



Bharatmala Pariyojana

For Prelims: [Bharatmala](#), Public Investment Board, [Capital Expenditure](#), [Goods and Services Tax](#)

For Mains: Bharatmala Pariyojana, PM Gati Shakti Yojna and Its contribution in India's infrastructure development.

[Source: ET](#)

Why in News?

Nearly **50%** of the **Bharatmala Pariyojana Phase-I**, a flagship road network expansion program, has been completed as of 31st March 2024 and is expected to be completed by 2027-28.

- The Ministry of Road Transport and Highways' **Vision 2047** aims to provide high-speed corridors within 100-150 km of all citizens and enhance passenger convenience by developing world-class amenities.
- This vision serves as the basis for the **Master Plan** for highways and related infrastructure in India.

What is Bharatmala Pariyojana?

- **About:**
 - **Bharatmala Pariyojana** is an umbrella programme launched under the Ministry of Road Transport and Highways.
 - The **first-phase** of Bharatmala was **announced in 2017** and **was to be completed by 2022**, but it could not be completed due to **slow implementation and financial constraints**.
 - **Bharatmala**, **Sagarmala**, dry/land ports, and other infrastructure projects have been incorporated under **PM Gati-Shakti Plan** to enhance connectivity and logistics efficiency.
 - While **Bharatmala** project aims to **improve road connectivity**, enhancing freight and passenger movement, **Sagarmala project** focuses on **modernising ports and promoting coastal shipping** to boost trade and maritime activities.
- **Key Features:**
 - **Economic Corridors and their Efficiency Improvement:** Bharatmala focuses on enhanced effectiveness of already built infrastructure, multi-modal integration, bridging infrastructure gaps for seamless movement and integrating National and Economic Corridors.
 - It aims to develop about 26,000 km of economic corridors, along with the **Golden Quadrilateral (GQ)** and **North-South and East-West (NS-EW) Corridors**, to carry the majority of the freight traffic on roads.
 - **Inter-State Corridor and Feeder Routes:** This would ensure first mile and last mile connectivity.
 - About **8,000 km of interstate corridors** and about **7,500 km of feeder routes** have been identified for improving the effectiveness of these corridors.

- **Border and International Connectivity Roads:** Better border road infrastructure would ensure greater manoeuvrability, while also boosting trade with neighbouring countries.
 - **Coastal and Port Connectivity Roads:** Port-led economic development is further boosted through connectivity to coastal areas, encouraging both tourism and industrial development.
 - **Green-Field Expressways:** Expressways have higher traffic configuration and choke points would benefit from green-field expressways.
- **Funding Mechanism:**
 - The Bharatmala project is being funded from various sources including **Central Road and Infrastructure Fund cess, remittances, additional budgetary support, monetisation of national highways, Internal and Extra Budgetary Resources,** and **private sector investment.**
 - **Status:**
 - As of March 2024, Bharatmala Pariyojana Phase-1 has successfully awarded contracts for the construction of 26,425 km of roads and **completed 17,411 km**, with a total expenditure of **Rs 4.59 lakh crore.**
 - The project covers **34,800 km across 31 states** and UTs and over 550 districts.



