

GREEN ECONOMY: CHALLENGES AND OPPORTUNITIES**R. Malar MARAN***Punjab Technical University, India**drprswamy@gmail.com***Alexandru-Mircea NEDELEA***Stefan cel Mare University of Suceava, Romania**alexandrun@seap.usv.ro***Abstract**

Financial crisis has discovered new philosophy of Green Economy. Green economy facilitates the implementation of sustainable development. There are several strategies to implement the greener economy. The beginning is made in several countries on green economy. It is encouraging but problems are persisting. Achieving sustainable development is the ultimate object of greener economy. Green economy faces innumerable challenges. Finance and technology remain the biggest challenges. National economic policies and global policies do not sail through successfully when there is global financial crisis.

Key words: *Green Economy; Strategies; Sustainable Development; Developing Nations and Developed nations*

JEL Classification: *O13, O130, Q5*

I. INTRODUCTION

Achieving sustainable development is the ultimate object of greener economy. In order to achieve it the spatial dimensions of economic policy shall be made and for the implementation there shall be sound policies. Restructuring is to meet the global climate and environmental challenges and it demands massive inputs of both investment and economic policy decisions. During the transition there will be negative impact which has to be accepted initially.

United Nation Environment Programme has suggested the idea of green economy in 2008. The Conference on Sustainable Development 2012(Rio+20) in Brazil has further discussed on the strategies of Green Economy.

There are many definitions of 'green economy' but the basic ideas are pertaining to sustainable development. It is also defined as 'an economy that aims at reducing environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment'. According to UNEP, a green economy achieves human well being and societal equity with less environmental risks (UNEP, 2010). The green economy is the economic growth and development while conserving natural resources for present and future (OECD (2011)). The green economy advocates green policies which are not detrimental to economic growth and development.

II. CHALLENGES

There are serious challenges to the world. Most of them are related to nature. It is reported that human actions have degraded 60% of world ecosystems. In the last fifty years we have lost 50% of wetland ecosystems. China is struggling to save 70% of rivers which are dead or dying. The world has lost in two decades 20% of corals. The fisheries and freshwater have depleted drastically (UNO (2005)). There will be a shortage of drinking water to 75-250 million people in Africa by 2020. The crop yield will decline to 30% in Central and South Asia. The temperature will increase to 1.5 C to 2.5 C which will destroy rainforests, and increase in sea levels. It is important to control CO2 emissions. The food production will decline (IPCC (2007)). The world has to reduce 805 of emissions in the next 50 years. The increasing population of China, India and Brazil will consume more natural resources will cause further depletion. The developed nations adopt dual strategies of advocating to the world one and practicing different at home. This further worsens. The Sustainable Development Commission criticizes the practice of subsidies and measures for low prices which lead to market failures. The global economy has to find solutions to these challenges.

The global financial crisis has deviated Europe from several green economy policies during 2008-2010. The voice of Neil Carter of Greening Millennium in 1997 has little achieved. The slogan of UK's 'one nation, one planet', has yielded less practical value as the rich nations are concerned with their local environmental problems but not the poor nations' problems.

It is difficult to decide the discount rate at which the economic decisions can be made for future generation. Equally it becomes difficult to make decisions on saving and investment today for tomorrow. The vague analysis suffers from the obscurity of reality.

The environmental degradation occurs in sum total of exploitation and it is impossible to quantify environmental degradation on each exploitation. Thus the green economy policy lacks accuracy. It is a challenge to policy makers of green economic policies.

It is report in the UNEP Green Economic Report that the investment towards green economy may slower down the economic growth.

III. RISKS

There are several risks associated with the green economy transition. One of them is the tradeoffs between the economic growth and environment. Such tradeoffs may be varying in stages of policy implementations. There dimensions of development are economic, social and environmental focusing on the inter-generational equity. The national policies of each country vary on their priorities like eradication poverty. This is the second risk. No nation will plead environment at the cost of elimination of poverty. The green economy approaches individual sectors of economy and hence the policies are not uniform. This is the third risk. The principle of common but differentiated responsibilities is practically posing more problems to resolve that the implementation of green economy. This is the fourth risk. The conditionalities imposed on developing nations to implement green economy policies are becoming obstructions to the implementation of national priorities. This is the fifth risk.

IV. STRATEGIES

There are two important strategies to shift to green economy. One of them is the investment to achieve sustainable development followed by new development of technologies free from environmental degradation and social development without loss of natural wealth. This is suitable developed economies. The second strategy is transitional green shift of gradual environmental friendly development. The leading nations of building green economy are USA, Germany, Britain, France, Japan and Korea. Norway can achieve it and my research study will be dedicated towards it. Several countries like Vietnam have initiated actions to green economy. The most important actions include propaganda, restructuring of economy with a focus on investment in resources and financial mechanism, promotion of technological innovations and legal environment towards sustainable development.

Developing green economy is to transform the entire process of production, construction, distribution and consumption. China has committed to sustainable development through resource –efficient and environment friendly society. Due to lack of financial resources, developing nations opt to poverty eradication and economic development. Norway has committed to several strategies of restructuring to a greener economy. It decides to investment in new technologies such carbon capture, manufacturing electric cars, construction of walking and cycling path, Norway has created new ministries to deal with these issues. Norway has introduced green procurement initiatives in many areas including hotel services, information and communication equipments etc. Political Parties in Norway make election manifesto on restructuring to a greener economy.

