

Indian Economy: Infrastructure sector in India

GS Paper 3: Economic development - Infrastructure: Energy, ports, roads, railways, etc.



Infrastructure refers to the fundamental facilities and systems serving a country, city, or other area, including the services and facilities necessary for its economy to function. Infrastructure is composed of public and private physical improvements such as roads, bridges, tunnels, water supply, sewers, electrical grids, and telecommunications (including Internet connectivity and broadband speeds). In general, it has also been defined as "the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions".



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There are two general types of ways to view infrastructure, hard or soft.

Hard infrastructure refers to the physical networks necessary for the functioning of a modern industry. This includes roads, bridges, railways, etc. **Soft infrastructure** refers to all the institutions that maintain the economic, health, social, and cultural standards of a country. This includes educational programs, parks and recreational facilities, law enforcement agencies, and emergency services.

Ownership of infrastructure

Infrastructure may be owned and managed by governments or by private companies, such as sole public utility or railway companies. Generally, most roads, major airports and other ports, water distribution systems, and sewage networks are publicly owned, whereas most energy and telecommunications networks are privately owned. Publicly owned infrastructure may be paid for from taxes, tolls, or metered user fees, whereas private infrastructure is generally paid for by metered user fees. Government-owned and operated infrastructure may be developed and operated in the private sector or in public-private partnerships, in addition to in the public sector.

