

Sustainability in Economics: Rational Economic Practices & Its Impact on Future Growth Rate.

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ABSTRACT:

Growth always comes with certain side effects or what we call as negative externalities. It is almost impossible to achieve growth or attain development without disrupting or depleting a particular aspect of an ecosystem. Man, when he invented paper, he started using it so extensively and exceedingly that the rain forests were cut down thoughtlessly without reforestation and that led to large scale deforestation. When the environmentalists realized that the paper usage was the reason behind the unprecedented felling of trees all over the world, then plastic was invented so that it will replace paper and thereby lead to reduction in the usage of paper and thus trees felled for this purpose was reduced. But nevertheless, cutting of trees continued and here we stand today where we have literally littered the deepest part of the earth i.e., the oceanic trenches. Replacing paper with plastics gave way to plastic pollution that is toxification of the land and ocean. Today there is no place on earth where one can not find plastic, we have not spared even the poles. All these are not by products of human civilization, but these are the resultants of unprecedented and unwarranted economic activities. Earlier times man worked and ate for that particular day, the moment when man started to work for future, he began to exploit what was rightfully others' i.e., future generations. In this paper we aim to study the impact of sustainability practices of new gen on the growth prospects or outlook of the people. We have used primary data and simple statistical analysis to find out if there is any association between the same.

Keywords: Sustainability, Growth Index, Depletion. Consumption

This paper discusses the environmental challenges India faces, such as contamination from hydrocarbon use, and examines how rapid economic growth intensifies these impacts. The authors note that policymakers have concerns about whether sustainability measures could hinder economic progress. The study explores India's journey from focusing solely on economic expansion to incorporating broader living standards and ecological amenities into development models.

Objectives

- Explore various aspects of economic growth and sustainable development in India
- Discuss the relationship and impact of components such as GDP, per capita income, exports, and imports on sustainability.
- Identify the major contributors to economic growth and sustainable development, including metropolitanization, business progress, and economic planning.

Methodology

- Mixed methods approach: The paper reviews both theoretical studies and those with quantitative secondary data.
- Key indicators: GDP, per capita income, exports, and imports are considered for measuring economic sustainability.

Economic growth and sustainable development are intertwined in India's journey, with the country aiming for rapid economic expansion while addressing the environmental and social costs. India has made significant strides in both areas, but major challenges persist. The nation's approach is guided by its commitment to the UN's Sustainable Development Goals (SDGs) and its own domestic policies.

Economic Growth Trends in India

India's economy is one of the fastest-growing in the world, with a robust GDP growth rate. The country's growth is primarily driven by strong domestic demand, a growing middle class, and significant public and private investment. However, this growth is not without challenges, including:

- Subdued manufacturing activity: While the service sector remains resilient, manufacturing and industrial production have shown signs of weakness.
- External risks: Global economic headwinds and trade tensions, such as tariffs, pose risks to India's export growth.
- Income inequality: Economic growth hasn't always translated into equitable wealth distribution, with significant disparities remaining between different regions and communities.

Sustainable Development Progress and Challenges

Sustainable development in India is a multifaceted challenge that requires balancing economic, environmental, and social pillars. India has adopted the UN's 17 Sustainable Development Goals (SDGs) as a framework for its national development agenda.

Progress Made

India has demonstrated commendable progress on several SDGs, as reflected in the SDG India Index published by NITI Aayog.

- Poverty Reduction: Significant gains have been made in reducing multidimensional poverty.
- Clean Energy: India has made remarkable progress in expanding access to affordable and clean energy. The country's renewable energy capacity has grown five-fold in the last decade, and it is on track to meet its goal of 50% non-fossil fuel power generation by 2030.
- Infrastructure: There has been a focus on building resilient infrastructure and promoting sustainable industrialization.

Key Challenges

Despite the progress, India faces critical challenges in its pursuit of sustainable development.

