

# Green Economy and Its Implications for Economic Growth in Nigeria

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## Abstract

This paper examines the Green economy framework and its implications for sustainable growth and development of the Nigerian economy. Employing the political economy approach this study explores relevant concepts, identifying the core meaning of the concept of sustainable development. Few sectors were analyzed in terms of green growth policies to see what economic benefits Nigeria stands to gain transiting into the green economy. The study revealed that the green economy holds lots of opportunities especially for those sectors studied. Recommendations to enable Nigeria transit into green economy includes that institutional capacity is needed to integrate environmental policies with economic policies among others.

**Key words:** Green economy, Green growth, sustainable development, environment, ecosystem, institutional capacity, gross domestic product, deforestation and over grazing.

## Introduction

The Nigeria ecosystem had continued to witness increasingly rapid and intensive pace of disequilibria especially immediately after the civil war in 1970, due mainly to increasing exploration and exploitation of crude oil increasing demand for other natural resources such as food, water, timber and fibers. The significant contribution to economic growth and social well-being of these national resources are not in doubt, yet the excessive exploitation of these resources led to irreversible losses of global biological diversity and services provided by ecosystem. Providing more course for worry is the rebasing of the Nigeria's Gross domestic product (GDP) making Nigeria the biggest economy in Africa and twenty-fourth economy in the world but with massive unemployment rate, near total absence of power, dysfunctional education and health sectors and increasing poverty rate of well over sixty (60) percent.

This unsustainable exploitation of resources have engendered alterations in the ecosystem with accelerated, abrupt and irreversible changes with significant consequences for human well-being, threatening the survival of many communities as evident in the Niger Delta, desertification and overgrazing in the North, erosion, deforestation and surface water pollution in the South. These of course have continued to exacerbate the worsening living condition of many Nigerians especially the rural population who live in the fringes.

Noting that sustainable economic development is to recognize that environment and economic development are not exclusive of one another but are complementary and interdependent and in the long run, mutually reinforcing (Ahmed and Sanny: 2000). The complex nature of this relationship explains why it has been difficult to give an operational content to the concept of sustainable economic development or to formulate practical policy guidelines for its realization, yet there is an evidence of excessive demands being made on limited natural resources and on the already weakened ecosystem. Under the condition of increasing "absolute poverty" rate in Nigeria where the National Bureau of statistics said 60.9 percent of Nigerians in 2010 were living in "absolute poverty" this figure had risen from 54.7 percent in 2004, the environment had therefore, continued to exhibit ravages of mismanagement as observed in overgrazing, erosion, deforestation, desertification and surface water pollution. In this situation, not just quality of life but like itself, is endangered many a times it is difficult and sometimes impossible to reverse these effects.

A paradigm shift to sustainable consumption and production (SCP) initiative will not only preserve the ecosystem but generate new opportunities for trade and investment, stimulating green growth and subsequently, sustainable development, therefore, fostering the green economy framework in Nigeria.

The main objective of this paper is to examine the need for Nigeria to transit into a green economy while taking into account its benefit and challenges for sustainable development.

## Conceptual Literature Green Growth

The concept of economic growth which also meets environmental goals had been very much associated with the concept of sustainable development. Sustainable development remains the core principle of international environmental policy making and of national environmental planning in many countries. Indeed, the official institutions now promoting green growth insist that it is not a substitute for sustainable development but a way of achieving it (Michael Jacobs 2012). According to Todaro and Smith (2011) "In a classical definition, a development path is sustainable if and only if the stock of overall capital assets remain constant or rises over time". Noting that the overall capital assets are meant to include manufactured capital (machines,

factories, roads, human capital, knowledge, experience, skills) and environmental capital (forests, soil quality, range land). By this definition, sustainable development requires that these overall capital assets not be decreasing and that the correct measure of sustainable net national income (NNI) is the amount that can be consumed without diminishing the capital stock. Thus, sustainable development is that pattern of development that permits further generations to live at least as well as the current generation, generally, requiring at least a minimum environmental protection.

