



## India's Infrastructure Push

This editorial is based on "[An infrastructure push for the people](#)" which was published in the Hindu on 07/02/2023. It talks about India's push on infrastructure in the Union budget 2023-24 and challenges ahead.

**For Prelims:** Infrastructure, Capital Expenditure, Digital Divide, Physical Infrastructure, Cybersecurity, Digital and Social Infrastructure, Digital India Bhashini Portal, 5G, Internet of Things (IoT), Artificial Intelligence (AI), Quantum Computing, Mechatronics, Robotics

**For Mains:** Government Policies & Interventions, Growth & Development, Infrastructure

Infrastructure is universally acknowledged as a key driver of growth. The term infrastructure, however, is **usually associated with physical assets**, such as roads, ports, power transmission lines, etc. However, in recent years, **India's growth story has been closely associated with a strong focus on not only physical**, but also social and digital infrastructure.

Budget 2023 gives a **powerful thrust to these three dimensions of infrastructure development** which, put together, accelerate inclusive growth. The targeted investments will not only create vital physical infrastructure and improve connectivity that will accelerate the movement of passengers and freight, but also create jobs, spur private investments, and provide a cushion against global headwinds.

In Budget 2022-23, India focused on giving the necessary push to the economy by investing in various infrastructure projects. In the upcoming Budget, the infrastructure sector will receive a similar amount to reach **India's goal of becoming a [USD5 trillion economy by 2025](#)**.

### What is the Proposed Allocation in the 2023-24 Budget?

- **India's Capital Expenditure:**
  - India's [capital expenditure](#) as a percentage of GDP increased from **1.7% in 2014 to nearly 2.9% in 2022-23**.
  - For infrastructure, **Rs 10 lakh crore (3.3% of GDP) was allocated in the budget 2023-24**, an increase of three times from 2019.
- **Largest Allocation:**
  - The Ministry of Railways **received its highest-ever allocation of Rs 2.4 lakh crore**, approximately nine times the allocation in 2013-14.
  - The Ministry of Road Transport and Highways saw a **36% increase in its budget to about Rs 2.7 lakh crore**.
- **Extension of Interest-Free Loan to States:**
  - The direct capital investment by the Centre has been further **supplemented by a one-year extension of the [50-year interest-free loan to state governments](#)** to encourage

infrastructure investment and incentivise complementary policy actions, with a significantly increased outlay of Rs 1.3 lakh crore.

- This will lead to **decentralised infrastructure development in urban and peri-urban areas** across regions.
- Increasing allocations to [PM Awas Yojana](#) by 66% will not only provide rural workers with housing, but also create jobs.

## Why is India's Infrastructure Push Challenging?

### ▪ Physical Infrastructure:

- **Land acquisition:** One of the biggest challenges in building physical infrastructure is acquiring land, as it often involves resettlement of people and compensation issues.
- **Funding:** Funding large-scale infrastructure projects is also a major challenge, as the government **may not have sufficient resources and private investment** may be limited due to economic and regulatory hurdles.
- **Lack of Technology:** India faces **challenges in terms of the availability of technology and expertise necessary** for complex infrastructure projects.

### ▪ Social Infrastructure:

- **Inadequate Human Resources:** The **shortage of skilled workers, engineers, and managers can be a hindrance to the development** of social infrastructure projects.
- **Lack of Public Support:** Social infrastructure projects, such as **healthcare and education, require public support and buy-in, which can be difficult to secure** in a complex political environment.
- **Inadequate Planning and Implementation:** Poor planning and implementation can result in substandard facilities and a lack of sustainability, ultimately reducing the impact of the infrastructure push.

### ▪ Digital Infrastructure:

- **Digital Divide:** There is a **digital divide in India**, with limited access to technology and the internet in rural areas, which can hinder the development of digital infrastructure.
- **Cybersecurity Concerns:** The increasing **use of technology also raises concerns about cybersecurity and privacy**, making it necessary to have strong regulations and infrastructure in place.
- **Lack of standardization:** The **lack of standardization and coordination among different players in the digital infrastructure sector can create problems for users** and limit the potential for growth and innovation.

## What are the Related Initiatives taken?

### ▪ For Digital Infrastructure:

- **First Phase:**
  - **JAM trinity** — Jan Dhan, Aadhaar and mobile linkages
  - **Digital India programme**
- **Second Phase:**
  - Development, application, and large-scale expansion of cutting-edge technologies such as **5G, Internet of Things (IoT), Artificial Intelligence (AI), quantum computing, mechatronics, robotics** and more.
  - An important domain that the government is focusing on currently is creating open AI resources.
  - **Example:**
    - **Digital India Bhashini portal** is India's Artificial Intelligence (AI) led language translation platform.
    - The **Agriculture Accelerator Fund** announced in the budget will enable the Indian agricultural ecosystem (startups, businesses, and farmers) to work collaboratively and find knowledge-based and farmer-centric solutions.

