

Research Paper on Economic Survey of Infrastructure Sector

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ABSTRACT:

This paper provides an overview of the current state of the infrastructure industry, focusing on economic trends, challenges, and opportunities. It analyzes key sectors, investment flows, and policy implications, drawing on data from various sources, including government reports, industry analyses, and international organizations. Economic Survey 2023-24 has been released on 22nd July 2024. Every year, the Ministry of Finance publishes a report called the Economic Survey of India. This report usually comes out a day before the Union Budget is presented in the Parliament.

KEYWORDS:

Budget, Infrastructure

OBJECTIVE OF RESEARCH:

- Understanding the key developments and trends in India's infrastructure sector as outlined in the Economic Survey of India 2024.
- Understanding the government's initiatives and policies for infrastructure development, including the National Infrastructure Pipeline and Gati Shakti.
- Understanding the challenges faced in infrastructure financing, implementation, and regional disparity.

REVIEW OF LITERATURE:

- An extensive analysis of India's infrastructure development has been recognized as a critical driver of long-term growth, attracting research interest from economists, policymakers, and international organizations like the World Bank and International Monetary Fund (IMF). PM Awas Yojana expenditure increased by 66% to Rs.79,000 crore.
- Railways will receive a capital outlay of Rs.2.4 lakh crore, the highest allocation ever since 2013–14.
- Public agencies will use the Urban Infrastructure Development Fund (UIDF), which will be administered by the national Housing Bank, to build urban infrastructure in Tier 2 and Tier 3 cities. The UIDF will be established through the use of the priority Sector Lending shortfall.
- Investments total of Rs.75,000 crores (Rs.15,000 crores from private sources) will be made in 100 vital transportation infrastructure projects to provide last and first mile connectivity for the coal, ports, food grain, steel, and fertilizer grains sectors.

- The creation of the New Infrastructure Finance Secretariat will increase opportunities for private infrastructure investment.
- Government will establish an Urban Infrastructure Development Fund, similar to the Rural Infrastructure Development Fund, which will be run by NHB.
- A one-year extension of the 50-year interest-free loan to state governments in order to encourage them to adopt complementary policies and encourage infrastructure investment.
- Prompting states and local governments to implement urban planning changes and initiatives aimed at transforming their cities into "sustainable cities of tomorrow." Convert all cities and towns to a machine-hole system by allowing them to completely mechanically dislodge their septic tanks and sewers.

INTRODUCTION OF STUDY:

India has seen a massive infrastructure push in the last decade, but infrastructure-creation efforts are predominantly public sector-led. There is a need to increase private investment to continue down the development path, highlighted the Economic Survey released Monday. The document noted that transformative changes have occurred in the infrastructure landscape with a consistent focus on road, rail and air connectivity, sanitation, and digital infrastructure. However, infrastructure-creation efforts in India are led by government agencies, state-owned entities, and banks. The consistent focus on road, rail, and air connectivity, sanitation, and digital infrastructure has led to considerable growth in assets in these sectors. Between fiscal year 2019 and 2023, the Central and State Governments contributed 49% and 29% of the total investments, respectively, while the private sector contributed 22%. The Indian infrastructure industry is a vital cornerstone of the nation's economic development, playing a crucial role in facilitating growth across various sectors. As one of the fastest-growing segments of the Indian economy, infrastructure encompasses a wide array of components, including transportation, energy, urban development, and telecommunications.

With the government's ambitious initiatives—such as the National Infrastructure Pipeline (NIP) and the Smart Cities Mission—India is striving to enhance its infrastructure framework to support its burgeoning population and urbanization. These efforts aim not only to improve connectivity and services but also to attract substantial domestic and foreign investments.

Overview of the Infrastructure Industry:

The infrastructure sector encompasses various segments, including transportation, energy, water, and telecommunications. Each segment plays a distinct role in supporting economic activities and facilitating growth.

Transportation

Transportation infrastructure includes roads, bridges, railways, and airports. Investments in this area are critical for enhancing connectivity and reducing logistics costs. Recent trends show a shift toward sustainable transportation solutions, such as electric public transit systems and smart traffic management.

Energy

The energy sector is undergoing a transformation, with a significant push toward renewable energy source. Investments in solar, wind, and hydropower are rising, driven by government incentives and the need for energy security. The transition to a low-carbon economy is reshaping the landscape of energy infrastructure.

Water and Sanitation

Access to clean water and sanitation is essential for public health and economic productivity. Investments in water infrastructure are critical, particularly in developing regions where infrastructure gaps remain significant. Innovative financing models, such as public-private partnerships (PPPs), are emerging to address these needs.