The simple definition of green growth is economic growth (i.e. growth of gross domestic product, GDP) which also achieves significant environmental protection. Some wonder the compatibility of economic growth and possible environmental improvement. For the World Bank (2012) it is “growth that is efficient in its use of natural resources, clean in that it minimizes pollution and environmental impacts, and resilient in that it accounts for natural hazards and the role of environmental management and natural capital in preventing physical disasters.” For the Organization for Economic Co-operation and Development (2011), “green growth means fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services in which our well-being relies.

There is no divergence in terms of the meaning of both concepts (green growth and sustainable development), but as a result of the dwindling momentum by governments to apparent commitment to sustainable development and the continued decline in the health of the global environment. Yet at the same time policy makers realized that an environmental discourse focused on costs and limits and the need to constrain growth to assess them would be unlikely to attract political support in a world where GDP growth and the employment it generates remain the core interest of electorates and businesses and the overriding policy objective of government. This is especially true in the field of climate change, where the dominant discourse was centered on the economic cost of mitigation and international negotiations have been concerned with how the global ‘burden’ should be distributed Stern (2007). Thus, the purpose of the discourse of green growth has therefore, been shifted from this negative and politically unattractive framing to something more positive. Unlike sustainable development, however, it faces the issue of growth head on. Sustainable development was a deliberate exercise in holding together a wide coalition of political support by side stepping the question of fundamental compatibility of growth and environment protection and reframing the economic objective as development. Green growth not only insists on that compatibility, but claims that protecting the environment can actually yield better growth. In this it reflects its different provenance whereas the concept of sustainable development came out of the environment movement, where ideological argument about the limits to growth was widespread, green growth has emerged from the more mainstream and pragmatic community of environmental economic policy makers (Michael Jacobs: 2012).

### **Green Economy**

The UNEP report “Towards a green economy” defines a green economy as “one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.” Green economy is buttressed by three major pillars (1) low-carbon technology (2) resource - use efficiency and (3) socially inclusive growth. Such a framework is of particular importance to Nigeria. The severe poverty in the midst of plenty and the extensive environmental degradation across all regions in Nigeria, are in many ways linked to a high dependence on the exploitation of natural resource in inefficient ways for livelihood activities; which reinforces the cycle of under development. A shift to a green economy framework could provide Nigeria with tremendous opportunities to benefit from her rich natural resource endowments as it strives to pursue sustainable development. Achieving the benefits of a green economy, however, will require the Nigerian government to put in place the institutional framework of which a functional and vibrant national council of sustainable development (NCSD) will be pivotal.

For smooth and successful transition to a green economy, Nigeria must take full advantage of the report of the Trade policy and Planning Unit of the United Nations Environment Programme (UNEP). This report is a key component of the green economy and Trade Opportunities Project (GE – TOP). The report stated the types of opportunities arising from the transition namely trade in environmental goods and services, standards and certification, and the greening of global supply chains. The report then presented a comprehensive sectoral analysis. The necessity for greening products and processes is aided by growing opportunities with regard to market desirability and added value. Sustainable agricultural methods can increase productively and there will be growing market for business-to-business trade in the verification and certification of production methods and goods. Moreover, green energy represents a growing and potentially large industry, and emerging economies are becoming significant players in the trade in environmental goods and services.

The following five enabling conditions are identified by the report.

- ✓ Strategic investment and spending: economic infrastructure, targeted education programmes technical assistance and access to sustainable energy should be considered crucial.
- ✓ Market – based instruments: Subsidies to unsustainable products should be reformed and environmental and social costs should be factored into pricing policies.
- ✓ Improving national regulatory frameworks, transparency and accountability
- ✓ International frameworks: These are necessary for technology skills and resource transfer and dissemination.
- ✓ Enhancing dialogue and capacity building: Facilitate and support trade opportunities that arise, particularly with regard to access to export markets.

