

GREEN ECONOMY IN INDIA: POSSIBILITIES AND CHALLENGES

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Abstract

The Green economy has over the past few years become a central concept on the global sustainable development agenda. The concept was first mentioned in a British government-commissioned sustainable development report from 1989. However, it was only during the late 2000s' global economic crisis that green economy was brought to international attention as an economic recovery strategy focused on creating 'green jobs' and tackling climate change and creating real investments. South Korea was the first country to declare 'Low Carbon Green Growth' as its long-term national development vision, in 2008.

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. Mirroring the size and diversity of its economy, environmental risks are wide ranging and are driven by both prosperity and poverty.

Three striking findings emerge from this review:

First, Environmental sustainability could become the next major challenge as India surges along its projected growth trajectory.

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Second, A low-emission, resource-efficient greening of the economy should be possible at a very low cost in terms of GDP growth. While a more aggressive low-emission strategy comes at a slightly higher price tag for the economy it promises to deliver greater benefits.

Third, For an environmentally sustainable future, India needs to value its natural resources, and ecosystem services to better inform policy and decision-making.

Green Economy in India: Possibilities and Challenges

Introduction of green economy

The UNEP has developed a working definition of a green economy as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive.

Practically speaking, a green economy is one whose growth in income and employment is 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. These investments need to be catalyzed and supported by targeted public expenditure, policy reforms and regulation changes. This development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economic asset and source of public benefits, especially for poor people whose livelihoods and security depend strongly on nature.

Principles of Green Economy

Furthermore, the green economy is based on various sustainability principles. Some of the principles present in relevant literature and discourse are:

- The earth integrity principle: every human has the duty to protect the earth and its ecosystems.
- The polluter pays principle: polluters are responsible for the environmental damage they have caused.
- The dignity principle: every human has the right to livelihood.
- The justice principle: benefits and burdens should be shared fairly among all stakeholders.

- The resilience principle: diversity and diversification are preconditions for sustainability as well as quality of life.
- The governance principle: establishment of policies, rules and regulations requires a transparent and participatory process that includes all affected people.
- The planetary boundaries: humans are crossing the 'planetary boundaries' that define our safe planetary operating space. According to scientists, we have already crossed these limits for climate change, biodiversity loss and interference with the nitrogen cycle, and are heading towards the Earth's boundaries for ocean acidification, freshwater use, changes in land use, and interference with the phosphorus cycle.

Towards A Green India

- Although the past decade of rapid economic growth has brought many benefits to India, the environment has suffered, exposing the population serious air and water pollution.
- A new report finds that environmental degradation costs India \$80 billion per year or 5.7% of its economy.
- Green growth strategies are needed promote sustainable growth and to break the pattern of environmental degradation and natural resource depletion. Emission reductions can be achieved with minimal cost to GDP.

India: Possibilities of green economy

As a member of the G-20, India's decision to promote the concept of a green economy is linked to its overall aim to foster prosperity and sustainability in development as elaborated in the country's 11th Five-Year Plan (2007–2012). In embracing green growth, India envisages poverty alleviation and the lowering of economic inequalities as a key benefit that could be derived from implementing the green economy concept. Before embracing green growth, India, in its quest to reduce poverty and spur economic activity, regarded the controls on carbon emissions from fossil fuel-generated energy as unfair. Recently, India's economic development objectives provided a different perspective in which opportunities for growth could be realised from developing a green economy.

In analysing debates on India's approach to developing a green economy, a dominant and a counter-discourse is observed. The main premise of the dominant discourse is that no trade-off exists between economic growth and environmental sustainability. Proponents of the counter-discourse agree that developing a green economy will impact the country's economy positively. Hence, India can pursue both discourses, applying both market and scientific strategies in developing its economy without compromising the environment. Conversely, using historical economic data, proponents of the counter-discourse highlight deficiencies of economic growth in addressing poverty reduction in India; contesting claims that green growth will drastically change India's current economic paradigm, and subsequently lead to prosperity and sustainability for all Indians.

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: agricultural yields are lower on degraded lands, and forests and grasslands are depleted as livelihood resources decline. To subsist, the poor are compelled to mine and overuse the limited resources available to them, creating a downward spiral of impoverishment and environmental degradation.

Key Findings

Green growth is necessary. With cost of environmental degradation at US \$80 billion annually, or equivalent to 5.7% of GDP in 2012, environment could become a major constraint in sustaining future economic growth. Further, it may be impossible or prohibitively expensive to clean up later.

Green growth is affordable. Model simulations suggest that policy interventions such as environmental taxes could potentially be used to yield positive net environmental and health benefits with minimal economic costs for India.

Green growth is desirable. For an environmentally sustainable future, India needs to value its natural resources, and ecosystem services to better inform policy and decision-making especially since India is a hotspot of unique biodiversity and ecosystems.

Green growth is measurable. Conventional measures of growth do not adequately capture the environmental costs, Therefore, it is imperative to calculate green Gross Domestic Product (green GDP) as an index of economic growth with the environmental consequences factored in.