### ▪ Social Infrastructure:

- **Mission to Eliminate Sickle cell Anaemia:**
  - In the Union **Budget 2023-24**, the government has announced a mission to eliminate **Sickle cell Anaemia** by 2047.
- **PM Poshan Shakti Nirman or PM Poshan:**

- It is the largest school feeding programme of its kind in the world, covering students enrolled in government schools from Classes 1 to 8.
- **Beti Bachao Beti Padhao:**
  - It was launched in 2015 with the aim to address sex selective abortion and the declining child sex ratio which was at 918 girls for every 1,000 boys in 2011.
- **Physical Infrastructure:**
  - **PM Gati Shakti Scheme:**
    - It aims to **ensure integrated planning and implementation of infrastructure projects in the next four years**, with focus on expediting works on the ground, saving costs and creating jobs.
  - **Bharatmala scheme:**
    - In 2022, India saw a major push in construction of highways with more than 5000 kms of National Highways constructed.
    - Targeted development of highways under the Bharatmala scheme has helped in bridging of infrastructure gaps in development of economic corridors

## What should be the Way Forward?

- **Investment in social infrastructure:**
  - Investment in social infrastructure can lead to a **more productive and proficient workforce**, reduced mortality, wasting and stunting, increased social mobility and a higher quality of life.
    - Social infrastructure includes education and skilling, public health and nutrition, drinking water and sanitation.
  - These **factors contribute to a stronger and more inclusive economy** and holistic development.
- **Increased Public-Private Partnerships (PPPs):**
  - The government can partner with the private sector to finance, design, construct, and operate infrastructure projects.
- **Improved Project Planning and Implementation:**
  - The government can streamline project planning and implementation processes to ensure that projects are completed on time and within budget.
- **Implementation of Innovative Financing Solutions:**
  - The government can **explore innovative financing solutions, such as [infrastructure bonds](#)**, to mobilize additional funds for infrastructure development.
- **Encouraging Foreign Direct Investment (FDI):**
  - The government can **ease regulations and create a favorable environment for [foreign direct investment](#)** in infrastructure development.
- **Building Human Capital:**
  - The government can **focus on building human capital in the form of skilled labour and technical expertise** to support infrastructure development.
    - Some ways to build human capital to support infrastructure development:
      - Investing in workforce development programs that provide job training, apprenticeships.
      - Providing access to quality education and training programs
      - Supporting research and innovation in infrastructure-related fields
      - Fostering partnerships between the public and private sectors to encourage investment in human capital development
  - Schemes to build human capital and support infrastructure development include: **[Skill India](#)**, **[National Skill Development Corporation \(NSDC\)](#)**, **[Pradhan Mantri Kaushal Vikas Yojana \(PMKVY\)](#)**.
- **Effective Regulation:**
  - The government can establish and enforce effective regulations to ensure the quality and safety of infrastructure projects.
  - Some ways regulations can help:
    - Regulations can set standards for the quality of materials, workmanship

- Regulations can also specify safety requirements, such as fire safety, evacuation plans, and accessibility standards, which must be met to ensure the safety of the public and the workers involved in the project.
- Independent inspection and testing which will help to identify any issues or problems that need to be addressed before the infrastructure is put into use.

### **Drishti Mains Question**

What are the main challenges in the infrastructure sector in India and what measures can be taken to overcome them?

## **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)**

- The NIIF (National Investment and Infrastructure Fund) is overseen by the Investment Division of the Department of Economic Affairs, Ministry of Finance. **Hence, statement 1 is not correct.**
- The NIIF is currently managing three funds which are registered as an Alternative Investment Funds (AIFs) under the SEBI Regulations. Those three funds are Master Fund, Strategic Fund and Fund of Funds and the proposed corpus of NIIF is `40,000 crore and not 4,00,000 crore. **Hence, statement 2 is not correct. Therefore, option (d) is the correct answer.**

**Q2. In India, the term "Public Key Infrastructure" is used in the context of (2020)**

- (a) Digital security infrastructure
- (b) Food security infrastructure
- (c) Health care and education infrastructure
- (d) Telecommunication and transportation infrastructure

**Ans: (a)**

- Public Key Infrastructure (PKI) is a technology for authenticating users and devices in the digital world. Under this system, one or more trusted parties digitally sign documents certifying that a particular cryptographic key belongs to a particular user or device. The key can then be used as an identity for the user in digital Networks. **Therefore, option (a) is the correct answer.**

### **Mains**

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

PDF Reference URL: <https://www.drishtias.com/printpdf/india-s-infrastructure-push>