Telecommunications

The digital economy relies heavily on robust telecommunications infrastructure. The COVID-19 pandemic accelerated investments in broadband and 5G networks, highlighting the importance of connectivity for remote work and digital services.

Economic Trends and Investment Flows:

Recent years have seen fluctuations in infrastructure investment due to economic cycles, geopolitical tensions, and the impact of the COVID-19 pandemic.

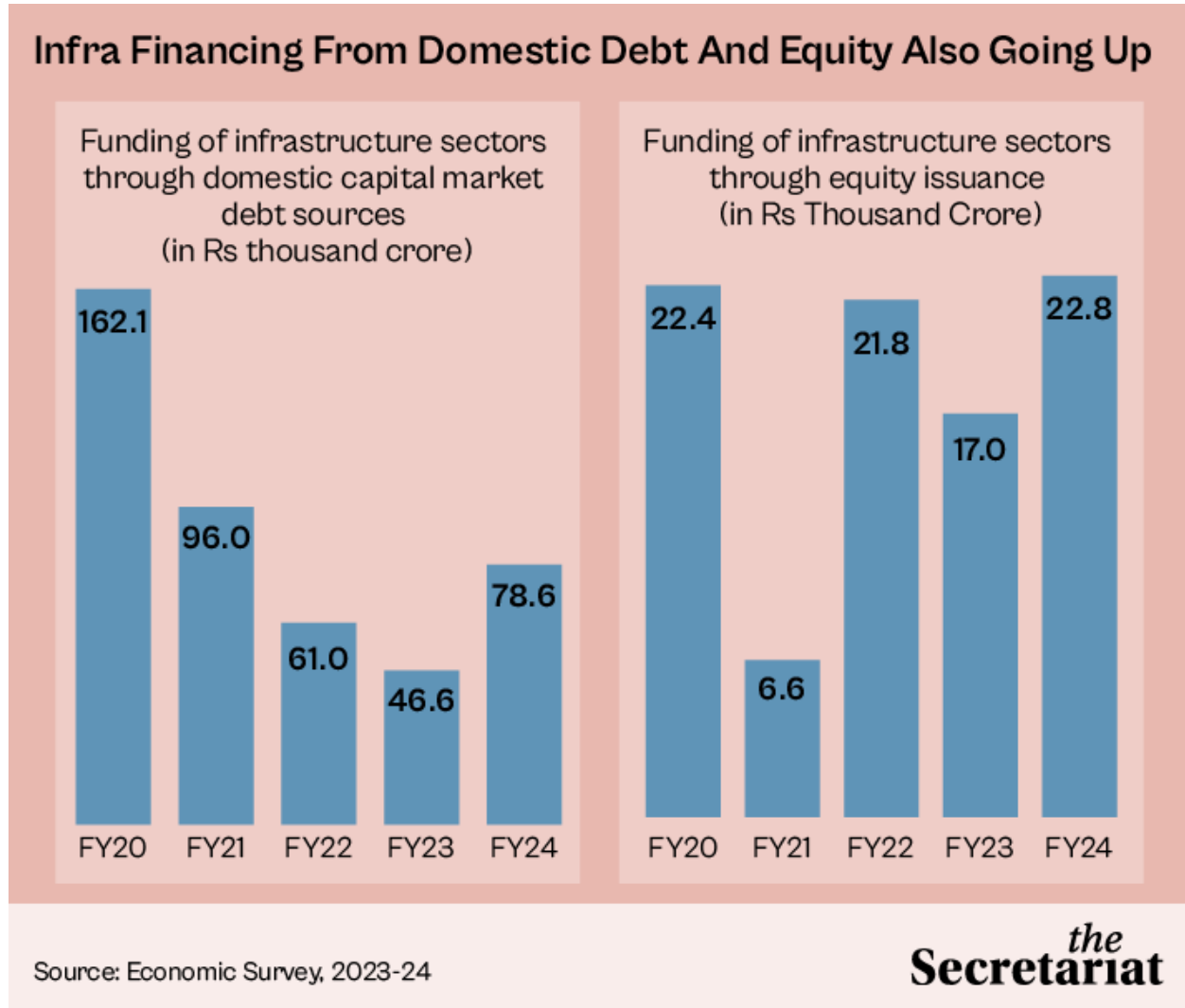
Global Investment Trends

According to the Global Infrastructure Outlook (2021), global infrastructure investment is projected to reach \$94 trillion by 2040, with significant investments needed in both developed and developing nations. Emerging markets are expected to see the highest growth rates.