PHASE-I OF BHARATMALA PARIYOJANA APPROVED IN GCEA MEETING CHAIRED BY PM. #NewIndia

Components



Other Similar Initiatives for Road Infrastructure Development

- **Pradhan Mantri Gram Sadak Yojana (PMGSY):** This project was initiated in **2001** to provide connectivity to unconnected Habitations.
- **National Infrastructure Pipeline (NIP):** The **National Infrastructure Pipeline (NIP)** is an initiative that will provide **world-class infrastructure across India** to improve the overall quality of life for all citizens and attract domestic and foreign direct investments.
 - Infrastructure projects include both social and economic infrastructure projects in sectors such as **Energy, Roads, Urban, and Railways** amounting to around 70% of the projected capital expenditure in infrastructure in India.
 - It includes **greenfield and brownfield projects** costing above Rs 100 crore each.
- **Golden Quadrilateral Project:**
 - It is a network of 4-6 lane highways connecting India's 4 top metropolitan cities, namely **Delhi, Mumbai, Chennai and Kolkata**, thereby forming a quadrilateral.
 - This project was launched in **2001** as part of the **National Highways Development Project (NHDP)**. It is the largest highway project in India.
 - 4 arms of the Golden Quadrilateral:
 - **Delhi-Kolkata:** 1,453 km
 - **Chennai-Mumbai:** 1,290 km
 - **Kolkata-Chennai:** 1,684 km
 - **Mumbai-Delhi:** 1,419 km
- **New Contracting Models and Asset Monetisation:** In addition to the traditional tendering methods like **Engineering, Procurement, and Construction (EPC)** and **Build, Operate, Transfer (BOT)**, several new contracting models have emerged.
 - These include the **Hybrid Annuity Model (HAM)**, **Toll, Operate, and Transfer (TOT)**, and **Infrastructure Investment Trusts (InVITs)**.

What is the Significance of Road Infrastructure in India's Development?

- **Economic Growth and Productivity:** Road networks are crucial for India's economic growth, contributing over **3.6% of GDP** and transporting **more than 85% of passenger traffic and 65% of freight**.
 - They **reduce transportation costs, enhance market access**, and stimulate trade.
 - They also create significant **employment opportunities supporting local economies** and helping reduce poverty.
- **Rural Development and Social Equity:** Rural roads, under schemes like **PMGSY**, bridge gaps between remote areas and essential services.
 - They empower marginalised communities, reduce isolation, and enhance the quality of life in rural areas.
 - Improved road connectivity boosts access to **essential services like education and healthcare**.
- **Tourism and Cultural Exchange:** Efficient road networks facilitate tourism, contributing significantly to the economy. Scenic routes and access to heritage sites foster cultural exchange and support local economies.
- **National Security and Defense:** Roads are vital for **defence logistics and emergency responses**. Border and strategic roads are essential for national security and troop movement.

What are the Major Concerns Related to Road Infrastructure Development?

- **Environmental Concerns:** Road construction raises environmental concerns such as deforestation, biodiversity loss, and increased pollution. It contributes significantly to habitat fragmentation, air and noise pollution, and climate change, highlighting the need for sustainable infrastructure practices.
 - The **International Energy Agency (IEA)** reports that road transport accounts for 12% of India's CO2 emissions, with heavy vehicles being the primary contributors to **Particulate Matter (PM) 2.5** emissions.

- **Social Concerns:** Road projects may lead to displacement of communities, particularly in rural areas, and safety issues. Inadequate resettlement can worsen poverty, while poorly designed roads contribute to high accident rates, with over 150,000 fatalities reported in India in 2021, underscoring the need for safer infrastructure.
- **Economic Concerns:** Many road projects include significant cost overruns and delays, with the [Comptroller and Auditor General \(CAG\)](#) reporting instances where costs exceeded budgets by over 40%.
 - Additionally, the **lack of a robust maintenance framework** leads to rapid road deterioration, potentially doubling long-term costs..
- **Governance and Policy Issues:** It includes **corruption in bidding and execution**, leading to substandard infrastructure.
 - Additionally, the **lack of comprehensive planning** results in poorly executed projects, highlighting the need for **integrated transport planning**.

Way Forward

There is a need to focus on **strategic procurement to secure raw materials at competitive rates** and negotiate favourable terms with suppliers. Also, **streamlining land acquisition** by adopting transparent practices and exploring alternatives such as **land pooling to minimise disputes** is needed. Further, there is a **need for stable GST policies** and work with government authorities to address the impacts of tax changes on the industry.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims:

Q1. With reference to 'National Investment and Infrastructure Fund', which of the following statements is/are correct? (2017)

1. It is an organ of NITI Aayog.
2. It has a corpus of `4,00,000 crore at present.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (d)

Mains:

Q. "Investment in infrastructure is essential for more rapid and inclusive economic growth." Discuss in the light of India's experience. **(2021)**