. Capacities to conceptualize projects, develop sector-specific innovative strategies for execution, and, develop high-expertise areas such as risk and revenue sharing, contract management, conflict resolution and project closure need to improve substantially. The efforts of the Union Government would need to be supplemented with wholehearted acceptance of the need for public-private partnerships in infrastructure across the country.

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## CONCLUSION

India has placed infrastructure development at the Centre stage of its fiscal and public policy agenda. Our infrastructure programme emphasizes the use of sustainable materials and processes. These considerations are receiving particular attention in areas such as highway development, waterway projects, power capacity addition and waste management.

Over the years transformative changes have improved the quality and stock of infrastructure assets. India's infrastructure strategy reflects a decisive shift towards scale, integration and quality, with sustained public capital expenditure acting as a powerful catalyst for growth. Coordinated investments across roads, railways, ports, civil aviation, and energy, digital and rural infrastructure have begun to yield tangible efficiency gains—shorter travel times, faster freight movement, improved logistics performance and wider access to essential services. The institutionalization of integrated planning through PM Gati-Shakti, alongside reforms in financing, asset monetization and public–private partnerships, has strengthened project preparation and execution while crowding-in private investment. Improvements in transport connectivity are enhancing ease of travel for people and businesses by reducing travel times, lowering transaction costs and expanding access to markets. Enhanced multimodal integration and more reliable freight movements are strengthening regional integration and improving the competitiveness of the Indian economy by enabling firms to participate more effectively in domestic and global value chains.

At the same time, the concept of infrastructure is evolving beyond physical networks to encompass digital public infrastructure, clean energy systems, resilient water management and future-ready technologies. This widened infrastructure base is also enhancing productivity, competitiveness, innovation and sustainability across the economy. Looking ahead, maintaining investment momentum, deepening private participation and aligning infrastructure development with emerging priorities—such as decarburization, digitalization and resilience—will be critical. Together, these efforts position infrastructure as a central pillar of India's medium-term growth strategy and a key enabler of its long-term development vision under Viksit Bharat up to 2047.

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