



Dynamics of Globalization and Inclusive Economic Transformation in India: Interlinkages Between Financial Development, Energy Consumption, Employment, Poverty, and Sustainable Economic Growth

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Abstract

India's economy has experienced rapid transformation since the early 1990s, driven by globalization and economic reforms. This process has boosted trade; investments, technology, and social development, helping India become one of the world's fastest-growing economies. Financial development, including expanded banking services and digital payments, has made economic benefits accessible to a broader section of society, especially in rural areas. Energy consumption has increased to support industries, transportation, and households, though reliance on non-renewable sources poses environmental challenges. Employment opportunities have grown, but many workers remain in informal sectors with limited social security, highlighting the need for inclusive growth. Despite progress, regional disparities, poverty, and environmental concerns persist.

This study explores the interconnections between globalization, financial development, energy use, employment, poverty reduction, and sustainable growth in India. Using secondary data from government sources and international agencies, it analyzes trends and relationships over the period from 1991 to 2024. The findings suggest that balanced policies promoting financial inclusion, renewable energy, productive employment, and social protection are crucial for inclusive and sustainable development. The paper emphasizes that integrating economic, social, and environmental objectives can help India build a resilient, equitable, and environmentally sustainable economy. It concludes that future

growth depends on harmonizing progress with social justice and ecological sustainability; ensuring benefits reach all sections of society, especially the marginalized and vulnerable groups.

Keywords: Globalization, Economic Reforms, Social Security, Financial Development, Energy Consumption, Poverty Reduction, and Sustainable Growth.



Introduction

India's economy has undergone significant changes since the early 1990s, mainly driven by globalization and economic reforms. These changes have opened up new opportunities for trade, investment, technology, and international cooperation, helping India become one of the fastest-growing economies in the world. As globalization expanded, India experienced rapid economic growth, industrialization, and social development, which contributed to reducing poverty and improving living standards for many people. Financial development, such as the expansion of banking services and digital payments, has played a crucial role in making economic benefits more accessible to all sections of society, especially in rural areas.

Additionally, the increasing use of energy to support industries, transportation, and households has been vital for economic progress, though it also presents environmental challenges. Employment opportunities have grown, but a large part of the workforce still remains in informal sectors with limited social security. This makes inclusive growth and sustainable development essential for ensuring that all citizens benefit from India's economic transformation. To achieve long-term prosperity, India needs to balance globalization, financial inclusion, energy efficiency, job creation, and poverty reduction while protecting the environment. This integrated approach can help India build a more equitable and sustainable economy that benefits everyone, especially marginalized and vulnerable groups. Understanding the complex interconnections between these factors is critical for designing policies that promote inclusive and sustainable economic growth in India's dynamic landscape.

Statement of the problem

India has made remarkable progress in economic growth and development over the past few decades. However, this rapid transformation has also brought several challenges that need urgent attention. One major issue is that the benefits of globalization and economic growth have not reached all sections of society equally. While urban areas and wealthy groups have gained significantly, rural populations, women, and marginalized communities still face poverty, unemployment, and limited access to quality education and healthcare. This creates a gap between different regions and social groups, leading to inequality and social unrest. Another challenge is ensuring sustainable development. India's heavy reliance on fossil fuels for energy has increased pollution and environmental degradation, threatening the health of the population and the stability of ecosystems. Despite efforts to promote renewable energy, the country still depends largely on coal and other non-renewable sources, making it difficult to balance economic growth with environmental protection.

Employment generation remains a significant concern as well. Although economic reforms have created new jobs, many workers are employed in informal and low-productivity sectors with little job security or social benefits. This situation hampers efforts to reduce poverty and improve living standards sustainably. Furthermore, regional disparities in development, access to financial services, and infrastructure continue to hinder inclusive growth. To address these issues, India needs integrated policies that promote financial inclusion, green energy, productive employment, and social protection. Without addressing these interconnected problems, the goal of sustainable and inclusive economic transformation in India may remain elusive. Therefore, understanding and tackling these challenges is vital for building a resilient, equitable, and environmentally sustainable economy for the future.

Objective

The overall objective of the article is to explore how globalization and economic reforms have transformed India's economy since 1991. It aims to analyze the interconnections between financial development, energy consumption, employment, poverty reduction, and sustainable growth. The article seeks to highlight the progress made and the challenges faced in achieving inclusive and equitable development. It also aims to identify policies that can promote sustainable economic transformation while protecting the environment and social equity. By understanding these dynamics, the article emphasizes the importance of balanced, integrated strategies for India's long-term prosperity. Ultimately, it aims to provide insights for policymakers to foster inclusive growth that benefits all sections of society with the help of secondary sources of information and statistical data pertaining to the theme of the article.

