

Infrastructure: Lifting Potential Growth

Shijo Thomas¹, Anuraj P K²

^{1&2} Research scholars, Gulati Institute of Finance and Taxation

Abstract

The article discusses India's infrastructure development efforts, highlighting key initiatives outlined in the Economic Survey 2023-24. The latest Union Budget allocates Rs.11,11,111 crore for capital expenditure on infrastructure, which represents 3.4% of India's Gross Domestic Product (GDP). This substantial investment is aimed at creating resilient infrastructure to achieve Viksit Bharat by 2047, fostering economic growth and improving living standards across the country. It focuses on the significant growth in sectors like road, rail, and air connectivity, driven by public investment and government reforms. Despite the progress, challenges still exist, such as uneven funding and reduced budgets.

Keywords: *Infrastructure development, union budget, capital expenditure, Viksit Bharat*

Introduction

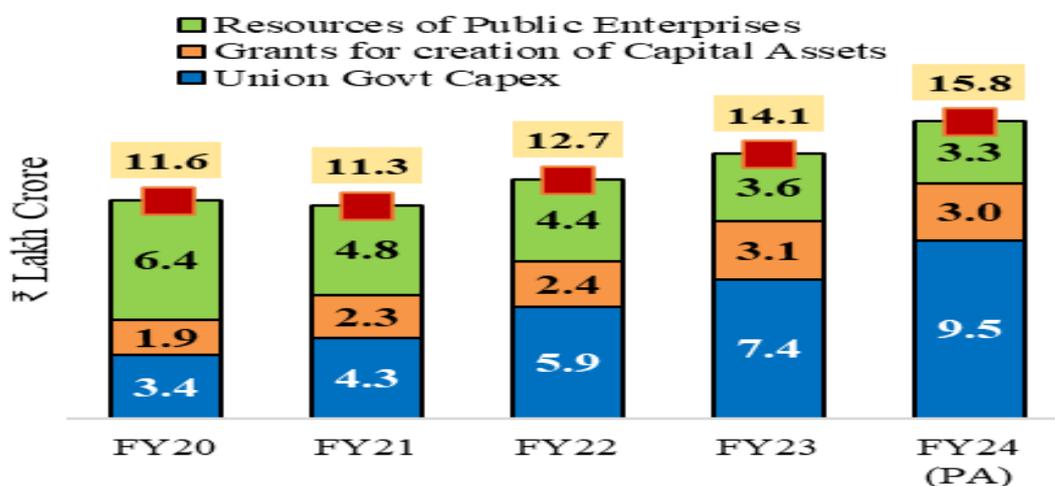
The Chapter 12 titled **Infrastructure: Lifting Potential Growth** of "Economic Survey 2023-24" highlights the infrastructure development efforts in India and presents a comprehensive overview of India's infrastructure development, focusing on public investment's key role and the challenges ahead.

Capital expenditure by the Union and State Governments remains crucial for large-scale infrastructure projects, and from FY21 to FY24, the Union Government's capital expenditure

increased by 2.2 times, reflecting a substantial investment push. This investment was directed towards critical sectors, particularly roads and railways, with the aim of enhancing infrastructure and driving economic growth. Public investment has been further strengthened by key institutional reforms such as the National Infrastructure Pipeline (NIP) and the Project Monitoring Group, which were introduced to address and resolve infrastructural bottlenecks more effectively.

Despite innovative financing mechanisms emerging in recent years, public expenditure continues to play a central role in funding large-scale infrastructure projects. The government has prioritized heavy investments in the railways and road sectors, viewing them as key drivers for long-term economic development. To complement these efforts, the National Monetization Pipeline (NMP) was introduced, focusing on asset monetization to attract private sector investment. This initiative has already shown results, with successful monetization transactions reported in FY22-24, showcasing the potential of private-public collaboration in infrastructure development.

Fig 1. Union government's capital expenditure and its support for cpses and state governments



Source: *Economic Survey 2023-24*, pp – 407

Physical connectivity infrastructure

Investment in road transport has seen a substantial rise, growing from 0.4% of GDP in FY15 to 1% in FY24. This increased funding has been directed towards major infrastructure projects, such as the Bharatmala Pariyojana, which has played a pivotal role in expanding India's national highways. The pace of highway construction has tripled between FY14 and

FY24, contributing to improvements in India's logistics network and enhancing its standing globally. This is reflected in the country's improved rank of 38th on the Logistics Performance Index in 2023. In addition to road construction, advancements in toll digitization and the establishment of multi-modal logistics parks have been key milestones in transforming India's road transport infrastructure. These initiatives aim to streamline transportation, reduce costs, and enhance the efficiency of goods movement across the country, further supporting India's economic growth trajectory.

