



## **INDIA’S PATHWAYS TOWARDS GREEN ECONOMY**

**Revathy Rajasekaran, R**

Coordinator, Entrepreneurship and Talent Development Cell,  
Department of Management Studies,  
V.V.Vanniaperumal College for Women,  
Virudhunagar, India.

**Corresponding Author: [reva6887@gmail.com](mailto:reva6887@gmail.com)**

### **ABSTRACT**

India’s Recent Development Experience has been both a spectacular success as well as a massive failure. Over the last decade, India’s strong growth has increased employment opportunities and allowed millions to emerge from poverty. However India’s remarkable growth record has been clouded by a degrading environment and growing scarcity of natural resources. While our economy has grown steadily, this growth has come at the cost of environmental sustainability and has failed to translate into better living conditions for the majority of the Indian people. In a recent survey of 178 countries whose environments were surveyed, India ranked 155th overall and almost last in air pollution exposure. For developing countries, like India, where economies are more dependent on natural resources, environmental issues such as air and water pollution, climate change, energy use and natural resources depletion are of primary importance. Environmental issues are one of the primary causes of disease, health issues and long term livelihood impact for India. Besides, Environmental degradation costs India about Rs.3.75 Trillion annually. Thus economic growth should be sustainable and should also enhance a green economy. A green economy is a low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced Carbon Emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services. Thus this paper analyses India’s pathway to achieve green economy in

terms of government policies and business initiatives. Various steps have been taken in the areas of Agriculture, Construction, Energy, Manufacturing and Transportation to reduce the carbon footprints and to increase the environmental sustainable growth.

**Key words:** Green Growth, Green Economy, Sustainable Development

## INTRODUCTION

The Indian economy is seen as a bright spot in the global landscape. It is one of the fastest growing emerging market economies in the world. As the world looks towards India as a new engine of growth, the Indian economy holds the responsibility to meet the development needs of its billion-plus population, without exceeding its environmental boundaries. Over the last decade, India's strong growth has increased employment opportunities and allowed millions to emerge from poverty. India's remarkable growth record, however, has been clouded by a degrading environment and growing scarcity of natural resources. In a recent survey of 178 countries whose environments were surveyed, India ranked 155th overall and almost last in air pollution exposure. The survey also concluded that India's environmental quality is far below all BRIC countries [China (118), Brazil (77), Russia (73), and South Africa (72)]. Also, according to another recent WHO survey, across the G-20 economies, 13 of the 20 most polluted cities are in India.

Simultaneously, poverty remains both a cause and consequence of resource degradation. India with score of 0.634, ranks 131 out of 187 countries on Human Development Index, where the score falls 27% due to regional disparities in education, health and living standards within the country. Further, a growing population and increasing urbanization have also led to a huge increase in consumption demands. This poses a serious threat to the sustainability of this impressive economic growth. According to the Living Planet report, if India continues its current trajectory of natural resource overuse, its consumption levels would rise to the combined consumption of all the 34 OECD countries in just 14 years. With an ecological footprint that is double its bio-capacity, it is clear that with a business as usual approach, India will not be able to sustain the well-being of its people or natural capital. Hence the country urgently needs to bring about economic reforms that steer India in the direction of green, fair, and inclusive economies.

**WHAT IS GREEN GROWTH?**

The concept of Green Growth has its origin in the Asia and Pacific regions, at the fifth Ministerial Conference on, "Environment and Development" held in March 2005 in Seoul. Green Growth is a term to describe a path of economic growth that uses natural resources in sustainable manner. It is used globally to provide an alternative concept to typical industrial economic growth. Green growth is a strategy for achieving sustainable development. It is focused on overhauling the economy in a way that synthesizes economic growth and environmental protection. It emphasizes economic progress along with low carbon and social inclusive development.