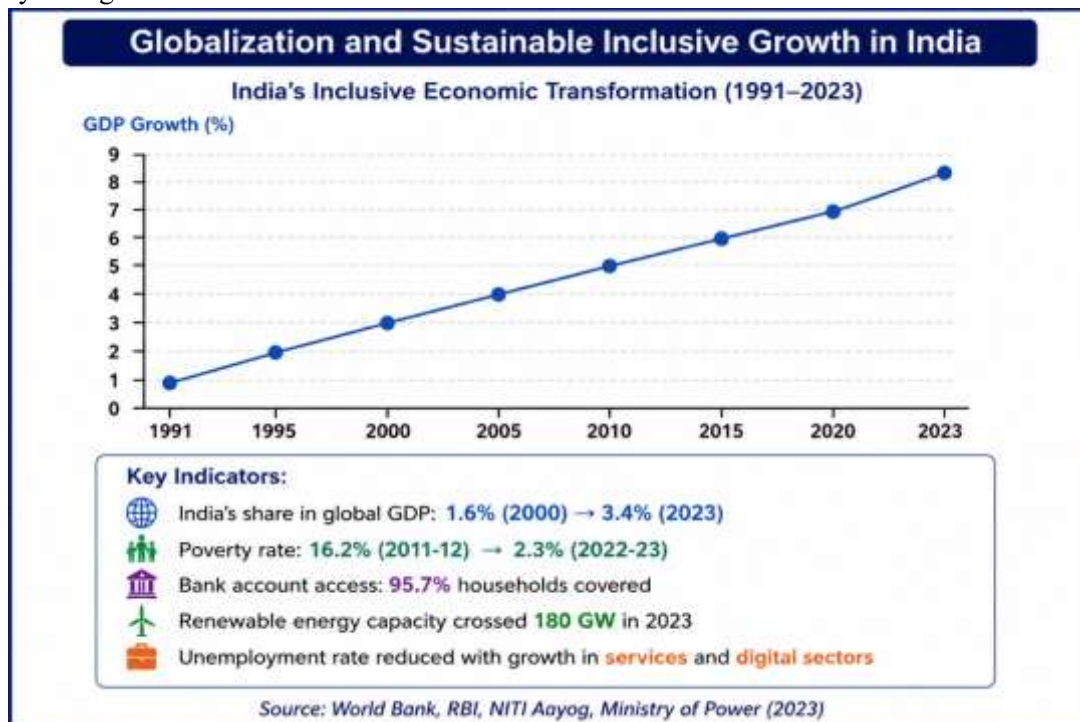


Research Methodology

This study primarily employs a descriptive and analytical approach to explore the interconnections between globalization, financial development, energy consumption, employment, poverty, and sustainable growth in India. The research relies on secondary data sources, including government reports, economic surveys, academic research papers, and statistical databases such as the World Bank, IMF, and India's Ministry of Statistics and Programme Implementation. Quantitative analysis is used to examine trends, correlations, and impacts of various macroeconomic variables over the period from 1991 to 2024. The methodology involves analyzing key indicators like GDP growth, FDI inflows, energy consumption patterns, employment rates, and poverty levels to understand their interlinkages. This approach helps to identify causal relationships and policy implications for inclusive and sustainable economic transformation in India. The focus is on interpreting data in a simple, clear manner to facilitate understanding of complex economic dynamics and to provide meaningful insights for policymakers and stakeholders.

Globalization and Sustainable Inclusive Growth in India

Globalization has played a vital role in transforming the Indian economy by increasing trade, foreign investment, technology transfer, and integration with global markets. Since the economic reforms of 1991, India's GDP growth has accelerated significantly, making India the world's fifth-largest economy. India's share in the global economy increased from 1.6% in 2000 to 3.4% in 2023. Extreme poverty also declined sharply from 16.2% in 2011-12 to 2.3% in 2022-23. Financial development has strengthened inclusive economic transformation through banking expansion, digital payments, and financial inclusion schemes such as PMJDY. Around 95.7% of Indian households now possess a bank or post office account, while women hold nearly 55.63% of Jan Dhan accounts. Improved financial access has encouraged savings, entrepreneurship, and employment generation.



