Green Economy in context to India: A Review.

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Abstract

The concept of "green economy" has become a topic of growing discussion in light of the environmental crisis. The global economy is on an unsustainable path. Since the industrial revolution, the world economy has grown at the expense of the environment. Natural resources have been exploited without allowing stocks to regenerate, pollutants have accumulated in the biosphere, ecosystems have been degraded severely and biodiversity has been lost at an alarming rate. The key question the developing countries like India are facing is how to reconcile the environmental goals with growth, poverty reduction and other serious problems like water and food supply crises, volatility in energy and food prices, rising greenhouse gases (GHGs) emissions, income disparity, chronic fiscal imbalances and terrorism. This paper tries to review the concept of green economy in context to India and how India is leading a way forward.

Key Words: Green Economy, Environment, sustainability.

Introduction:

India's independence was in itself a turning point in its economic history. During British rule India was primarily used for mass production for earning profit and collecting wealth for development in Europe and it led to a depletion of natural resources, leaving the economy and environment permanently damaged and injured. After independence India's five-year plans were launched in 1951. The first five year plan focused on agriculture and irrigation to boost farm output as India was losing precious foreign reserves on food grain imports. The second five year plan was launched in 1956 and it was based on the Mahalanobis model that advocated rapid industrialization with a focus on heavy industries and capital goods. Then came the Green Revolution spearheaded by Dr M.S. Swaminathan who advocated for moving India towards sustainable development. Environmentally sustainable agriculture, sustainable food security and the preservation of biodiversity became primary and it was termed an "evergreen revolution". With this in the year 1972 the Wildlife Protection Act was introduced and it was a land mark in the history of environment protection in India. Although the concept of environment protection in India started long before from the time of Ancient India. India's economic journey from an impoverished country to an emerging global economy is an inspiring example for many developing

nations. Although economic development has managed to lift millions out of poverty but this has also been accompanied by a wide array of negative environmental and social impacts which have threatened to undermine or deccelerate the economic development that has been achieved to date.

CONCEPT OF GREEN ECONOMY AND RESEARCH PROBLEM

UNEP has defined the green economy as "one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It is low carbon, resource efficient, and socially inclusive" (UNEP, 2011). A "green economy" gives the impression of an economy that is environmentally-friendly, sensitive to the need to conserve natural resources, minimises pollution and emissions that damage the environment in the production process, and produces products and services the existence and consumption of which do not harm the environment. Green economy concept has set out three objectives:

(i) economic recovery;

(ii) poverty eradication; and

(iii) reduced carbon emissions and ecosystem degradation;

The worsening global environmental situation and the growing risk of catastrophic climate change due to high level of industrial emissions associated has convinced the scientists to rethink on the use of conventional technologies. Thus has emerged a new sector in the world economy that encourages the use of safer and cleaner technologies and secondly monitoring and forecasting environmental effects of the technology used.

The United Nation's Millennium Ecosystem Assessment provided an alarming inventory of the degree of deterioration in many of the world's ecosystems (MEA 2005). Global warming is now widely recognised as an immediate threat to humanity. As the Intergovernmental Panel on Climate Change shows, only a few years are left to radically decarbonise the world economy if disastrous global warming is to be avoided (IPCC 2015). Other environmental crises such as the loss of biodiversity, depletion of water reserves, ocean acidification and reduction of soil fertility, among others are also serious and potentially threatening the continuity of human life on Earth (Rockström et al. 2009).

Objective of the study: The general objective of the paper is to deal with the concept of green economy. The specific objective is to reviews the development of green sector of the economy in context to India; its growth and problems involved.

Methodology: In order to review the concept of green economy, secondary data, policies, facts and figures from various UN publications, Government publications, and independent research articles have been consulted and results have been examined and used suitably.