**WHY INDIA NEEDS GREEN GROWTH?**

In 2016, India ranked a very low 68 out of 80 countries, in terms of performance ranking, analyzed in the Global Green Economy Index (GGEI), which is a data driven analysis of national green economy performance. For Developing Countries, like India, where economies are more dependent on natural resources, environmental issues such as air and water pollution, climate change, energy use and natural resources depletion are of primary importance. Environmental issues are one of the primary

causes of disease, health issues and long term livelihood impact for India. Besides, Environmental degradation costs India about Rs.3.75 Trillion annually equivalent to 5.7 percent of the G.D.P with air pollution being a major contributor, according to a World Bank Report. There are significant benefits in moving towards a Green Economy. Green growth is the pursuit of economic growth and development while preventing costly environmental degradations, climate change, biodiversity loss and unsustainable natural resource use.

**GREEN ECONOMY BAROMETER**

The India Green Economy Barometer tracks the economy on five aspects:

- Measuring what matters analyses the resilience of India's economic modeling and measurement. It discusses alternatives to the purely economic terms of measuring - the GDP and the fiscal deficit, such as Gross National Happiness, the Happy Planet Index and Social Progress Index. India ranked 6<sup>th</sup> out of 190 countries ranked by GDP growth in 2017, while in the same year India was ranked 122 out of 155th countries in Gross National Happiness report.

- Greening High Impact Sectors, Key sectors with a high potential to progress towards greening are identified, these are Agriculture, Renewable Energy, Construction, Transport and Medium and Small Industries. The contribution of MSME towards the GDP is high 37% in 2012-13, and it has the potential to provide millions of new jobs.
- Investing in People, assesses the condition of people and the action taken by the government to enhance and develop Human Resources. In 2013 the GOI made it compulsory for the companies to spend 2% of their profits on corporate social responsibilities.
- Managing Natural Systems, emphasizes the protection of India's natural capital – both valuable but finite raw materials, and the harder to measure but irreplaceable assets like biodiversity, rare species and clean air and water. It examines how more can be done to ensure the equitable distribution of resources and promoting resilience for production and consumption.
- Influencing Financial Flows, the trend and quantum of green investment in the economy, along with the government's spending on green economy is analysed, and the inclusiveness of financial sector is assessed. The government has taken the initiative to manage the resources better by introducing new coal taxes, through which a total collection of INR 170 billion was collected till 2014-15. Renewable energy meanwhile has attracted remarkable investment of US\$ 11.4 billion.

#### **A STEP FORWARD TOWARDS GREEN ECONOMY**

The transition to green and inclusive economies has been long deliberated both at national and global level; fortunately, the current domestic and international landscape has created an opportune moment to accelerate it. India has recently made two major global commitments: the 2030 Global Development Agenda (popularly known as the Sustainable Development Goals) and the ratification of the Paris Agreement, which aims for holistic well-being of all, today and in the future, without surpassing the natural boundary limits of environment.

India's 12th Five Year plan (2012-17) for the first time made environmental

sustainability a central pillar of India's development strategy. Since then, India has scrapped Five-Year Plans, and has instead developed a long term 15-year plan. The 15 year vision aims at inclusive development and poverty reduction, and is co-terminus with the period to achieve Sustainable Developmental Goals. Though India has ranked a low 110 out of 149 nations assessed on where they stand with regard to achieve the SDGs. This indicates that India has a long journey ahead, India is off to a good start. The general perception is that SDGs offer a huge opportunity to achieve holistic development in the country and increasingly gaining momentum.

#### **THE WAY AHEAD TOWARDS GREEN ECONOMY**

Five high-impact sectors key to the Green Economy transition in India are Agriculture, Construction, Power, Manufacturing, Transport and Tourism.

##### **Agriculture**

The organic farming sector in India has been undergoing a transformation over the past few years as a result of many new ventures that have disrupted the market. Organic farming was given emphasis in the 2017 Union budget. In 2015, Sikkim was named the first fully organic state in the

country. This has inspired many other state governments to move in the same direction

##### **Construction**

The construction sector is particularly resource intensive: it represents 30% of Indian electricity consumption, and has a high material footprint. India ranks third in the top Ten Countries for LEED (Leadership for energy and environmental design). Further green buildings are projected to grow 20% in the country by 2018. Fly ash utilization in the construction sector has witnessed a steady upward trend. Many private companies are coming up with innovative solutions. Wipro saves 40% energy worth INR 10 million on a 175,000 square feet building every year. Godrej saves 63% energy worth INR 0.9 million energy worth rupees on a 20,000 square feet building every year. The Model Building Bye-Laws of 2016 mandate that all buildings on various plot sizes above 100 square metres shall comply with the green norms.