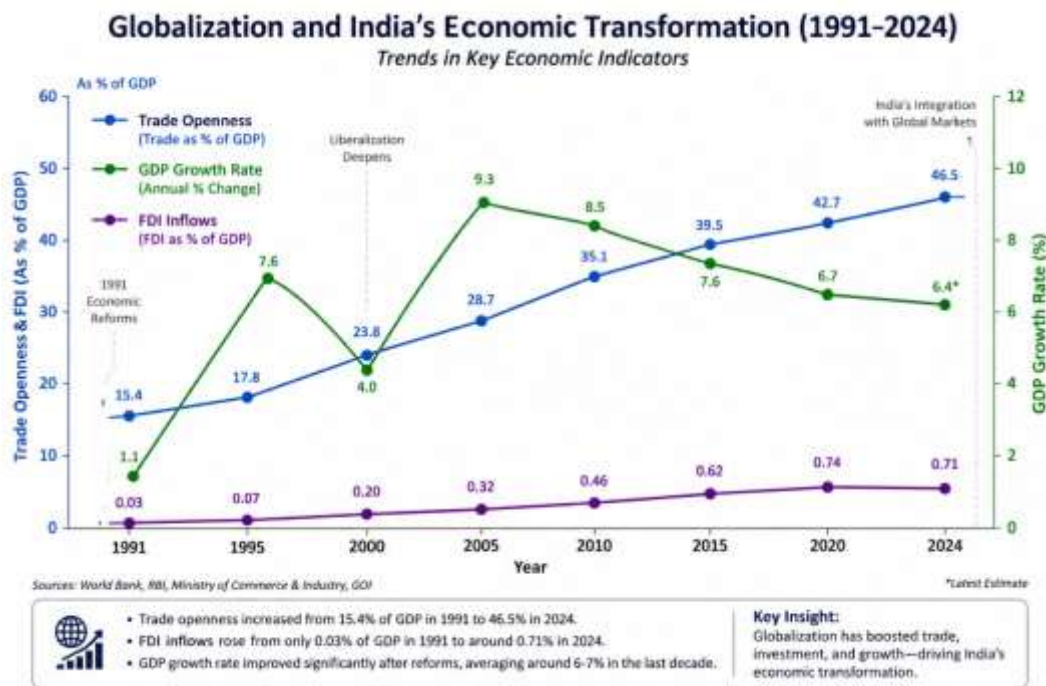
Energy consumption is closely connected with industrialization and economic growth. India's rising urbanization and industrial expansion have increased energy demand, yet studies show that globalization and financial development can also improve energy efficiency and sustainability. Renewable energy investments and green technologies are helping India move toward sustainable development goals. Employment growth remains a major challenge despite economic expansion. India's unemployment rate declined from 6.2% in 2018-19 to 3.4% in 2022-23, and labour force participation increased from 53.6% to 61.6% during the same



period. However, large shares of workers still remain in informal and low-productivity sectors. Therefore, inclusive and sustainable economic growth in India requires balanced policies that promote globalization, financial inclusion, green energy, productive employment, poverty reduction, and social equity simultaneously. This integrated approach can ensure long-term economic transformation and improved living standards for all sections of society.

Dynamics of Globalization and India's Economic Transformation (1991–2024)

Globalization has significantly transformed India's economy since the 1991 economic reforms. Trade liberalization, foreign direct investment (FDI), technological integration, and participation in global markets have accelerated economic growth, industrial expansion, and social development. India shifted from a closed economy to one of the world's fastest-growing emerging economies. The country's GDP growth increased from nearly 1.1% in 1991 to around 6.4–7% in recent years, while trade openness rose from 15.4% of GDP in 1991 to about 46.5% in 2024.



Trade liberalization reduced tariffs and encouraged exports, leading to rapid expansion in manufacturing, information technology, pharmaceuticals, automobiles, and service industries. India's services exports increased substantially, contributing nearly 44% of total exports by 2024. Foreign direct investment also played a major role in economic transformation. FDI inflows increased from only 0.03% of GDP in 1991 to around 0.71% in 2024, supporting infrastructure development, industrial productivity, employment generation, and technology transfer. Technological integration and globalization improved communication systems, digital infrastructure, banking services, and innovation capabilities. India emerged as a global IT and outsourcing hub, creating millions of jobs and strengthening financial development.

Global participation also enhanced competition, productivity, and consumer choice, improving living standards and reducing poverty levels over time. Studies show that exports, imports, and FDI have a long-run positive relationship with economic growth in post-reform India. However, globalization has also widened regional and income inequalities, increased dependence on global markets, and created challenges related to environmental sustainability and employment insecurity. Therefore, inclusive policies focusing on skill development, sustainable energy use, social protection, and balanced regional growth are essential for ensuring that globalization contributes to equitable and sustainable economic transformation in India.