Public vs. Private Investment

While public funding remains the primary source of infrastructure financing, private investment through PPPs is becoming increasingly important. Governments are leveraging private capital to improve infrastructure quality and efficiency.

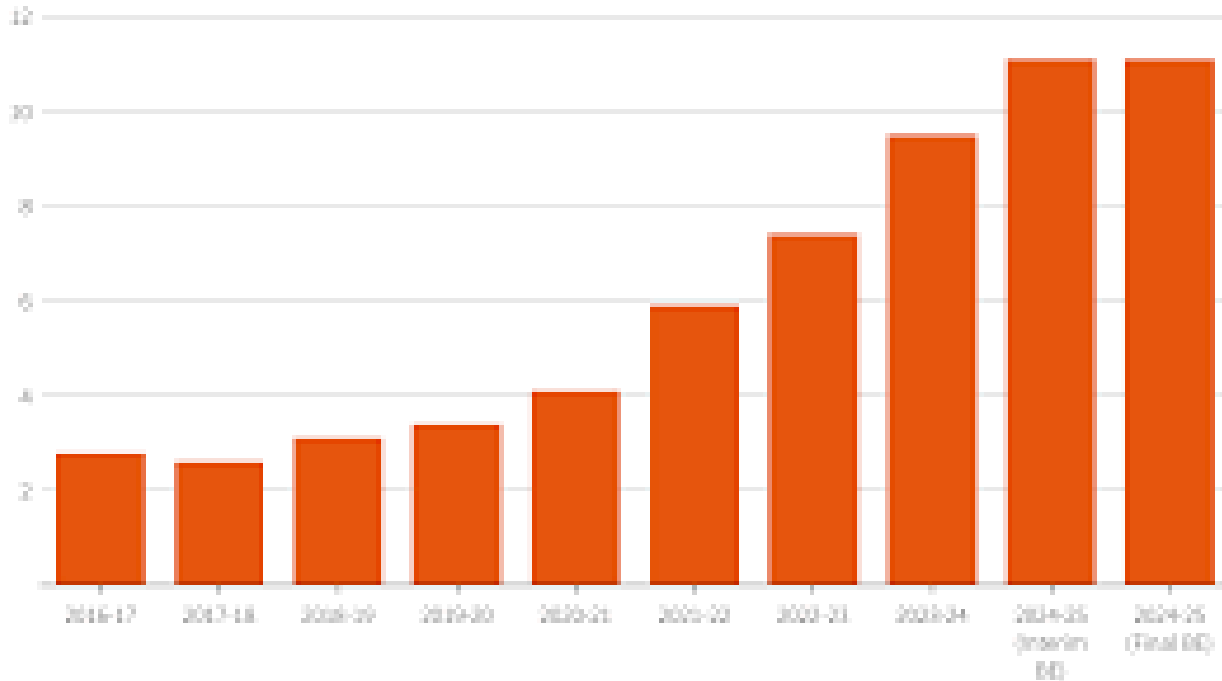
OBSERVATION:



The resource mobilization by infrastructure sectors⁵ through debt and equity issuances in the capital market was just over ₹1,00,000 crore during FY24. Real estate investment trusts (REITs) have raised ₹18,840 crore from year 2019 to 2024 while Infrastructure investment trusts (InvITs) raised a total of ₹1,11,294 crore in the last five years (2019-2024).

India federal government infrastructure spending

The federal government will spend a record 11.1 trillion rupees on infrastructure creation in 2024-25



Note: 2024-25 is budget estimates, rest all are actual/provisional figures in trillion rupees.

Source: Indian Budget Documents/Budget Speech

Infrastructure sector has been considered based on the following sub-sectors - For Equity: Airport & Airport services, Civil Construction, Education, E-Learning, Healthcare Research, Analytics & Technology, Hotels & Resorts, Port & Port services, Power – Transmission, Power Distribution, Power Generation, Railway Wagons, Real Estate Investment Trusts (REITs), Real Estate related services, Residential, Commercial Projects, Road Assets–Toll, Annuity, Hybrid-Annuity, Road Transport, Ship Building & Allied Services, Shipping, Telecom – Infrastructure, Waste Management and Water Supply & Management. For Debt: Construction, Infrastructure (Power, Telecommunications, Roads, Airports, Ports, Railways and Other Infrastructure), Civil Construction, Energy, Healthcare, Hotels & Resorts, Real Estate related services, Road Assets - Toll, Annuity, Hybrid-Annuity, Telecom – Infrastructure and Residential, Commercial Projects.

Challenges Facing the Infrastructure Industry:

Despite its critical importance, the infrastructure sector faces several challenges:

Funding Gaps

Many countries face substantial infrastructure funding gaps, exacerbated by budget constraints and competing priorities. Innovative financing mechanisms are needed to attract investment.