Indian Railways has witnessed a 77% increase in capital expenditure over the past five years. This surge in investment has been focused on expanding the network through the construction of new lines, gauge conversion, and track doubling. These efforts are aimed at enhancing the capacity and efficiency of the railway system to meet the growing transportation needs of the country. Significant transformations in the sector include the development of high-speed trains like the Vande Bharat Express, and dedicated freight corridors have been introduced to improve the transportation of goods. Electrification of the rail network has also progressed rapidly, with 96.4% of the network electrified by FY24, further boosting efficiency and sustainability in railway operations.

Water transport has made significant strides, with port capacity doubling since 2014, greatly enhancing the country's maritime competitiveness. The Sagarmala program has played a key role in modernizing port infrastructure. Additionally, focused development in island regions, such as the Andaman and Lakshadweep Islands, has highlighted eco-tourism and maritime activities.

Energy infrastructure

India's power sector saw peak demand rise by 13% to 243 GW in FY24, driven by the expansion of the unified electricity grid. A significant portion of the sector's development has been fuelled by investments in renewable energy, with the country aiming to achieve 50% of its installed capacity from non-fossil fuels by 2030. To support this transition, initiatives like the Revamped Distribution Sector Scheme (RDSS) have been introduced to improve operational efficiency and ensure financial sustainability in power distribution. As of FY24, India has already installed 190.57 GW of renewable energy, marking substantial progress in reducing carbon emissions and promoting sustainable energy use.

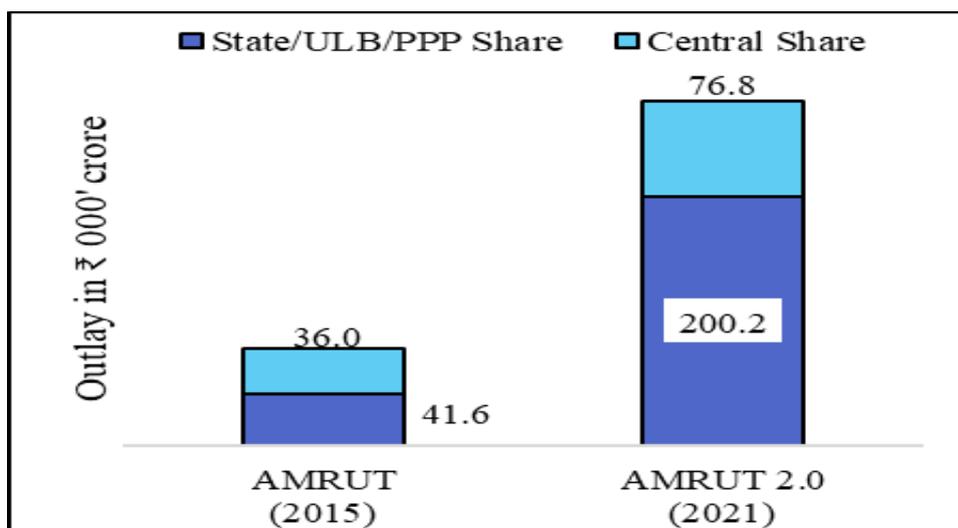
Programs such as PM-KUSUM and the Production Linked Incentive Scheme for solar PV modules are playing a crucial role in promoting renewable energy adoption across the country. These efforts are part of a larger goal to install 500 GW of non-fossil fuel-based capacity by 2030.

Urban sector and challenges

While the Economic Survey 2023-24 highlights the expectation that over 40% of India's population will reside in urban areas by 2030 (pp 435), requiring cities to be transformed into economic growth **centres**, recent union budgets have not given adequate attention to this crucial urban transition. The Pradhan Mantri Awas Yojana - Urban (PMAY-U), saw only a marginal rise in allocation in the 2021-22 budget, constituting 1.512% of total expenditure. However, this share has since declined significantly, dropping to just 0.63% in the 2024-25 budget. Similarly, the Pradhan Mantri Awas Yojana - Rural (PMAY-R) has witnessed inconsistent budget allocations between 2017-18 and 2024-25 (BE), reflecting a lack of sustained focus on housing and urban infrastructure development.