Discussion:

Already in the early 2000s, the Millennium Ecosystems Assessment, a UN-led global assessment of the Earth's ecosystems, concluded that about 60 per cent of the ecosystem services examined had been degraded or were used in ways that cannot be sustained (MEA 2005). Similarly, UNEP (2011) summarises a series of reports showing severe overexploitation of fish stocks, increasing water scarcity, decreasing soil quality and unsustainable rates of deforestation.

Green Economy in context to India:

Green Economy is a complex concept in context to India and it is unlikely there can be a consensus on its meaning in a country like India. It becomes imperative to discuss the use and usefulness of the concept and policy implications. The questions stimulating further discussion are whether the attainment green economy will restrain other aspects of development such as poverty eradication and employment generation. The factors of compatibility of green economy with the free market and challenges to address the role of the private sector to build an economy that is more environmentally-friendly, and to handle the transition from the present to the greener economy are questions India has to deal with. The emerging challenges are economic growth patterns, the degradation of environmental and natural resources and uneven distribution of wealth and risk in countries like India are strongly intertwined.

The National Environment Policy (NEP) adopted in 2006 argues on economic considerations above environmental ones. Although the Biological Diversity Act (BDA) promulgated in 2003 has remained numb on matters of conservation and livelihoods of indigenous people. The policy on special economic zones (SEZs) promulgated in India has sidelined the environment. The MoEF itself has in many instances been sidelined by the government eyeing on doubling growth rate at any cost. All these policies are taking the country towards unsustainability. According to the Global Footprint Network and the Confederation of Indian Industry (CII), India now has the world‟s third largest ecological footprint (after the United States and China), and its citizens are using almost twice what the natural resources within the country can sustain. India's 1992 National Conservation Strategy and the Policy Statement on Environment and Development commits to ensure sustainable and equitable use of resources for meeting the basic needs of the present and future generations without causing damage to the environment. At the same time India faces social and economic challenges and

aspirations as people want to live decent lives. Poverty is still widespread in India with many unsolved problems of human development. Therefore, India need to tackle a dual challenge of pursuing economic development and environmental conservation. Traditionally, industrial policies have focused primarily on increasing productivity as the key mechanism that would ensure rising returns to capital and labour and thus enable economic growth and prosperity development and wealth creation while keeping resource consumption and pollution in accordance with global limits. The Asian Development Bank (ADB) has projected India' growth to slow down to 4% in the 2020 fiscal year. India faces significant challenges including exploitation of natural resources, rapid industrialization, poverty and unemployment and the newly introduce health hazards. One wonders how to reconcile such objectives with real actions in the country.

Thus, there is a need to develop institutional and technological solutions that will enable decouple economic development and human well-being from resource depletion and waste production. While many of the required technologies are already available, the incentives guiding resource allocation need to change profoundly to disrupt current unsustainable technological pathways and change some economic subsystems entirely, such as those for energy provision and transport (IPCC 2014). Productivity growth is a precondition for improving living standards and maintaining competitiveness in the globalized economy. Low total-factor productivity is one of the main reasons for persistent poverty in developing countries. Low income and lower-middle income countries in particular need to boost productivity growth to reduce poverty. This implies the pursuit of more productive ways of doing business within each existing sector as well as to accelerate the structural transformation across sectors, reallocating resources from low productivity activities in agriculture, small trade and simple services to new activities that are knowledge-intensive and exploit the advantages of inter-firm specialisation. Except for some natural resource exporting countries, the countries that achieve the highest incomes are the ones that are able to combine diversified knowledge pools in ways that are difficult to emulate by others (Hausmann et.al,2014).