### **Sustainable Consumption and Production (SCP)**

This mechanism opens the window for skeptics to understand that environment protection as carried on through green economy via green growth is not just compatible with continued economic growth rather it stimulates economic growth with direct opportunities for employment, food sufficiency, improved well-being, poverty alleviation, etc. SCP initiative are policies that are made to guarantee sustainable consumption and production pattern and technology that will foster economic growth while the ecosystem continues to provide the resources and services.

Sustainable consumption must rely on the following premise:

1. Wise use of resources, and minimization of waste and pollution. Environmental friendly technologies must be adopted;
2. Renewable resources must be used within their capacity for renewal;
3. Fuller product life-cycles; and
4. Intergenerational and intra-generational equity.

No doubt, that business in Nigeria will do better guided by the principle of sustainable production with overwhelming opportunities for profit, expansion and employment generation. But beyond this, sustainable production will extricate negative externalities. As the demand for products continue to increase and environmental factors like climate change increasingly affect policies and businesses, it becomes more and more of a competitive advantage for businesses to consider sustainability aspects early on in the product development process.

### **Empirical Literature**

Hellena Pavese (2011), puts forth the concept of green economy in the report “Towards a green economy: pathway to sustainable development and poverty eradication” clearly showed the aggravated levels of ecosystem services degradation. The author presents the green economy initiative, launched with the intention of identifying the social and economic risks and costs generated by current standard of excessive natural resource use, as well as the opportunities for a transition to more sustainable practices.

Alexandre P’Avigon and Luiz Anthonia (2011) analyzed the UNEP report from a critical perspective. They affirm that the report represents a qualitative leap in the sense of introducing values that go beyond maximizing utility. They reveal the necessity of thinking about the green economy transition in a systemic way, where human activities are merely a subsystem of civil society, which in turn is a subsystem of the biosphere and its set of living and inanimate matter.

Donald Sawyer (2011) analyzed the relationship between green economy and sustainable development concepts. The author drew attention to the risk of green economy acquiring an exclusively economic shape, where market instruments and pricing of natural resources would prevail to the detriment of measures of a different nature. He asserts that other dimensions are relevant to the green economy, such as social, ethical, cultural, political and judicial. He claims that the green economy should be implemented through policies that guarantee rights to all and maintain ecosystem functions interlinked, so that this concept becomes concrete,

instrumental and popular, in complementarity to and connection with the sustainable development concept that is more abstract, diplomatic and governmental.

Francisco Gaetani, Ernani Kuhn and Renato Roseberg provided an overview of the situation in Brazil with regards to green economy. They argued that Brazil is an environmental energy power, due to the abundant availability of national resources and policies and measures aimed at environmental conservation. From an international perspective, the authors claim that the country has one of the highest GHG emissions in the world, but that Brazil is changing this situation by assuming voluntary emissions reduction targets. They outline the main actions that Brazil has been implementing in the direction of a green economy in sectors such as forestry, solid waste treatment, water resources among other.

Maria Cecilia J. Lustosa analyzed the importance of environmental innovations as means of changing the current technological model, intensive in raw materials and energy from fossil fuels, in a more ecologically correct direction. She presented the historical emergence of environmental issues and their relations to economic production. Then, the author highlights the importance of the innovative process in technological change and paradigm shift, and presented the circumstance under which such changes could occur and in which directions, with a focus on Environmentally Sound Technologies. The author further conducted analysis of innovations linked to environmental issues in Brazilian businesses and identified its main characteristics. The author concludes that environmental innovations are necessary to enter into a green economy and that building business capacity is fundamental and when appropriate, associated with incentives promoted by the state. She also came to the conclusion that in the case of Brazil, low innovation investment in the productive sector is certainly a factor that further inhibits the search for environmental innovation.