V. OPPORTUNITIES

In the long run the investments on green economy policies will yield results of faster growth rate of economy. It will reduce the potential climate change. The green economy will remove the adversity of energy shocks, water scarcity and loss of ecosystem slowly but firmly. The green economy investments generate more employment and agricultural productivity leading to poverty reduction. There will be good returns on the green economy investments. Higher investments bring new technology and higher productivity. There will be better incentives to long term investors. As result of the long-term growth demand driven green economy will emerge with higher income and employment and new public and private investment will be the added value of green economy. More investment will be possible on infrastructure development and welfare measures. Therefore the investments of green economy will be integrated into the principles of sustainable development.

VI. CONCLUSION

The success of green economy has certain prerequisites. The national economic policies shall be formulated and implemented in continuity. If there is unforeseen economic crisis or national crisis the casualty is the green economy because the benefit is visible in the long run. In the absence of short term returns the priority

will be shifted from green economy to real economy. Technology transfer is subject intellectual property rights and the developed countries have the intellectual property rights because of the research and development unlike developing nations. Thus integration of global technologies into the green economic policies of world nations has problems. The technological disparities will persist with discrimination between developed and developing nations. The availability of finance is another problem. The long term investment decision is associated with definite returns. The long term investments of green economy are limited to public sector or government funds. The private sector has its own priorities of long term investment. Raising finance for long term investment is remotely successful in developing nations unless the international investments flow to them. Unless international trade is restructured towards green economic policies the protectionism will dominate in the guise and garbage of environmental goods and environmental friendly engineering. The carbon capture technology is not available in developing nations but the developed nations do have. To promote green economy the developed nations are in advantageous position which permits exploitation. Never the less there is a point of contention on the subsidies practices as a tool of protection. The agricultural pricing policy is always devoid of market competition. Perfect market condition is less practiced rather imperfect market conditions dominate in international trade both in terms of volume and money. This is a point of disagreement between developed and developing economies. The international credit policies are decided by donors and the conditionalities are less favourable to developing economies. Hence the long term investments are not available to developing nations to implement green economic policies. There is a continuous demand from developing nations for adequate and new international financial resources towards sustainable development. The demand is huge and it cannot be met.

The developing nations carry debt for decades. Majority of the developing nations suffer from balance of payment problem. They always have unfavourable balance of trade. The items of exports are not less but also predominantly natural resources and conventional products. Developed nations transfer obsolete technologies with debt burden. Developing nations have their own problems like poverty, malnutrition, high mortality rate, poor sanitation, absence of infrastructure, lack of drinking water, traditional agricultural cultivation methods, unemployment, poor medical facilities, poor transportation, lack of power and so on. Thus they attach more important tasks to eradicate these problems. Political stability is the major obstacle for growth and development. The worst problem is the corruption. Money spent on plan expenditure never reaches the project but it is lost in transit due to corruption. Therefore they do not have long term capital for investment. International finance is ultimate source of investment. The savings in third world countries are inadequate despite various promotional schemes because their earnings hardly sufficient to basic demand. They are unable to attract Foreign Direct Investment also.

There are success stories of green economy practices in developing economies. China has allocated a considerable amount of long term investments 11th Five year plan of 2006-2010 for the promotion of green energy of renewable energy and energy efficiency. China has committed to achieve 16% of energy from renewable sources of energy by 2020. Kenya had adopted a scheme of Feed-in-Tariff in 2008 for promoting renewable sources of energy including solar, wind, small hydro, biogas, and municipal waste energy. Under this scheme it has achieved two objectives of greener economy and eradication of poverty though generating employment and income. Uganda is promoting Organic Agriculture. Under this scheme the conventional agriculture is replaced by organic farming system which reduces green house gas effect, reduction in use of chemical fertilizers and increasing income and employment. It has achieved twin objectives like Kenya. In Tamil Nadu, a state of India, the production of renewable sources of energy through solar system and wind mills has achieved self sufficiency in Electricity supply and increased income and employment. India has engineered Rural Ecological Infrastructure through the implementation of National Rural Employment Guarantee Act 2005 (NREGA). This green economy scheme has not only built rural infrastructure but also has generated income and employment of rural marginalized people. Nepal has launched a new scheme of Community Forest User Groups (CFUGs). Under this scheme the government plays only a role of facilitator and the people implement it. In Ecuador, the Quito municipal government and a NGO established FONAG (Fund for the Protection Water. The water users under this scheme contribute the Fund to finance ecosystem services, and land acquisition for hydrological functions. The National Fund for Energy Management in Tunisia to support renewable energy technologies and improved energy efficiency. Ethiopia has adopted to the inclusive green growth in agriculture, land use management, forestry, energy and transport. The Sub-Saharan countries have growing demand for food and it will eventually lead deforestation of forests which will have direct conflict with Sustainable Development Goal 2 –end hunger etc- and Sustainable Development Goal 15- sustainable use of terrestrial ecosystems etc. Both the Sustainable Development Goals of 2 and 15 should be managed to trade-offs. Thus the green economy is one of the best approaches to achieve sustainable development but it will not sufficient due to the divide of south and north. Efforts are important to gain and learn.

VII. REFERENCES

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