Financial Development and Sustainable Economic Growth in India

Financial development has become a major driver of sustainable economic growth in India. Expansion in banking services, digital finance, capital markets, and financial inclusion has strengthened investment, entrepreneurship, income generation, and long-term economic stability. The spread of banking infrastructure and digital financial services has improved access to credit for households, farmers, women, and small businesses, particularly in rural and semi-urban regions. India's digital financial revolution has accelerated rapidly through the Unified Payments Interface (UPI). In FY25, UPI processed nearly 185.8 billion transactions and accounted for more than 83% of India's digital payment volume. Digital payments now represent almost 99.9% of non-cash retail transactions in the country. This transformation has reduced transaction costs, increased transparency, and encouraged formal economic participation. Financial inclusion has also improved significantly through schemes such as Pradhan Mantri Jan Dhan Yojana (PMJDY). By 2025, India's Financial Inclusion Index reached 67, while Jan Dhan accounts crossed nearly 57 crore beneficiaries, with a large share belonging to women and rural populations.

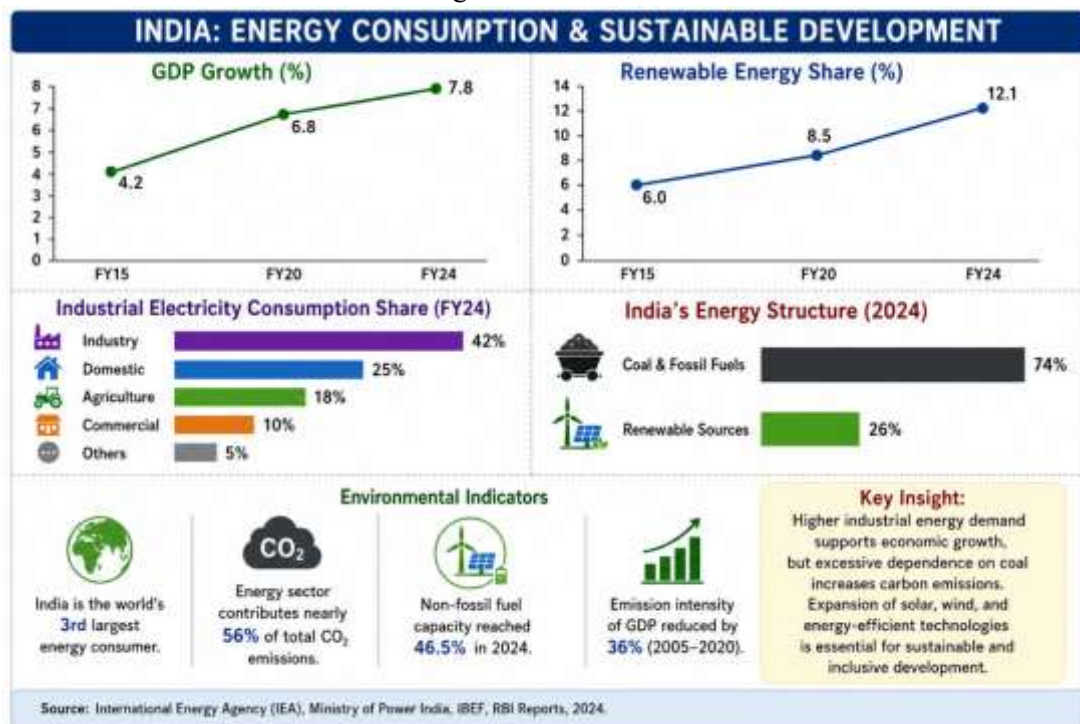




Greater financial access has enabled savings mobilization, easier credit access, insurance coverage, and entrepreneurial growth among micro and small enterprises. Capital market expansion and fintech innovation have further supported economic modernization. Digital lending, mobile banking, and fintech platforms have widened credit accessibility and promoted start-ups, self-employment, and MSME growth. Studies indicate that financial inclusion and digital payment growth positively influence GDP and productivity by encouraging investment and economic participation. Thus, financial development in India acts as a catalyst for inclusive and sustainable economic transformation by integrating technology, finance, employment generation, and poverty reduction into the broader process of globalization and economic growth.

Energy Consumption, Economic Growth, and Environmental Sustainability in India

Energy consumption plays a vital role in India's economic development by supporting industrial production, transportation, agriculture, and digital infrastructure. Rapid globalization and industrialization have increased India's demand for energy, making the country the world's third-largest energy consumer in 2023. India's GDP grew by nearly 7.8% in 2023, reflecting the strong connection between energy use and economic expansion. The industrial sector remains the largest consumer of electricity, accounting for around 42% of total electricity consumption in FY24. Coal continues to dominate India's energy structure, contributing nearly 79% of domestic energy supply and over 74% of electricity generation. Heavy dependence on fossil fuels has increased carbon emissions and environmental degradation.