Challenges India is facing can be summarized as

1. Problems of Rapid Urbanisation
2. Problems of Waste Management
3. Problems of CO2 Emissions
4. Gap in Power Supply & Associated Health Issues
5. Diseases Caused by Development Process
6. Unsustainable International Trade
7. Improper Sanitation Measures
8. Poverty eradication

Green growth and way forward in India

The 2030 Sustainable Development Agenda with 17 sustainable development goals and 169 targets that were adopted in September 2015 demonstrate the scale and ambition of member states in the new universal agenda. India as a signatory to UN declaration has to honour the 17 Sustainable Development Goals (SDG) (WCED 1987). The Constitution of India contains specific provisions for the protection and improvement of environmental quality. Article 48-A of the Constitution says that "the state shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country." Article 51-A (g) says that "It shall be duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wild life and to have compassion for living creatures." These provisions highlight the national conscience on the importance of environment protection. The National Environment Policy of the Ministry of Environment, Forests, and Climate Change highlights important principles around sustainable development such as social justice, polluter pays, and entities of incomparable value. The National Action Plan on Climate Change (NAPCC) along with the State Action Plan on Climate Change are important milestones for mainstreaming climate in development processes at the national and state levels. NAPCC has eight national missions that outline priorities for both mitigation and adaptation to combat climate change. The current eight missions are on the areas of solar energy, energy efficiency, sustainable habitat, sustainable agriculture, Green India, water.

To propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation India has set the following few milestones.

1. To adopt a climate friendly and a cleaner path in correspondence to the level of economic development.
2. To reduce the emissions intensity of its GDP by 33–35 per cent by 2030 from 2005 level.
3. To achieve about 40 per cent cumulative electric power installed capacity from non- fossil fuel based energy resources by 2030 with the help of transfer of technology and low cost international finance including from Green Climate Fund (GCF).
4. To create an additional carbon sink of 2.5–3 billion tonnes of CO_2 equivalent through additional forest and tree cover by 2030.
5. To better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, Himalayan region, coastal regions, health, and disaster management.
6. To mobilize domestic and new and additional funds from developed countries to implement the above mitigation and adaptation actions in view of the resource required and the resource gap.

7. To build capacities, create domestic framework and international architecture for quick diffusion of cutting edge climate technology in India and for joint collaborative research and development for such future technologies.

Source: Intended Nationally Determined Contribution

Conclusion:

The 11th plan is aimed at putting the economy on a sustainable growth (with a growth rate of approximately 10% by the end of plan period). Productivity growth is a precondition for improving living standards and maintaining competitiveness in the globalized economy. Many people still lack access to basic services such as health, clean drinking water, sanitation and education facilities without which they cannot claim their share in the benefits of growth which reflects the strength of our economy and environment.This implies use of more productive ways of doing business as well as to accelerate the structural transformation across sectors by reallocating resources from low productivity activities in agriculture, small trade and simple services to new knowledge-intensive technology. India can make green growth a reality by putting in place strategies to reduce environmental degradation at the minimal cost of 0.02% to 0.04% of average annual GDP growth rate (Kamble at.el,.2016). The union government has allocated ₹3100 crores to the Ministry of Environment, Forests and Climate Change (MoEFCC) in 2020. A budget of ₹4,400 crores has been assigned to the National Clean Air Programme (NCAP). Incentives need to be inspired by the principle of sustainability. They must be designed to ensure that environmental costs are internalized, pollution is kept to a minimum, material consumption is reduced, and inputs are reused or recycled to the greatest possible extent. The benefits are obvious. Economic development has so far been achieved at the cost of severe overexploitation of natural resources (World Bank 2016). Therefore, for creating wealth there is the need for structural change and taking ecological boundaries into account would be a game-changer for structural change. To make economic development sustainable, resource efficiency needs to increase at least at the same rate as economic output. Enormous resource efficiency jumps are technologically feasible with the shift to renewable energy, the use of smart information and communication technology systems, the use of energy-saving technologies and, last but not least, changes in consumer behaviour. To accelerate the required technological and business model innovations, however, economic incentives need to be set very differently (Anadon et.al., 2014, 2016). Electricity generation needs to shift fully from fossil to renewable sources; as power generation is decarbonised, transport, heating and other energy using sectors need to be electrified, including road traffic; and resource efficiency needs to be increased radically across all industries, including the shift to circular economies where waste is reduced, reused or recycled. Sustainability should be the mantra of economic development process.

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