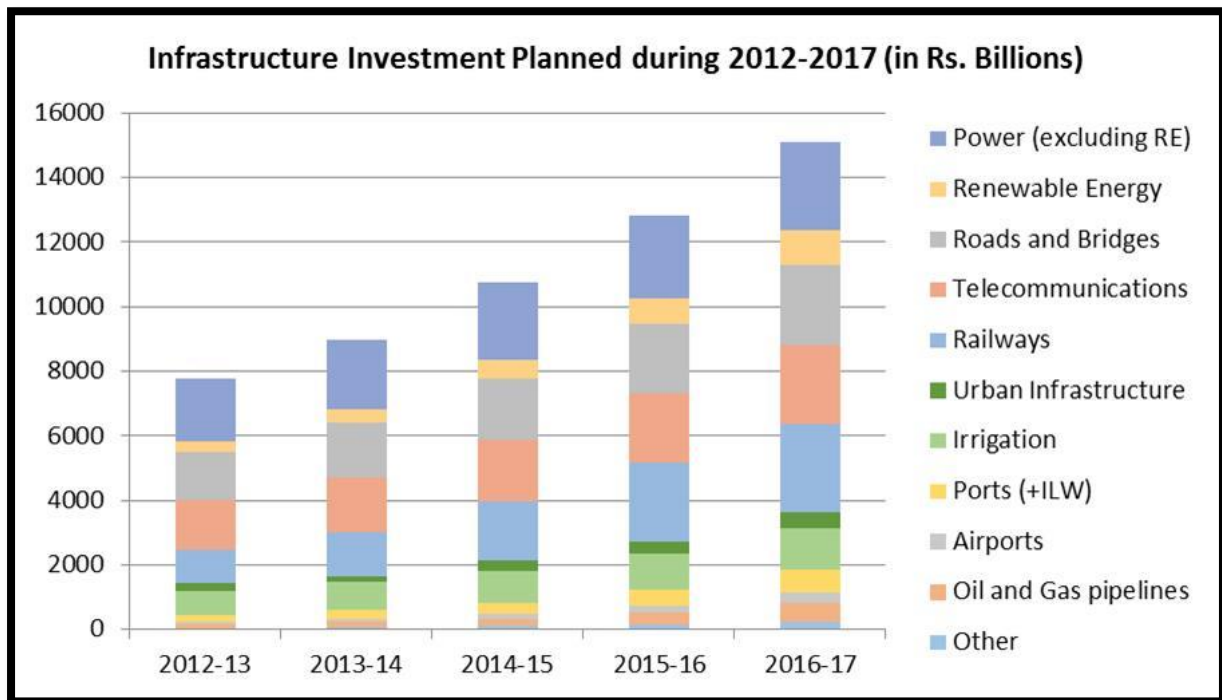
Logistics Performance Index

LPI is an interactive **benchmarking tool** created by the World Bank to help countries identify the challenges and opportunities they face in their **performance on trade logistics** and what they can do to improve their performance. LPI is the weighted average of the country scores on the six key dimensions: 1) Efficiency of the **clearance process** by border control agencies, including customs. 2) **Quality of trade and transport** related infrastructure. (e.g., ports, railroads, roads, information technology) 3) Ease of arranging **competitively priced shipments**. 4) Competence and **quality of logistics** services (e.g., transport operators, customs brokers). 5) Ability to track and **trace consignments**. 6) **Timeliness of shipments** in reaching destination within the scheduled or expected delivery time.

Market size

Foreign Direct Investment (FDI) received in Construction Development sector (townships, housing, built up infrastructure and construction development projects) from April 2000 to June 2018 stood at US\$ 24.87 billion, according to the Department of Industrial Policy and

Promotion (DIPP). The logistics sector in India is growing 10 per cent annually and is expected to reach US\$ 215 billion in 2019-20.



Government Initiatives

Announcements in Union Budget 2018-19:

- Massive push to the infrastructure sector by allocating Rs 5.97 lakh crore (US\$ 92.22 billion) for the sector.
- Railways received the highest ever budgetary allocation of Rs 1.48 trillion (US\$ 22.86 billion).
- Rs 16,000 crore (US\$2.47 billion) towards Sahaj Bijli Har Ghar Yojana (Saubhagya) scheme. The scheme aims to achieve universal household electrification in the country.
- Rs 4,200 crore (US\$ 648.75 billion) to increase capacity of Green Energy Corridor Project along with other wind and solar power projects.



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- Allocation of Rs 10,000 crore (US\$ 1.55 billion) to boost telecom infrastructure.
- A new committee to lay down standards for metro rail systems was approved in June 2018. As of August 2018, 22 metro rail projects are ongoing or are under construction.
- Rs 2.05 lakh crore (US\$ 31.81 billion) will be invested in the smart cities mission. All 100 cities have been selected as of June 2018.
- The Government of India is working to ensure a good living habitat for the poor in the country and has launched new flagship urban mission, the Pradhan Mantri Awas Yojana (Urban). In May 2018, construction of additional 150,000 affordable houses was sanctioned under Pradhan Mantri Awas Yojana (PMAY), Urban.

CHALLENGES

Difficulty in land acquisition and environmental clearance.

Lack of coordination between various Government agencies

Inappropriate structuring of the projects and investment models.

Lack of a proper dispute resolution mechanism between private players & government agencies.

Debt burden of infrastructure developers due to execution delays and irrational bidding.

Way Ahead

Whilst the need for greater infrastructure investment is clear, equally important is the need to sustainably manage such investments. The Indian Government's success in infrastructure provision will be measured not by the quantum of funds invested, but on how infrastructure contributes to the achievement of India's economic, social and environmental objectives. Importantly, infrastructure investment should be considered as a means to an end, not an end in itself.

Global climate change creates further challenges. New infrastructure must not only support social and economic goals, it must also do so within acceptable environmental parameters. Given that India's growth rate is likely to continue at high levels, it is important that considerations of issues such as fuel mix, encouraging more



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fuel efficient modes of transport such as rail, and the possible use of CCS technology, come fully into discussion.

Questions

1. Normally countries shift from agriculture to industry and then later to services, but India shifted directly from agriculture to services. What are the reasons for the huge growth-services vis-a-vis industry in the country? Can India become a developed country without a strong industrial base? (2014)
2. Explain how Private Public Partnership arrangements, in long gestation infrastructure projects, can transfer unsustainable liabilities to the future. What arrangements need to be put in place to ensure that successive generations' capacities are not compromised? (2014)
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4. Examine the development of airports in India through joint ventures under Public – private Partnership (PPP) model. What are the challenges faced by the authorities in this regard? (2017)