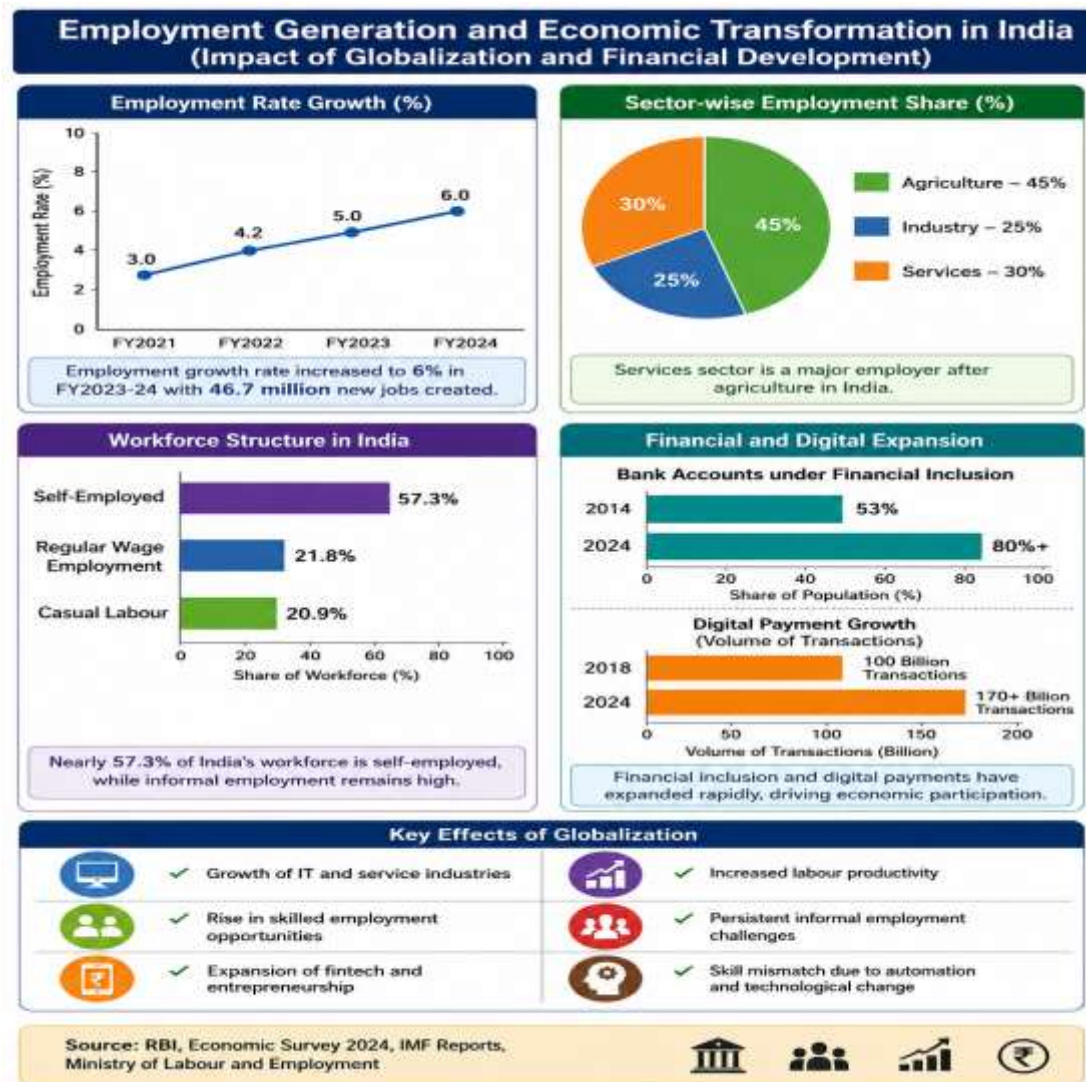


India's energy sector contributes more than 56% of total CO₂ emissions, highlighting the environmental challenges associated with non-renewable energy consumption. At the same time, India is rapidly expanding renewable energy to promote sustainable development. The share of renewable energy in electricity generation increased from 6% in FY15 to 12.1% in FY24, while non-fossil fuel sources accounted for nearly 46.5% of installed electricity capacity by 2024. India also reduced the emission intensity of GDP by nearly 36% between 2005 and 2020, indicating improved energy efficiency and cleaner production systems. Energy efficiency measures, solar expansion, wind energy projects, and green finance are supporting India's progress toward Sustainable Development Goals (SDGs). However, rising industrial demand and urbanization continue to increase pressure on energy resources. Therefore, balancing economic growth with renewable energy adoption, carbon reduction, and efficient energy utilization is essential for achieving inclusive and environmentally sustainable development in India.