Green Economy is a big Challenge

Reflecting the diversity of the world we live in, and the uniqueness of each country's national circumstances and development priorities, there is no single model or a pathway to the green economy. However, for all countries, shifting to a green economy – one that sets the economy at the centre of generating sustainable development – will require major economy-wide structural and technological changes, or at least the 'greening' of key sectors, such as energy, urban infrastructure, transportation, industry and agriculture. It will also include 'greening' investments nationally and globally, generating 'green' jobs through new 'green' sectors, and supporting and facilitating 'green' trade internationally through national and international policies.

A green policy, at the macro level, is defined by the author as “a policy that balances between natural resource consumption and environmental protection, while seeking to achieve social equity and raise the well-being of the society”. In simple terms, it is policy that has as its central objective a green economy, with the ultimate goal of achieving sustainable development.

The shift to green economy requires a mix of green policy instruments employed in any country, including those of the GCC, may include some or all of the following: market instruments, such as subsidy reform, green taxes and permit markets; legal instruments, including environmental legislation and incorporating sustainable development into trade agreements; government policies and measures, for example sustainable public procurement, sustainable land use and urban policy, integrated management of freshwater, monitoring and accountability measures; and awareness and education campaigns.

Financing the transition to green economy is important enabling tool. To date, various multilateral funds have been established to achieve global environmental protection and related benefits. Most of these environmental financial funds, or green funds, provide support to areas relevant for the green economy, including: green technology, green projects and programs, and measures to shift towards a low-carbon, resource-efficient and climate-resilient economy. At present, the global environmental finance architecture is quite complex. While the existence of several funds and programmes can be considered a merit, it also generates challenges for the coordination of activities, access to funds by recipients, and avoidance of duplication in goals and financing.

Green economy-relevant funding is usually channelled through multilateral funds, such as the Climate Investment Funds, and, starting from 2015, the Green Climate Fund (GCF), established under the UN Framework Convention on Climate Change (UNFCCC). In addition, funds are increasingly channelled through bilateral channels and national environment/climate change.

In addition to the above, there is a need to prioritize the infrastructure projects which ensures that investments are compatible with long-term green economy objectives. New information that takes environmental accounting and statistics are very vital in this regard.

Suggestions

A low-emission, resource-efficient greening of the economy should be possible at a very low cost in terms of GDP growth. A more aggressive low-emission strategy comes at a slightly higher price tag for the economy while delivering greater benefits

Emissions reduction would have a minimal impact on GDP which would be offset by savings through improving health while substantially reducing carbon emissions.

- A 10% particulate emission reduction will lower GDP only modestly. GDP will be about \$46 billion lower in 2030 due to interventions, representing a loss of 0.3 % compared to business as usual.
- A 30% particulate emission on the other hand reduction will lower GDP by about \$97 billion, or 0.7 %.

- GDP growth rate will be negligibly reduced by about 0.02 to 0.04% in both scenarios. There will be significant health benefits under both scenarios which will compensate for the projected GDP loss.
- The savings from reduced health damages will range from \$105 billion in the 30% case and by \$24 billion with a 10% reduction.
- Under the scenarios, another important benefit would be a substantial reduction in CO₂ as a co-benefit which has a potential of being monetized.

Conclusion

India's remarkable growth under liberalisation, privatisation and globalisation process has been clouded by a degrading quality of environment, growing scarcity of natural resources and inequality –

1. The future of agriculture, which provides livelihood of 58 per cent of Indian population, is threatened by loss of biodiversity and ecosystem services, depletion and erosion of top soil nutrients, scarcity of freshwater, aggravated water pollution caused by poor nutrient management, hazardous chemical release, rising greenhouse gases (GHGs) emissions and disposal of waste, under the business-as-usual scenario;
2. Indian cities are plagued by poor basic services for growing urban population and consequent problems of waste management;
3. India's high CO₂ emissions growth despite its low share in world energy demand;
4. Inadequacy in access to modern energy services leads to loss of employment opportunities, negative health effects, negative effect on vulnerable groups of society;
5. Increased volumes of trade and resultant unsustainable levels of resources and increased GHGs emissions.
6. A more sustainable and cleaner environment in India will see generation of downstream jobs to make it a low-carbon Green Economy.
7. Reaping positive externalities in production of energy and resource efficient for international green trade for India.
8. Sustainable farming practices increase food availability and food security, reduce poverty.

9. Middle class consumers will grow significantly by 2030, which would put pressure on resources and points to the need of shift to better consumption pattern with sustainable production and resource utilisation.

10. Waste management and recycling may be proved to be difficult for the developing countries like India to handle this in the initial stage as they lack comparative advantages and need capacity building in this area.

11. The core problem of income inequality in India has not been resolved, so it requires equitable distribution of income for meeting the sustainable development objectives.

12. There are ample evidences of misallocation of capital in the unsustainable sectors in India – property, fossil fuels, and structured financial assets but low investment in renewable energy, energy efficiency, public transportation, sustainable agriculture, and land and water conservation causing reproduction of risks and perpetuation of the same.

It can, therefore, be concluded that given the majority share of unsustainable production and associated technological characteristics, there is urgent need for a policy shift for green reforms to enable India to achieve sustained and sustainable development. There are, of course, discernible concerns like lack of aid flow and restrictive environmental trade measures for developing countries like India while treading the path towards Green Economy. However, rule-based multilateral policies and observance of differentiated responsibilities at the international level by all countries can mitigate most of these problems. Thus efforts in both the national and International fronts are needed in true spirit.

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