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GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES GREEN ECONOMY: A STRATEGY FOR SUSTAINABLE DEVELOPMENT

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ABSTRACT

India is a Republic Country of South Asia; it is the seventh largest country by area, the second populous country with over 1.2 billion people and the most populous democracy in the world. Since 1991, India accepted the LPG Policy and became one of the fastest growing major economies and since then, it has been facing many environmental problems and issues. Thus, there is the need for using alternative model of development known as green economy. The concept of green economy is being discussed in recent decade for achieving sustainability in inclusive growth and development of respective area of countries of the world. The present article is conceptual in nature constructed to understand the need and importance for adoption of green economy as one of the strategy for sustainable development. India is facing the problem of coexistence of the conventional economic growth strategy and piecemeal efforts to make the economy ready to mitigate and adapt to the climate change issues. The article helps on finding that the existing production and consumption system can not make the development a really sustained and sustainable one.

Keywords: Green Economy, Ecological Sustainability, Economic development, resource efficiency.

I. INTRODUCTION

Conceptual Framework

The concept of a green economy was introduced as a response to the failure of neoclassical economics to effectively include the value of natural resources and environmental degradation in pricing and other market mechanisms. Global economic growth over at least the past 50 years has been accompanied by accelerated environmental decline. From 1981 to 2005, the global Gross Domestic Product (GDP) more than doubled, but 60% of the world's ecosystems were degraded or used in an unsustainable manner. Essentially, the economies of the world have, to date, overexploited natural resources and severely undervalued the ecological goods and services that form the basis of all economic activity.

Economic development has put staggering demands on the natural resource base of the earth and the world is already resource-constrained. Many resources, including water, fertile soil and fossil fuels, are fast reaching the limits of their potential for exploitation. In addition, the consequences of climate change that include unpredictable weather patterns, increased frequency and severity of natural disasters and disrupted ecosystems, are already threatening food security and economic activities. Furthermore, the increasing prevalence of social and sociopolitical dissent and unrest, various social pathologies and violent conflict across the world, are partly the result the inequitable sharing of limited resources that are unequally distributed. A new development path is therefore urgently needed.

The green economy was brought into international focus in response to the multiple crises that the world has been facing in recent years—climate change, the food and economic crises, and the rise in poverty and social inequality. The United Nations Environment Program (UNEP) proposed a 'Global Green New Deal' to revive the global economy and boost employment while simultaneously accelerating the fight against climate change, environmental degradation and poverty. Subsequently, a number of intergovernmental green economic initiatives were developed; including: UNEP's Green Economy Initiative ; The International Labour Organisation's (ILO) Green Jobs Initiative ; and the Organisation for Economic Cooperation and Development's (OECD) Green Growth Strategy .







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About Green Economy

The causes of the climate change, food, social and economic crises that have unfolded during the last decade vary, but they all share one common feature- the gross misallocation of capital. During the past two decades, much capital was poured into property development, fossil fuels and structured finance. By comparison, relatively little was invested in the development of renewable energy, improving energy efficiency, promoting and developing appropriate public transportation, sustainable agriculture, ecosystem and biodiversity protection, and land and water conservation. Decades of creating new wealth through this 'brown economy' model powered by fossil fuels, has not succeeded in substantially addressing social marginalization, environmental degradation and resource depletion.

The green economy requires that economic development is decoupled from the use of resources and environmental degradation. Decoupling refers to reducing the environmental impact (in terms of both resource use and the generation of pollution and wastes) associated with any economic activity. A distinction can be made between relative decoupling (a reduction in environmental impact per unit of economic output), and absolute decoupling (a reduction in the overall environmental impact of an economy).

How will the green economy help combat climate change?

Human activities that have released greenhouse gases into the atmosphere are the cause of recent climate change, often referred to as global warming. Climate change is the shift of average weather conditions over long-time horizons (decades and longer). The average temperature on the planet has been increasing in recent decades; resulting in more extreme and unpredictable weather across the world and a range of impacts on economic activity and human well-being. To combat climate change we need to act now since the benefits of strong, early action on climate change can have significant and lasting benefits that improve the resilience of society. The main human activities responsible for greenhouse gas emissions are the use of non-renewable fossil fuels, land-use change from deforestation and agricultural expansion, and other industrial activities. Many countries are signatories to the Kyoto Protocol (and related mechanisms under the United Nations Framework Convention on Climate Change), that commits countries to reduce greenhouse gas emissions through the adoption of a range of mitigation measures and defined emission reduction targets. The transition to a green economy, which is resource efficient and low carbon, will therefore be essential in reducing greenhouse gas emissions and mitigating climate change by decoupling future growth from the use of non-renewable fossil fuels and other natural resources.

II. REVIEW OF LITERATURE

Shoibal Chakravarty in his article 'Cheap Oil, Climate Change Mitigation and India' finds link between oil price crash and China's economic slowdown and mentions gain in terms of rise in real income and reduction in subsidies which opens up opportunities to better targeting and cash transfer. In the long run, growth in alternative fuel sources during previous prolonged period of high oil prices and rapid decrease in the price level of these alternative energy sources can reduce heavy dependence on oil in public transport. A number of policies have already been initiated by India. The author has cautioned about India's climate change prospects in view of fall in global coal prices.

Martin Khor in the article, 'Risks and uses of the green economy concept in the context of sustainable development poverty and equity', has mentioned in details about the risks of misuse of Green Economy concept as one dimensional manner where stress has more been given to environmental aspects rather than the developmental and equity dimensions, Disregard of the principle of common but differentiated responsibilities, Inappropriate use of environment for trade protectionist purposes against the developing countries, Provisions of subsidies for research and development of environmentally sound technologies may put the developing countries at a disadvantage, Concerns of developing countries against the attempt of the developed counterparts for gaining access to their markets in the name of trade in environment goods, Problems of reconciliation of two principles of allowing price signals to better continuous flows of ecological services, while depletion of stocks imply reduced services in future with adverse effects on human well-being. He identified recognition of economic and social values of environmental resources among others as the important measures.