Globalization, Financial Development, and Employment Generation in India

Globalization and financial development have significantly influenced employment generation and economic transformation in India. Liberalization policies since 1991 encouraged foreign direct investment (FDI), industrial expansion, technological advancement, and integration with global markets. These developments increased employment opportunities in manufacturing, information technology, banking, telecommunications, retail, and service industries. India's employment growth rate increased to nearly 6% in FY 2023–24, with around 46.7 million new jobs created, reflecting the positive impact of economic expansion and financial sector growth.



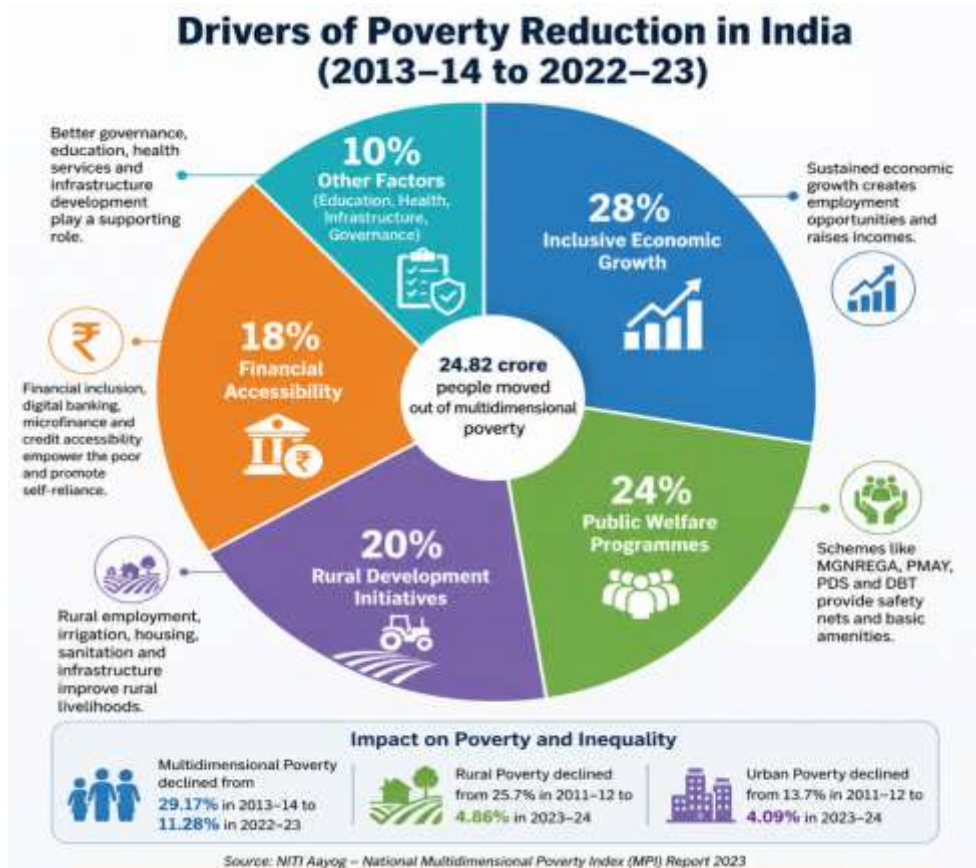
Financial development through banking expansion, digital finance, microfinance, and credit accessibility has supported entrepreneurship, small-scale industries, and self-employment. The rise of digital payment systems and fintech platforms has improved labour market participation and income opportunities, especially among youth and women. At the same time, globalization-driven technological progress has enhanced labour productivity and industrial efficiency. India's IT and digital economy sectors have become major sources of skilled employment and export earnings. However, employment generation remains uneven. A large share of India's workforce continues to work in the informal sector. According to the Economic Survey 2024, nearly 57.3% of workers are self-employed, while informal employment still dominates labour markets. Technological automation and global competition have also created skill mismatches, leading to



underemployment among educated youth. Studies indicate that around 80–90% of workers are still employed in informal or unorganized sectors with limited job security and low wages. Therefore, India must strengthen skill development, labour-intensive industries, financial inclusion, and social protection policies to ensure that globalization and financial development create inclusive, productive, and sustainable employment opportunities for all sections of society.