- Environmental Degradation: Rapid industrialization and urbanization have led to issues like air and water pollution, deforestation, and resource depletion. Urban centers, in particular, are grappling with severe air pollution.
- Resource Management: With a large and growing population, India faces immense pressure on its natural resources, including water and land.

- **Social Disparities:** Despite overall economic growth, poverty and inequality persist, particularly in rural areas. Access to basic needs like clean water, sanitation, and healthcare remains a challenge for many.
- **Climate Change India** is highly vulnerable to the impacts of climate change, including extreme weather events. Mitigating carbon emissions while sustaining growth is a complex task.

Government Initiatives and Future Direction

The Indian government has launched various initiatives to bridge the gap between economic growth and sustainable development. These include:

- **National Green Hydrogen Mission:** Aims to make India a global hub for green hydrogen production, helping to decarbonize hard-to-abate sectors.
- **Production Linked Incentive (PLI) Schemes:** These schemes promote domestic manufacturing and innovation across various sectors, encouraging the adoption of cleaner technologies.
- **FAME-India Scheme:** This initiative promotes the faster adoption of electric vehicles (EVs) by providing incentives for their manufacturing and use, helping reduce reliance on fossil fuels in transportation.
- **National Clean Air Programme (NCAP):** A time-bound, pan-India strategy to reduce air pollution levels.

India's strategy for the future involves a "frugal economy" model, which seeks a middle path between hyper-growth and degrowth. This model prioritizes resource efficiency, distributed manufacturing, and regenerative practices, aligning with India's long-term goal of achieving net-zero emissions by 2070.

The relationship between key economic components like GDP, per capita income, exports, and imports and sustainability is complex and often contradictory. While these metrics are traditionally used to gauge economic progress and prosperity, they frequently fail to account for the environmental and social costs of that growth.¹ This creates a disconnect where a country can appear to be thriving economically while its sustainability is in decline.

Gross Domestic Product (GDP) and Sustainability

GDP, the total value of goods and services produced in a country, is the most common measure of economic growth. However, its relationship with sustainability is fraught with issues.

- **Positive Impact:** A growing GDP can provide the resources to invest in sustainable technologies, environmental protection, and social welfare programs. Higher national income can lead to increased public and private spending on R&D for cleaner energy and pollution control.
- **Negative Impact:** The traditional method of calculating GDP ignores externalities. It doesn't subtract the value of natural resources depleted or the cost of pollution and environmental damage. For example, a country's GDP can increase due to logging an old-growth forest, but this doesn't account for the loss of biodiversity and carbon absorption. This has led to the concept of "Green GDP," which attempts to factor in these environmental costs, providing a more accurate measure of sustainable economic health.

Per Capita Income and Sustainability

Per capita income (GDP divided by population) is a measure of average wealth per person. Its effect on sustainability follows an inverted U-shaped curve, known as the Environmental Kuznets Curve (EKC).

- **Early Stages of Development:** In low-income countries, as per capita income rises, there is often an increase in environmental degradation. People prioritize basic needs and survival, which can lead to practices like deforestation for agriculture and reliance on polluting industries to drive growth.
- **Middle and High-Income Stages:** As countries become wealthier, they tend to reach a turning point where rising income leads to improved environmental quality. This is because citizens demand cleaner environments and have the financial means to invest in pollution-reducing technologies, stricter environmental regulations, and a shift towards service-based or high-tech economies. However, this is not a guaranteed outcome and requires conscious policy choices.

Exports, Imports, and Sustainability

International trade, through exports and imports, links a country's economic activity to the global sustainability landscape.

Exports (Positive and Negative): Positive: Exports can drive economic growth, create jobs, and generate foreign exchange, which can be used to fund sustainable development projects.

Negative: An export-driven economy can lead to over-extraction of domestic resources to meet international demand. This can result in deforestation, water scarcity, and pollution from manufacturing processes. The environmental burden is often shifted from the consuming countries to the producing countries.

