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Green Economy in India: prospects and Difficulties

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Abstract: The economic development of India has been growing rapidly since the introduction of economic reforms in 1991. Despite the economic growth, the economic reforms have brought along with them the significant increase of the pollution, resource depletion and climate change. Though economic development is essential, it must not be at the expense of environmental degradation, which is the real-time demand. This paper explores the relationship between economic development and environmental crisis by emphasising the need for green economic transformation. The study finds that rapid economic development has contributed significantly to environmental degradation. This paper concludes with the note that in order to fully integrate green economy principles along with the economic development process, substantial efforts to combine and apply are necessary.

Keywords: Green Economy, Economic Development, Environment, Pollution

Introduction

India was closed economy before the introduction of economic reforms. The country's economy was based on central planning where the scope of foreign trade as well investment was limited. It has been seen that before economic reforms our country's economic development was not up to that level as compared to today's economic development. GDP growth dramatically increased compared to pre-1991 that is from 1-2% to 5-6% of economic growth in the era of 1990s. The economic reforms have brought tremendous transformation in key sector of India's economy that includes sectors such as energy, agriculture, manufacturing. It not only has ballooned but their sharing quite larger in the contribution to the GDP.

However, though, it is quite necessary for a country to improve its capacity on industrialization as well as urbanization, compromising at the greater cost of its environment is a matter of greater concerns. The industrialization and urbanization process post-reform era has deteriorated the environment causing air pollution, water pollution and scarcity, deforestation and habitat loss, climate change, loss of agricultural land, waste generation etc. In this context, the need of green economy is inevitable as green economy promotes sustainable development along with the greater concerns for environmental protection. It aims to achieve economic development and environmental protection simultaneously. Hence, the green economy

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is necessary in order to ensure the long-term prosperity, to protect the planet and build a better society. This paper enquires the relationship between economic development and environmental degradation. It also focuses on how unplanned economic development has been responsible for devastating environmental crisis along with the remedial measures.

Concept of Green Economy: UNEP (2011) defines a green economy as one that results in 'improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. Put another way, a green economy is 'low-carbon, resource efficient and socially inclusive'. Furthermore, 'growth in income and employment are driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services. The International Chamber of Commerce (2011) defines the green economy from a business perspective, as 'an economy in which economic growth and environmental responsibility work together in a mutually reinforcing fashion while supporting progress on social development'.

Current economic and environmental scenario in India:

India is one of the fastest-growing economies in the world. But currently facing several environmental challenges, including air pollution, water pollution, deforestation, lack of waste management, climate change, and so on and so forth. In these days, the economy has been growing in various aspects, making significant contributions to the agricultural and manufacturing sectors, which have grown at the cost of the environment. This economic transformation has become a concern for public health as well as the loss of environmental stability. However, the current economic outlook vividly expresses that in FY 2023-24 the economic growth is 8.2%, which has increased 7% from the previous financial year, i.e., 2022-23. This sharp growth has been driven by manufacturing investment, infrastructure investment, household investment and service sector performance.

Unsustainable development in India is significantly impacting both public health and biodiversity. Rapid urbanization, industrial expansion, and poor environmental governance have led to severe air and water pollution, which in turn cause rising respiratory diseases, cardiovascular issues, and waterborne illnesses—especially in densely populated urban areas. Heatwaves intensified by deforestation and the urban heat island effect are increasing mortality and straining healthcare systems. Simultaneously, unchecked land-use changes, habitat destruction, and pollution are accelerating biodiversity loss, with forests fragmented, wetlands drained, and over 12% of India's wildlife species now threatened. Invasive species, chemical runoffs, and mining further degrade ecosystems, disrupting food chains and ecosystem services. The

cumulative effect is a vicious cycle: weakened ecosystems reduce natural resilience to floods, droughts, and disease outbreaks, which in turn heighten risks to human life and well-being.

Key sectors for green transformation:

Energy: The energy sector can transform to make India greener by improving the shift from fossil fuels to renewable energy. There is scarcity in the resources to produce more and more energy to meet the present need; the use of solar, wind and hydro can be an optimised choice. As of late 2024 India has made up the power generation of 46.5% from non-fossil fuel.

Agriculture: Like the energy sector, the agriculture sector also plays a crucial role in transforming a greener and eco-friendly environment. Although it is a great contributor to the Indian economy, potential efforts are still needed to make our environment greener and stable.

The raising demand for more production of food depended on the use of more pesticides. Soon, the negative impact on the environment began; that's when the food products became contaminated. Soil and water bodies were polluted. Therefore, the agricultural sector needs urgent transformation of the green economy, which can be achieved by sustainable farming, organic agriculture, and water conservation.

The agriculture sector is the backbone of the Indian economy. It employs a larger portion of the population in India, particularly in rural areas. In the agriculture sector a green economy can be encouraged by adopting sustainable farming, which means producing food healthy for the environment, economy and society. Sustainable farming aims to protect soil health, air, and biodiversity. Furthermore, organic agriculture is the method of agriculture where chemical use is avoided, such as pesticides and fertiliser. Apart from that, water conservation for agriculture helps the green economy in India.