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'Trade and Green Economy: A Handbook' of International Institute for Sustainable Development mentioned about the importance of trade, an important global economic activity, as a driver of environmental change. It observes that there are specific interactions between the designs of environmental laws and the trade laws. The existing literatures are heavily against the present production and overall economicsystem due to different negative externalities retracting the growth process itself andjeopardizing the sustainability of the economic structure. The new Green Economy concept hasadvantages which far outweigh its limitations.

III. RESEARCH METHODOLOGY

Given India's imperative to attain higher economic growth, the first research question iswhether India can sustain its high growth prospect and societal improvements if it continuesto adopt the business -as – usual strategy. If the answer of the first research question is in the negative, then the second researchquestion is how the new Green Economy concept can be useful in making India able toachieve its goals stated in the first research question. In the course of the research, the researchers has to tried to find answers of these questions viewing India in the context of global economy, especially the developing countries.

In order to derive all the research answers, 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.

IV. RESULT AND DISCUSSION

Downside risks of present growth system: India's case

Estimates show that at least 40 per cent of all violent conflicts in the world in the last 60 years have been linked to natural resources; thus India may also face similar situations in various parts of the country. Ecological services of forests, an important carbon sink, account for 7.3 per cent of India's overall GDP, but also account for 57 per cent of the GDP of the poor or the effective household income of those living below the poverty line and relying on activities like subsistence farming and the gathering of non-timber forest produce. Unmindful commercial activities cause deterioration of the natural environment having an almost immediate and drastic impact on the living conditions and livelihoods of poor people due to loss of natural assets on which they are more dependent. According to a World Bank report, 'Diagnostic Assessment of Select Environmental Challenges in India', the annual cost of environmental degradation in India is at about Rs.3.75 trillion (US\$80 billion) equivalent to 5.7 per cent of GDP.

- i) India's remarkable growth record under liberalization, particularly in the last 10 years, has been ahead of the global curve, however, it has been clouded by a degrading environment and growing scarcity of natural resources. In a recent survey of 178 countries, India's environmental quality is far below all BRICS countries. Studies and estimates by economists find India's growth rate to be 2.5- 3 per cent lower than the reported Gross Domestic Product (GDP) of 7-8 per cent when environmental factors and human well-being are taken into account.
- ii) According to another recent World Health Organizations (WHO) survey, across the G- 20 economies, 13 of the 20 most polluted cities are in India.
- iii) India's poverty reduction through economic growth compares poorly with that of China and Brazil. During 1981 to 2001, the population living below the poverty line (US\$1.25 per person per day benchmark) fell from a staggering 84 per cent to 16per cent in China and from 17 per cent to 8 per cent in Brazil, while for India it was from 60 per cent to 42 per cent. In the period 1981–2001, average economic growth rates were above 5 per cent for India, while it was above 10 per cent in China. Brazil's case demonstrated that with stagnant or low growth rates during the same period (1981–2001), higher levels of poverty reduction was achievable primarily by lowering levels of inequality. India's rate of poverty reduction (1.5 per cent per year during the period 1981–2001) was lower than that of Brazil or China. In India, in spite of progress on poverty reduction, almost 400 million people continued to live below the US\$1.25 a day poverty line the largest number of absolute poor in any country.







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India having huge development priorities will be adversely affected by climate change, in terms of availability of fresh water, low ground water recharge, food production, ocean acidification, increased vector born and water borne diseases with impact on human health, agriculture, water resources, natural ecosystems, and biodiversity. The future of agriculture, which provides livelihood of 58 per cent 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. In this interconnected world even a drought or flood caused by climate change in one part of the globe can soon challenge supply chains or move commodity markets in another country with profound implications for the poor and the vulnerable groups.

V. CONCLUSION

The Green Economy responds to global economic, social and financial crises by reallocating natural, social and financial capital into creating benefits for economic development, social equity and environmental protection. Reconciliation of short-term versus long-term priorities by adopting resource-efficient and less polluting pathway enable the countries to leapfrog the usual development trajectory avoiding future costs. Countries like Japan, South Korea, China and Germany have already positioned themselves as green technology leaders and India should not be the perennial technology buyer.

India should ensure that the implementation and monitoring of Green Economy schemes are democratically controlled, transparent, and inclusive. Furthermore, the capacity for good governance affects the trustworthiness of a country and is thus an important factor influencing decisions concerning the access to financial support and international funds. Achieving the necessary paradigm shift towards a sustainable development model through Green Economy measures will require active civil society participation. Banks and financial institutions are required to factor in potential environmental risks as well as environmental gains into the standard asset valuation and credit rating procedures. India can provide interest incentive for the green industries or some of the existing loan mechanism can be tagged with green initiatives.

The green economy therefore presents an opportunity to reorient the economy along a development path which is resource efficient and generates low levels of carbon emissions. Broad-based, free and open participation in decision-making is needed to define development options and priorities that will transition India to a green economy. This will help to ensure that the green economy is socially inclusive, with the more equitable sharing of wealth and benefits that improve human well-being. These benefits may include economic goods and services, such as money, material goods and services, ecosystem goods and services such as clean air and water, and public infrastructure goods and services such as roads and rail, sanitation, schools, education, policing and fire protection). Also central to the green economy transition and a more inclusive and equitable society is a focus on poverty alleviation, and the generation of green jobs and decent work that contribute significantly to maintaining and enhancing the environment.

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