### **Theoretical Literature**

The neo-Schumpeterian theory provides assistance in rethinking the economy from the perspective of technology as a vector of transformation of human societies. This approach gives consideration to alternative solutions that are flexible and of a local character and conducive to an effective transition to a green economy. Economies which had experienced a huge recessionary shock could be stimulated back into growth – particularly employment growth – partly through measures aimed at improving the environment (Pollin et al 2008). The core argument used to justify governments spending was the simple Keynesian theory, it argued that in a slump, governments should sustain aggregate demand in the economy by replacing lost private sector demand with public expenditure. This in turn creates a multiplier effect which generates further income and employment growth. Such spending does not have to be green, but given the extent of the environmental opportunities available, and the various additional amenity and health benefits they offer, a green stimulus package offers particular advantages.

Estimates of the impact of the green stimulus measures taken in 2008-10 give some credence to these arguments. Around half a million net jobs were estimated to have been created by the environmental elements of the US stimulus package (Barbier 2010a), with as many as 960,000 by the similar measures taken in South Korea (OECD 2010). Indeed there is some evidence that in terms of job creation the environmental stimulus measures may have out-performed (as their proponents predicted) the non-green elements: one estimate for the US suggests 20% more jobs were created by green measures than by traditional infrastructure spending (Houser et al. 2009).

### **Analysis**

Mainstream economics explains that economic growth occurs by combining the factors of production: Labour, physical capital, human capital and technology. Economic growth then occurs when these factors increase total productivity. This increase in productivity is only expected to occur only when certain proportion of output are reinvested such as in improved technology, improved wages/salaries and other fringe benefit for the purpose of motivating labour for improved productivity, better education and healthcare to the workforce. The rate of this investment in these factors of production determines the rate of economic growth.

The environment is analogous of the other factors of production, and this is the heart of green economy. The natural environment is actually a factor of production; it acts as capital in three ways: it provides resources, it assimilates waste, and it performs various environmental services which sustain life, including climatic regulation and ecosystem health. Thus for this total neglect, the natural resources are over-exploited; soil eroded, fisheries depleted, water over- abstracted and forests are depleted. The ecosystems which provide valuable services, such as wetlands and forests, are allowed to be degraded. These occur because the right prices (if any at all), are not put on our natural resources, a case of market failure (market fails when they do not take into account the full value of the activities within them). Thus, the green growth framework is of the view that current patterns of economic growth are inefficient and sub-optimal.

What this means for Nigeria is that the Government must at this stage where there are clear evidence of market failure step in to provide the take-off initiative and infrastructure to attract private participation. This will

not only open up new market opportunities and market competition but drastically reduce the high incidences of environmental degradation.

What this means for Nigeria is that government must at this stage where the nation's environmental capital is grossly underpriced and as a result market failure, step in to provide the initiative and take-off infrastructure to attract private participation, just less than she did in the power sector. This will not only open up new market opportunities and market competition in environmental goods and services but will drastically reduce the high incidence of environmental degradation.

### **Analysis of Selected sectors in Nigeria:**

#### **Agricultural Sector:**

The future of agriculture in Nigeria is threatened by series of adverse environmental outcomes, including the continue loss of biodiversity and ecosystem services, depletion and erosion of top soil nutrients, increasing scarcity of freshwater, aggravated water pollution caused by poor nutrient management, hazardous chemicals release, disposal, emissions and waste, whereas trade conducted on a business-as-usual largely exacerbates these trends. Sustainable production has the potential to maintain or increase agricultural output in the medium and long-term while reducing resource use, preserving the national environment and promoting food safety.

Sustainable farming technique can increase productivity, facilitate access to international supply chains, and respond to the global demand for more sustainable and organic produce. Farmers in cocoa, rubber, rice, cassava, groundnut, etc will not only witness increase yield, but increase in well-being, guaranteed and prosperous future for these local farmers.

In order words, investment in environment will bring about improved ecosystem and the only way to sustain this improvement in environment is by keying into SCP initiative. This will translate into increase in organic products and services while putting to halt the degradation of our environment. The end result will be increasing access to income, increase in output, and general well-being of more than half the nation's population living in the rural areas.