Transportation: Another most important sector which is necessary to transform greener is transportation. To protect our environment from damages and losses, we need to promote public transport, electric vehicles, and non-motorised transport. Public transport is a pivotal step because it moves many people with less fuel and energy. Electric vehicles are also a good transport medium through which the excessive air pollution can be checked. Furthermore, non-motorised transport such as walking, cycling, etc., should be prioritised when applicable.

Manufacturing: The manufacturing sector is rapidly growing, which should be greener by applying the principles of the circular economy, green technologies, and eco-labelling. As we all know, the manufacturing sector shares a larger share of economic growth. The manufacturing sector contributes

approximately 17% to India's GDP. It has been a rapidly growing sector of India. According to the International Energy Agency (IEA), industries account for about 25 per cent of carbon dioxide emissions. The circular economy can lessen this pollution by reuse, reduction and recycling. For instance, a plastic bottle can be recycled by producing a new plastic bottle, or it can be used many times or converted to other objects in plastic.

Waste Management: The waste management sector of India has immense capabilities to make the environment greener by adopting strong steps toward recycling, composting, and plastic bans. Poor infrastructure, lack of public awareness and lack of policy enforcement have been major causes of waste mismanagement.

Economic advancement and ecological considerations:

The environment and economic development are interrelated. The economic development has been only possible due to natural resources existing in the environment, which is limited. With the overuse and misuse of natural resources, the environment has been affected severely, and this process is continuous in nature. A little research has been done on the relationship between economic development and environmental degradation. Whereas, these relationships exist for the present time and will exist in the upcoming days. The utility of resources has been increased significantly to fulfil the need of people for the sake of accelerating the country's GDP. But the excessive use of resources has its own consequences. It has a direct impact on environmental degradation. Industrialisation and urbanisation have core values to improve economic development, but this leads to pollution and climate change. We are using excessive fertiliser and pesticides in order to make more output in agriculture, but it is weakening the soil health and causing water pollution. In fact, it is inviting harmful consumption of vegetables, which directly or indirectly affects our health. Hence, it is the prime time to choose sustainable development and environmental protection. Else, the delectation of quality life and environmental harms are sure.

Policy framework and Governmental initiatives:

The environmental policy has been formulated to solve the different environment issues. It encompasses air, water, human health etc. Various policies by the government have been discussed as follows:

National action plan on climate change (NAPCC) was launched in India in July 2008. Its objective is to promote sustainable development, protection of environment, and address the issues of climate change.

Perform, achieve and trade (PAT) scheme is a market-based mechanism introduced by beurou of energy efficiency (BEE) under India's National mission on enhanced energy efficiency (NMEEE). Its aim is to reduce specific energy consumption (SEP) in energy intensive industries.

The FAME (faster adoption and manufacturing hybrid and electric vehicles) launched by the government of India to promote adoption of electric mobility and reduce dependence on fossil fuels.

Challenges to transitioning to a green economy:

Green technologies like solar, wind and electric vehicles require substantial upfront investment. Developing countries may struggle with the financial burden. The lack of awareness among the people is a great concern for adopting a green economy. The investment in awareness and education in this regard is highly appreciated. Another concern is the initial investment and funding issue. Resistance from polluting industries is challenging in India in order to prevail in the green economy in the nation. The policy implementation gaps are being generated. There are gaps in implementing the policy in a proper manner. Coordinated efforts between central and state government are needed.

Opportunities and benefits:

Job creation in green sectors is a major benefit of transitioning to a green economy. This job also called green jobs. By the transitioning to green economy the public health and quality of life will be improved. Green economy has potential to increased long term economic resilience. The sustainable economic development will protect our environment and hence, natural resources will not be misused or misallocated.

Way forward:

To effectively transitioning to Green economy India should adopt trade-off path between economic development and environmental protection. There needs to analyse existing policy to make it effective in ground level. The centre and state should take step collaboratively to resolve the problem. Public private intervention is necessary to expand green infrastructure. In order to change the public behaviour the spread of environmental literacy is urgent.

References:

- Banerjee, P., & Sood, A. (2012). *The political economy of green growth in India* (No. 5). UNRISD Occasional Paper: Social Dimensions of Green Economy and Sustainable Development.

- Kamble, P. S. (2020). Green Economy a Design for Sustainable Development of India. *International Journal of Inclusive Development*, *6*(1), 01-17.
- Ovhal, M. V. V. (2016). *India Towards A Green Economy* (Doctoral Dissertation, Shivaji University, Kolhapur).
- Gajjar, Y. (2021). Exploring the scope of green investment in the coal sector of India and its efficacy on Indian economy. *Environmental Claims Journal*, *33*(4), 279-303.
- Kar, S. K., Mishra, S. K., & Bansal, R. (2014). Drivers of green economy: an Indian perspective. In *Environmental sustainability: Role of green technologies* (pp. 283-309). New Delhi: Springer India.
- Yaduvanshi, N. R., Myana, R., & Krishnamurthy, S. (2016). Circular economy for sustainable development in India. *Indian Journal of Science and Technology*, *9*(46), 1-9.
- Munot, S. (2022). Implications of the green economy for higher and future education institutions in India. *International Journal of Enhanced Research in Educational Development*, *10*(3), 105-115.

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