Economic Growth and Poverty Reduction in India: Towards Inclusive and Sustainable Development

India's economic growth has played a crucial role in reducing poverty and improving living standards, particularly when supported by inclusive development policies, rural welfare programmes, and financial inclusion initiatives. Over the last decade, India has emerged as one of the world's fastest-growing economies, recording GDP growth rates above 7 percent in several years. This growth, combined with targeted public welfare schemes, has significantly reduced multidimensional poverty across rural and urban regions. According to the National Multidimensional Poverty Index (MPI), nearly 24.82 crore people moved out of multidimensional poverty between 2013–14 and 2022–23, while the poverty rate declined from 29.17 percent to 11.28 percent. Inclusive growth policies such as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Pradhan Mantri Awas Yojana (PMAY), Public Distribution System (PDS), and direct benefit transfers have strengthened rural livelihoods and reduced socio-economic deprivation among vulnerable populations. Rural poverty witnessed a major decline from 25.7 percent in 2011–12 to around 4.86 percent in 2023–24, while urban poverty decreased from 13.7 percent to 4.09 percent during the same period.



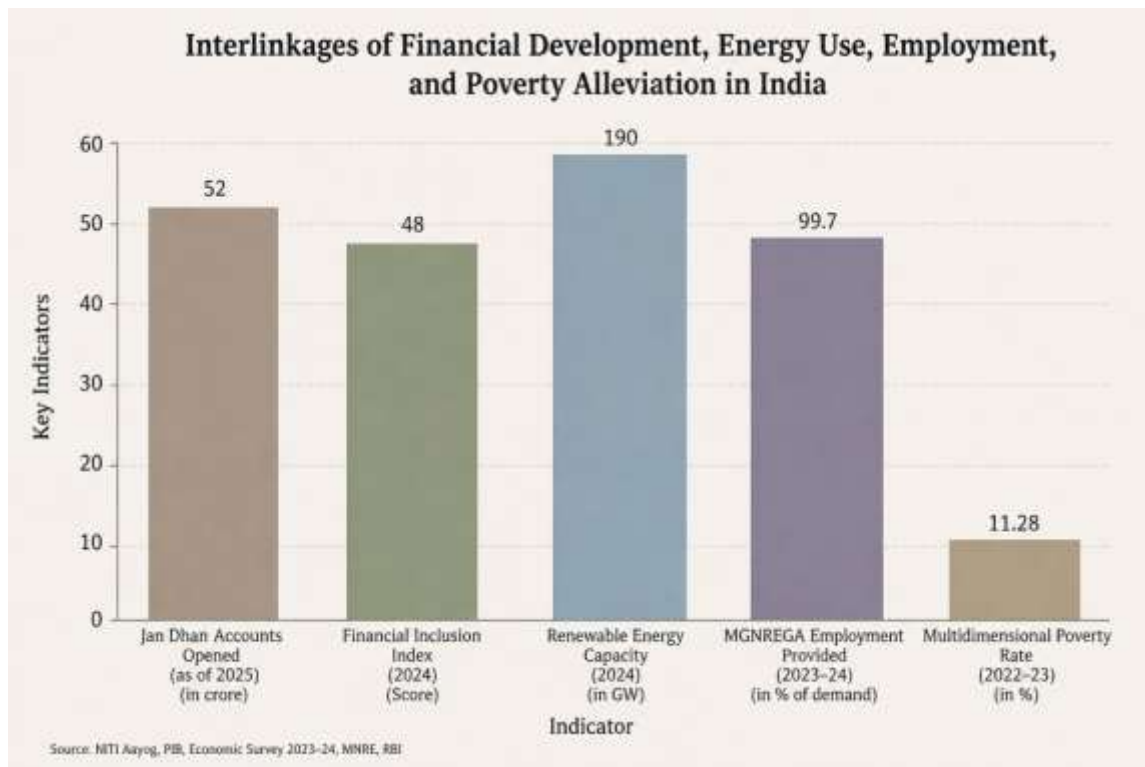
Financial accessibility has also contributed to poverty reduction through schemes such as Pradhan Mantri Jan Dhan Yojana, digital banking, microfinance, and credit accessibility. Increased financial inclusion has enabled low-income households, women, and rural workers to access savings, loans, insurance, and government subsidies, thereby improving economic security and entrepreneurship opportunities. However, regional inequality, unemployment, informal labour, and unequal access to quality education and healthcare continue to challenge inclusive development. Therefore, sustainable poverty reduction requires balanced regional growth,



employment generation, social protection, human capital investment, and equitable access to economic opportunities to ensure long-term inclusive economic transformation in India.