Imports (Positive and Negative): Positive: Imports can provide access to advanced green technologies and capital goods, helping a country improve its production efficiency and reduce its environmental footprint. For instance, importing solar panels or wind turbines can accelerate the transition to renewable energy.

Negative: Relying heavily on imports can create a false sense of sustainability. A country may appear to have low domestic emissions, but it is effectively "outsourcing" its pollution by importing goods produced with high emissions elsewhere. This is known as a country's carbon footprint, which includes emissions from imported goods.

Major contributors to economic growth and sustainable development in India include **metropolitanization**, **business progress**, and **economic planning**. Each of these components has a distinct and often dualistic impact, simultaneously driving progress while creating challenges that require careful management.

Metropolitanization

Metropolitanization, the process of cities growing and becoming centers of economic activity, is a powerful engine for both economic growth and sustainable development in India.

- **Economic Growth:** Cities are hubs of innovation and productivity. They generate significant **agglomeration economies**, where the concentration of people, firms, and knowledge leads to increased efficiency and higher output. Indian cities, while accounting for a small percentage of the nation's land, contribute a disproportionately large share of its GDP. They attract skilled labor, foster a vibrant service sector, and provide a strong market for a variety of goods.
- **Sustainable Development:** The density of urban areas can be an advantage for sustainable development. A compact urban form can lead to more efficient public transport, lower per capita energy consumption, and reduced land use compared to sprawling development. Cities also have the potential to be at the forefront of adopting green technologies and implementing sustainable

infrastructure, such as waste management and green energy. However, rapid and unplanned metropolitanization also brings major challenges like pollution, strained infrastructure, and the growth of informal settlements, which undermine sustainability.

Business Progress

The private sector plays a crucial role in India's economic growth and sustainable development. Business progress goes beyond simple profit-making and increasingly involves integrating environmental and social considerations into core operations.

- **Economic Growth:** Business innovation, investment, and competition are fundamental drivers of a dynamic economy. New businesses create jobs, develop new products and services, and contribute to exports. Corporate investment in R&D and technology adoption improves productivity and efficiency, which are key to sustained growth.
- **Sustainable Development:** Businesses are now a critical part of the sustainability agenda.⁷ Companies are adopting **Corporate Social Responsibility (CSR)** and **Environmental, Social, and Governance (ESG)** frameworks to reduce their carbon footprint, manage resources more efficiently, and ensure ethical labor practices. For example, many Indian companies are investing in renewable energy, developing sustainable supply chains, and engaging in waste reduction programs. This shift not only aligns with global sustainability goals but can also improve a company's public image and long-term profitability.

Economic Planning

Economic planning provides the strategic direction needed to align growth with sustainable development goals. In a country as vast and diverse as India, planned interventions are essential to ensure equitable and balanced progress.

- **Economic Growth:** Historically, India's five-year plans directed national resources toward key sectors, laying the foundation for a mixed economy. Today, planning is more focused on creating a favorable policy environment through initiatives like the **Production Linked Incentive (PLI) Schemes** to boost domestic manufacturing and attract investment.
- **Sustainable Development:** The government's role in planning is critical for setting sustainability targets and creating the necessary regulatory and financial frameworks. For instance, the **National Green Hydrogen Mission** and policies promoting electric vehicles (EVs) demonstrate a clear plan to transition to a green economy. The NITI Aayog's **SDG India Index** is another example of a planning tool used to measure and monitor progress on sustainable development across states, promoting a competitive and cooperative federalism approach to achieving national goals.

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Key Findings

- India's growth must account for ecological constraints and environmental health, policy reforms focusing on renewable energy, economic diversification, and green skills are essential for sustainable development.
- The process of “imperishable evolution”—long-term, resilient progress—becomes integral to the Indian context.

Conclusion

Sustainable economic growth in India demands a nuanced, multifaceted approach—balancing rapid expansion with environmental preservation, policy reform, and inclusive development. Researchers recommend integrating renewable energy, ecological safeguards, and skills training to maintain growth without compromising future generations' welfare.

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