##### **Energy**

According to a report by the UN Environment Program (UNEP) India was ranked Seventh in the world in terms of investment in Sustainable Energy. The Ministry of New and Renewable Energy targets to set up renewable energy capacities

to the tune of 175 GW by 2022 of which about 100 GW is planned for solar, 60 for wind and other for hydro, bioenergy. Total installed renewable energy capacity (including large hydro projects) in India touched 114.43 GW as of May 2018, which is around 33 per cent of total energy capacity of the country. In 2016, the world's largest solar plant was unveiled in Tamil Nadu with a capacity of 648 MW.

### **Manufacturing**

Green Manufacturing in India is still at the take-off stage. While there has been significant policy development and adoption by the Manufacturing Industry in the area of green energy, there is substantial scope on both the policy front and its adoption in the areas of green products and green processes. The Indian manufacturing sector has a long way to go. Even the more advanced amongst the Indian steel producers consume more than 20% higher gigajoules per ton of hot metal in the iron making stage as compared to their advanced Chinese counterparts, and over 70% more gigajoules per ton compared to advanced western European producer. However, although the country's manufacturing exports are growing, its manufacturing sector generates just 16 percent of India's GDP—much less than the 55 percent from services. Realized at its full

potential, manufacturing could generate 25 to 30 percent of GDP by 2025 and create 60 million to 90 million new jobs in the country.

### **Transportation**

A growing trend in India's transportation sector today is the growth of on-demand transportation and carpooling platforms. These are particularly popular in urban areas and are expected to grow exponentially as Internet penetration improves. The Ministry of Road Transport and Highways signed a pact with Transport for London to revamp the public transportation in India. The pact envisages adoption of best practices for policy reforms in the transport sector. Since 2016, Uber POOL has reported saved over 32 million km of vehicle traffic, over 1.5 million litres of fuel and reduced emissions worth 3.5 million kg. The current patterns and trends of transportation in our cities are extremely energy intensive and highly unsustainable. According to a 2011 study conducted by the Central Pollution Control Board (CPCB) for six cities—Delhi, Kanpur, Bengaluru, Pune, Chennai, and Mumbai, the road transport sector is responsible for a majority of NOX and 30% to 50% of PM emissions in these cities.

### **THE STUMBLING BLOCKS TOWARDS GREEN ECONOMY**

The Key Barrier in attaining green growth is as follows

The larger perception in India among businesses and policy makers remains that environmental protection comes at the cost of economic growth and development.

Financial markets for green investments are at a nascent stage and systems to direct funding towards green and responsible investments are inadequate.

Green technology is generally thought of as unreliable and not cost-competitive. The thinking that India cannot afford to 'pollute now, clean up later' has still not gained mainstream acceptance.

Greening the economy is not fully recognized as a tool to achieve social prosperity and environmental sustainability

## CONCLUSION

Thus Green Economy concept is an exciting approach that links economic growth with human development and environmental sustainability, and holds much promise for India. Such an economy is based on principles of sustainability, justice, dignity, inclusion, good governance & accountability, resilience, efficiency & sufficiency, inter-generational equality and remaining within ecological boundaries. But the road to a green, fair and inclusive economy will not be easy and treading it

will require a strong collaboration between government, businesses and civil society who recognize that our economies need to be guided by different goals, sustained by different activities and deliver different results.

## REFERENCE

1. Bowen A, and Fankhauser S,(2011). The green growth narrative: Paradigm shift or just spin, *Global Environmental Change*, 21(4): 1157–1159.
2. Banerjee, Payal and Atul Sood (2012).The Political Economy of Green Growth in India, United Nations Research Institute for Social Development (UNRISD), Occasional Paper-5.
3. Kamble and Prakash V (2016). Analysis of Green Economy of India, *International Journal North Asian International Research Journal Consortium*, 2: 3-25.
4. Gupta and Himanshu (2015). *Low Carbon Pathways- Working Paper 305*, Indian Council for Research on International Economic Relations, pp16.