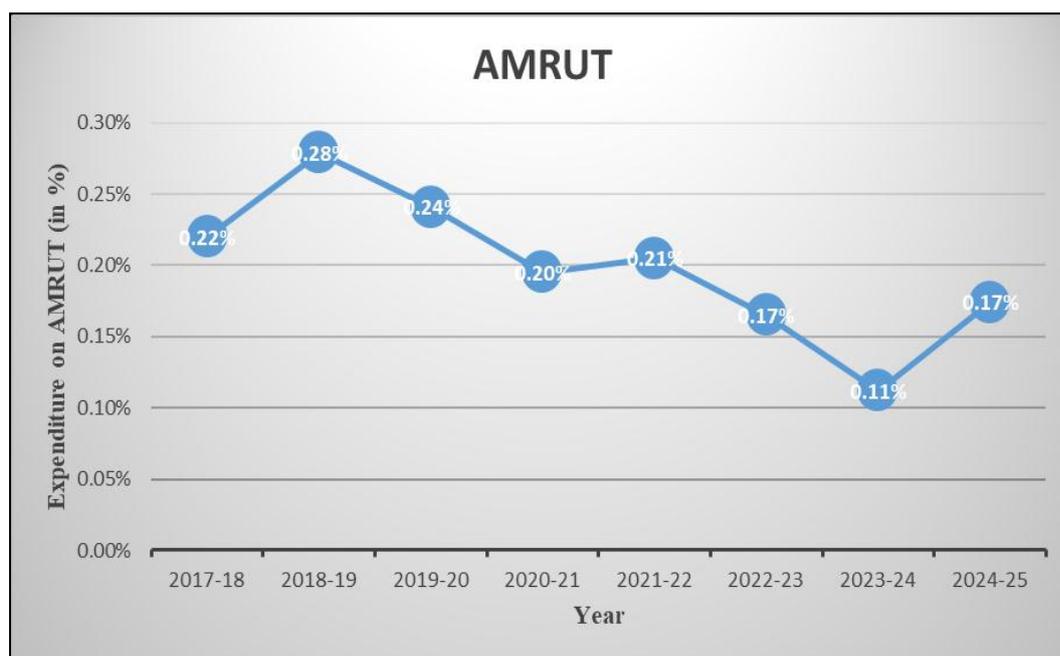
The Atal Mission for Rejuvenation and Urban Transformation (AMRUT), launched in June 2015 in 500 cities, initially focused on ensuring safe and reliable drinking water supply across urban areas. With the launch of AMRUT 2.0 in October 2021, the mission expanded its focus to making cities self-reliant and water-secure, while also aiming for universal coverage of sewerage and septage management in the same 500 cities. However, when we look at the expenditure on AMRUT as a share of the total budget expenditure, there was an initial increase, but this has been followed by a consistent decline in recent years. This downward trend in funding raises concerns about the ability to meet the mission's ambitious goals, especially as cities grow and demand for water and sanitation infrastructure increases.

Fig 2. Total outlay for AMRUT 1.0 and 2.0



Source: Economic Survey 2023-24, pp – 433

Fig 3. Expenditure on AMRUT / Total budget expenditure



Source: Author's computation, data from Ministry of Housing and Urban Affairs

The Smart City Mission, launched in June 2015, aimed to promote cities that offer core infrastructure, a clean and sustainable environment, and an improved quality of life for citizens through the use of 'smart solutions.' However, the data shows a sharp decline in the allocation of funds for this mission when comparing the expenditure on smart cities to the total budget expenditure over the years. This drop in funding raises concerns and questions about the ability to achieve the mission's goals.

Fig 4. Expenditure on smart city mission / Total budget expenditure

Source: Author's computation, data from Ministry of Housing and Urban Affairs

Challenges and opportunities

The challenges and opportunities in infrastructure development include land-related issues, skill demands, and the need for improving private participation. Climate and environmental sustainability are also crucial, alongside the lack of aggregation of financial flows into infrastructure projects. Additionally, there is a significant gap in obtaining a comprehensive overview of the physical progress of these projects, which hinders effective planning and execution. Addressing these challenges can unlock potential opportunities for sustainable growth in infrastructure.

Conclusion

To conclude, the consistent focus on enhancing road, rail, and air connectivity, as well as sanitation and digital infrastructure, has led to substantial growth in these sectors. While India's investment in infrastructure has primarily been funded by the public sector, there is a pressing need for greater private sector financing and resource mobilization. Additionally, establishing and maintaining a reliable statistical database for the infrastructure sector is essential for effective planning and execution. The development of resilient, world-class infrastructure - spanning physical, social, financial, and digital domains, is fundamental to India's vision of achieving Viksit Bharat by 2047. The government's sustained focus on

infrastructure, especially as a key priority within the 'Saptarishi' framework for the vision of Amrit Kaal, highlights its critical role in national progress. With a proposed investment of Rs. 11,11,111 crore, there is significant hope that the investment will create a strong multiplier effect on the economy.

References

Government of India, Ministry of Finance, Department of Economic Affairs, & Economic Division. (2024). Economic Survey 2023-24.
India Budget | Ministry of Finance | Government of India. <https://www.indiabudget.gov.in/>