Regulatory Hurdles

Bureaucratic processes and regulatory uncertainties can delay infrastructure projects. Streamlining approvals and fostering collaboration between public and private sectors are essential for timely project execution.

Climate Change

Infrastructure projects must consider resilience to climate change impacts. This includes investing in sustainable materials and technologies and adapting existing infrastructure to withstand extreme weather events.

Findings

- **Sectoral Contribution:** The infrastructure sector significantly contributes to India's GDP, with transportation, energy, and urban development as the leading segments driving economic activity.
- **Government Initiatives:** Programs like the National Infrastructure Pipeline (NIP) and PM Gati Shakti have streamlined investments and encouraged private participation, but execution remains a challenge.
- **Investment Gaps:** Despite increased public spending, there is a considerable gap in funding, requiring innovative financing mechanisms like infrastructure bonds and PPP (Public-Private Partnership) models.
- **Challenges:** Issues such as regulatory delays, inadequate planning, environmental hurdles, and a lack of skilled workforce impede the timely execution of projects.
- **Regional Disparities:** Infrastructure development is uneven across states, with significant differences in the availability of basic utilities and advanced facilities.

Recommendations

- **Policy Streamlining:** Simplify regulatory frameworks to reduce delays in project approvals and implementation.
- **Innovative Financing:**
 1. Strengthen PPP frameworks to attract private investments.
 2. Develop municipal bonds and infrastructure debt funds for urban projects.
- **Digital Integration:** Leverage technology, such as AI and GIS, for better project planning, monitoring, and resource allocation.
- **Capacity Building:** Enhance workforce skills through training programs, focusing on areas like construction technology, sustainable practices, and project management.
- **Sustainability:** Prioritize green infrastructure projects to align with global sustainability goals and reduce carbon emissions.
- **Balanced Regional Development:** Introduce targeted schemes to address the infrastructure needs of underdeveloped regions, promoting inclusive growth.
- **Strengthening Accountability:** Implement stricter monitoring mechanisms to ensure transparency and reduce corruption in large-scale projects.

Conclusion

The infrastructure sector is the backbone of India's economic progress, with vast potential to accelerate growth and improve quality of life. While government policies and initiatives have been instrumental in fostering development, challenges like funding gaps, execution delays, and regional disparities persist. A comprehensive approach that combines efficient policymaking, technological integration, and sustainable practices is essential to bridge these gaps. With the right strategies and stakeholder cooperation, India can establish a robust infrastructure ecosystem that supports its aspirations of becoming a \$5 trillion economy and ensures equitable development across all regions. The infrastructure sector serves as a cornerstone for economic development, influencing productivity, employment, and the overall quality of life. Over the years, India has made significant strides in enhancing its infrastructure capabilities, from building extensive road networks to establishing world-class urban and rural facilities. The government's focus on initiatives such as the National Infrastructure Pipeline (NIP), Bharatmala, Sagarmala, and Smart Cities Mission demonstrates a clear commitment to modernizing the sector and fostering economic growth.

However, challenges such as funding shortfalls, execution delays, and inefficiencies continue to hamper progress. Addressing these issues requires a multi-pronged approach involving policy reforms, innovative financing mechanisms, and active collaboration between the public and private sectors. Furthermore, integrating digital technologies and sustainable practices can unlock efficiencies and ensure the long-term viability of projects.

Infrastructure development is not just about economic returns; it is a catalyst for social inclusion and balanced regional development. Bridging the gap between rural and urban areas, improving last-mile connectivity, and ensuring access to essential services like water, electricity, and transportation are critical to achieving inclusive growth.

In conclusion, the future of India's infrastructure lies in a holistic strategy that combines visionary leadership, stakeholder participation, and a focus on sustainability. By addressing current bottlenecks and capitalizing on emerging opportunities, India can build a resilient infrastructure framework that not only supports its aspirations of becoming a global economic powerhouse but also enhances the well-being of its citizens.

BIBLIOGRAPHY :-

- <https://www.ibef.org/industry/infrastructure-sector-india>
- https://www.ey.com/en_in/insights/infrastructure/unleashing-india-s-infrastructure-potential-ey-roundtable-insights
- <https://www.ibef.org/industry/infrastructure-presentation>
- <https://kpmg.com/in/en/blogs/home/posts/2024/07/transforming-indias-infrastructure-a-futuristic-roadmap-through-budget-2024-25.html>
- <https://indiabudget.gov.in/economicsurvey/doc/eschapter/echap12.pdf>
- <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2036078>