#### **Fisheries:**

The aquatic-culture of the Niger-Delta zone is in a state of near total degradation and disaster. While these predominant fishermen can no longer catch fish, not for the reason of overexploitation, but for the reason of unsustainable exploitation of fossil fuel in the region. Yet Nigeria spends millions of dollars importing fish and other fish products yearly, this situation can be reversed by engaging in sustainable exploitation, and subsequently by certifying fish products for sustainability can improve the overall fishery management systems in Nigeria.

The water level is increasingly rescinding as a result of climate change, thereby forcing most of these fish further into the Atlantic making fishing more difficult and expensive. It could also be said that while environmental degradation resulting from non-fishing unsustainable activities in coastal regions have greatly impaired aquatic life in this regions, the growing rate of unsustainable fishing techniques especially as is the case in Oguta lake have also greatly exacerbated the worsening fishing condition. These unsustainable fishing techniques which had suddenly became fashionable for young men in Oguta Lake include the use of gamaline 20 and under water explosive (dynamite). In either case, deadly blow is melted out on aquatic life, as both eggs and fingerlings and other aquatic habitat are destroyed.

Though, this situation could be reversible, it can only occur by committed and genuine efforts by all stakeholders, especially the government who must raise the stake on regulations. An improved environment aquatic life will mean access to income better life for the rural population of the Bini-River (Escravos), and all riverine of the south.

#### **Forestry:**

Currently, Nigeria's forest reserves of Edo, Delta and Ondo States are under severe threat with increasing illegal logging, exacerbating this trend is the actions of government officials in this area, who have become an integral part of this illegal trade. However, sustainable trade in timber and non-timber forest products can significantly increase transparency and ensure traceability in the forestry sector, in particular through certificate schemes.

#### **Manufacturing:**

It is a known fact that poisonings from industrial and agricultural chemicals are among the top five leading causes of death worldwide and this sector CO<sub>2</sub> emissions in Nigeria keep increasing by the day. However, products with environmentally friendly designs and firms that comply with sustainability standards for products and processes have advantages in international markets. Many suppliers are rendering their practices

more sustainable in order to secure their position within international supply chains. This is illustrated for example by the 1500 percent increase in global ISO 14001 certifications on environmental management award between 1999 and 2009, this Nigerian manufacturers must key into for increase earnings, profitability, output growth and subsequently employment generation.

### **Renewable Energy:**

The renewable energy resources can address many of the challenges facing Nigeria's energy sector today. The Nigerian power sector is in crisis state, not even the reforms in this sector over the years which have handed over public investments to politicians and allies have brought any form of succor to sector, rather the people continue to pay high tariff for energy not consumed through estimated billing that be paid every month even when there is no power. By June 2014 the power generation in Nigeria had nose-dived to 2,887.8 megawatts (Business July 2014).

This trend can also be reversed with the appropriate legislation for low-carbon emissions and energy efficient technologies found in renewable energy. Nigeria is endowed with huge wind and solar resources which if taken advantage of will see Nigeria breaking into Eldorado of sustainable energy sufficiency, sustainable output growth and employment.

### **Conclusion/ Recommendations**

The green economy through green growth is very much possible and plausible in Nigeria and also desirable, as it is capable of aligning income and employment generation with poverty eradication and natural capital conservation. This of course is at the center of achieving the millennium development goal seven. Thus, the green economy is that which produces a continuous increase in the stock of natural capital.

For Nigeria to successfully transit into green economy and take full advantage and also achieve millennium development goal seven, the following recommendations are proffered:

- (1) Institutional capacity must be created in order to integrate environmental policies with economic policies.
- (2) Institutional capacity to create a system of environmental indicators that would be capable of measuring and monitoring the benefits of natural capital investments in inevitable.
- (3) Nigeria must see green economy as a strategy to pursue economic development. Therefore, adopting some green growth policies could be easier for Nigeria, as her economy is still at an early stage of development and do not have the lock-in effect of the more advanced economies.
- (4) Finally, environmental regulations should not be seen as a problem and that, beyond a solution, it could represent a source of economic and social benefits for Nigeria.

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