Interlinkages of Financial Development, Energy Use, Employment, and Poverty Alleviation in India

The interlinkages among financial development, energy use, employment generation, and poverty alleviation play a crucial role in shaping India's inclusive economic transformation. Financial development through banking expansion, digital finance, microcredit, and financial inclusion enhances investment opportunities, entrepreneurship, and income generation. India's financial inclusion has expanded significantly through schemes such as Jan Dhan Yojana, with over 52 crore bank accounts opened by 2025, improving access to savings, credit, and welfare benefits. Increased financial accessibility stimulates industrial growth and employment creation, particularly in rural and informal sectors. Energy consumption is another key driver of economic transformation. Rising industrialization and urbanization have increased India's energy demand, while renewable energy investments have created new employment opportunities. India's renewable energy capacity crossed 190 GW in 2024, contributing to sustainable growth and reducing dependence on fossil fuels. Reliable energy access improves productivity in agriculture, manufacturing, and services, thereby enhancing employment and household incomes.



Employment acts as the connecting link between economic growth and poverty reduction. Expansion in manufacturing, services, infrastructure, and green energy sectors has improved labour market participation and income generation. Government programmes such as MGNREGA and skill development initiatives have strengthened rural employment and social security. According to NITI Aayog, 99.7% of households demanding work under MGNREGA received employment opportunities during 2023–24. The combined effect of financial inclusion, energy accessibility, and employment growth has contributed to a decline in poverty. India's multidimensional poverty rate declined from 29.17% in 2013–14 to 11.28% in 2022–23, with nearly 24.8 crore people escaping poverty. Economic Survey 2023–24 also reported that 13.5 crore people moved out of multidimensional poverty between 2015–16 and 2019–21. Thus, the long-run relationship among these macroeconomic variables demonstrates that balanced financial growth, sustainable energy use, and productive employment are essential for equitable and sustainable development in India.



Policy Recommendations for Inclusive and Sustainable Economic Growth in India

India's economic transformation under globalization requires balanced policies that combine financial inclusion, clean energy, employment generation, and poverty reduction. Although India has made rapid progress in economic growth, regional inequality and unemployment still remain major concerns. According to the Economic Survey 2025–26, India's unemployment rate declined to 4.8%, while female labour force participation increased from 23.3% in 2017–18 to 41.7% in 2023–24. First, financial inclusion must be strengthened through digital banking, microfinance, and affordable credit for rural households, women, and small entrepreneurs. Expanding financial literacy programmes and improving cyber security can encourage safe digital transactions and savings behaviour. India's Financial Inclusion Index reached 67.0 in 2025, showing progress in access and usage of financial services. Second, India should accelerate green energy adoption by investing in solar, wind, and clean technology infrastructure.

Renewable energy expansion can create employment opportunities and reduce environmental degradation. India added a record 44.5 GW of renewable energy capacity in 2025 and achieved 50% non-fossil fuel electricity capacity ahead of its 2030 target. Third, productive employment generation should focus on skill development, rural industrialization, MSME support, and green jobs. Renewable energy projects alone are expected to create nearly 330,000 jobs, especially for semi-skilled and rural workers. Fourth, poverty reduction policies should emphasize quality education, healthcare, social protection, and infrastructure development in backward regions. The multidimensional poverty rate in India declined to 15.5%, reflecting improvements in welfare programmes and rural development initiatives. Finally, inclusive and sustainable growth requires coordinated policies that integrate economic efficiency, social justice, and environmental sustainability. Balanced regional development, women's empowerment, and climate-resilient growth strategies are essential for achieving long-term prosperity and equitable economic transformation in India.

Conclusion

India's economic journey since 1991 has been marked by remarkable growth driven by globalization, technological progress, and financial development. These factors have helped reduce poverty, create jobs, and improve living standards for many people. However, the benefits of this rapid transformation have not reached everyone equally. Rural areas, women, and marginalized communities still face challenges like unemployment, limited access to quality education and healthcare, and regional disparities. Environmental concerns, mainly due to heavy reliance on fossil fuels, also pose hurdles for sustainable development. To ensure inclusive growth, India needs a balanced approach that promotes financial inclusion, renewable energy, productive employment, and social protection.

Strengthening digital banking, expanding renewable energy projects, and investing in skill development can generate more jobs and reduce poverty. Additionally, policies that focus on regional development, women's empowerment, and environmental sustainability will help create a more equitable economy. By integrating economic, social, and environmental goals, India can build a resilient, fairer, and greener economy. This comprehensive strategy is essential for achieving long-term prosperity that benefits all citizens, especially the vulnerable and marginalized groups. Overall, India's future growth depends on its ability to balance economic progress with social justice and environmental protection, ensuring sustainable and inclusive development for generations to come.



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