

Green Economy: Challenges and Opportunity for Economic Growth in Nigeria

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Abstract

This paper examines the green economy framework and its challenges to sustainable growth and development of the Nigerian economy. Adopting the political economy approach, the study explores relevant concepts, identifying the core meaning of the concept of sustainable development and green economy. Few sectors were analysed in terms of green growth policies to see what economic benefits Nigeria stands to gain if transiting into the green economy. The study revealed that the green economy holds a lot 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 will help Nigeria transit into green economy.

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

Introduction

The notion of a "green economy" has garnered substantial interest in the recent past due to its ability to mitigate the current overuse of the environment while taking economic growth into account. According to the 2005 report on the Millennium Ecosystem Assessment, excessive human use has caused the degradation of 60% of the world's main ecosystems, including both terrestrial and aquatic ecosystems, in the last few years. The agreement among scientists is that any increase in Earth's average temperature over 2°C is likely to have unanticipated and perhaps catastrophic consequences, such the global rainforest's extinction, a notable rise in sea levels, and eventually the extinction of all species. The green economy is a unique notion that presents a possible solution to lessen current environmental exploitation while taking economic development into account.

Two distinct economic models that support environmental preservation and sustainable growth are the "green economy" and the "blue economy." An economic paradigm known as the "green economy" emphasizes using renewable resources and cutting carbon emissions. The term "blue economy" pertains to an economic framework that prioritizes the sustainable utilization and administration of marine resources. The blue economy consists of industries like fishing, tourism, maritime transportation, and so on, whereas the green economy consists of industries like renewable energy, sustainable agriculture, and waste management. Both want to lessen their influence on the environment while generating jobs and economic progress.

The United Nations Environment Program (UNEP) estimates that by 2050, the transition to a green economy may provide millions of jobs worldwide and up to \$10 trillion in yearly economic developments is a possibility. In a similar vein, research from the World Bank and the Organization for Economic Cooperation and Development in 2022 indicates that the blue economy might provide over \$3 trillion in economic value annually by 2030 and support millions of jobs worldwide. The main benefits of both green and blue economies are the creation of jobs, the reduction of carbon emissions, and economic growth. The main drawbacks are that they are highly dependent on government policies and subsidies, which are vulnerable to change based on political goals.

Shifting the focus to the sustainable consumption and production (SCP) program will safeguard the environment and open up new avenues for investment and commerce. This would help Nigeria's green economic framework by encouraging green growth and sustainable development.

The main objective of this article is to examine whether Nigeria's shift to a green economy is necessary, taking into account both the benefits and challenges it poses for sustainable development.

Conceptual Literature

Green Growth

Sustainable development has been closely linked to the idea of economic growth that also satisfies environmental objectives. In many nations, national environmental planning and the formulation of international environmental policies are still based on the fundamental idea of sustainable development. In fact, the governmental organizations that are currently pushing green growth assert that it is a means of attaining sustainable development rather than a replacement for it (Michael Jacobs 2012). "In a classical definition, a development path is sustainable if and only if the stock of overall capital assets remains constant or rise over time," state Todaro and Smith (2011). Noting that manufactured capital (machines, factories, roads, human capital, knowledge, experience, and skills) and environmental capital (forests, soil quality, range land) are intended to be included in the total capital assets. According to this concept, sustainable development calls for the preservation of these total capital assets and the determination of the appropriate level of sustainable net national income (NNI) that is, the amount that may be spent without reducing the capital stock through continuous improvement. Therefore, sustainable development is that pattern of growth that, generally speaking, requires at least a minimal level of environmental preservation and allows future generations to live at least as well as the current generation.

To put it simply, green growth is defined as economic expansion (gross domestic product, or GDP growth) that also significantly protects the environment. There are many who question whether economic expansion and potential environmental enhancements can coexist. In the words of the World Bank (2012), it is "growth that is resilient in that it accounts for national hazards and the role of environmental management and natural capital in preventing physical disasters, clean in that it minimizes pollution and environmental impacts, and efficient in its use of natural resources." According to the Organization for Economic Co-operation and Development (2011), "green growth" refers to promoting development and expansion of the economy while making sure that natural resources continue to offer the resources and environmental services that are essential to human survival.

The words "green growth" and "sustainable development" have the same meanings; the only differences arise from governments' perceived lack of commitment to sustainable development and the ongoing deterioration of the state of the environment worldwide. However, policy makers also realized that in a world where GDP growth and the jobs it creates continue to be the primary concerns of businesses and voters, as well as the primary goal of government policy, an environmental discourse that emphasizes costs, limits, and the need to restrain growth in order to assess them would not likely garner political support. This is particularly true in the context of climate change, where the focus of international discussions has been on how to divide the global "burden," with the prevailing rhetoric being around the economic cost of mitigation Stern (2007). As a result, the rhetoric around green growth now serves a more constructive function rather than its original, politically unappealing one. But unlike sustainable development, it takes a direct approach to the problem of growth. Through rephrasing the economic goal as development and avoiding the underlying question of whether growth and environmental preservation are compatible, sustainable development was a purposeful attempt to maintain a broad coalition of political support. In addition to requiring this compatibility, green growth asserts that stronger growth might result from environmental protection. This illustrates its distinct provenance. Green growth has arisen from the more mainstream and pragmatic group of environmental economic policy makers, whereas the notion of sustainable development originated in the environmental movement, where ideological dispute about the limitations to growth was prevalent (Michael Jacobs: 2012).

Green Economy

A green economy is described as "one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities" in the UNEP study "Towards a green economy." Three main pillars support the green economy: (1) low-carbon technology; (2) resource efficiency; and (3) growth that is inclusive of society. A structure like this is very crucial for Nigeria. In many respects, Nigeria's extreme poverty in the midst of abundance and the widespread environmental degradation found throughout the country are related to the country's heavy reliance on the unproductive exploitation of natural resources for livelihood purposes, which feeds the vicious cycle of underdevelopment. Nigeria might have enormous chances to capitalize on her abundant natural resource endowments as it works toward sustainable development if it adopts a green economy paradigm. However, in order to reap the rewards of a green economy, the Nigerian government must establish the institutional framework, central to which would be a dynamic and well-functioning national council of sustainable development (NCSD).

Nigeria has to make the most of the findings from the UNEP's Trade Policy and Planning Unit if it is to make a seamless and successful transition to a green economy. A crucial part of the Trade Opportunities and Green Economy Project (GE – TOP) is this study. According to the research, commerce in environmentally friendly products and services, standards and certification, and the greening of international supply chains are the main opportunities brought about by the shift. Subsequently, the paper included an extensive sectoral analysis. Growing prospects for additional value and market attractiveness support the need for greener goods and processes. Productive growth in sustainable farming practices is possible, and business-to-business commerce in the certification and verification of products and production processes is expected to rise. Furthermore, emerging economies are becoming major actors in the trade of environmental goods and services, and the green energy sector represents a rising and potentially substantial business.

The study lists the following five enabling criteria.

Strategic expenditure and investment: access to renewable energy, specialized education programs, technical support, and economic infrastructure should all be seen as essential.

Market-based tools: Price policies should take social and environmental costs into account and modify subsidies to unsustainable products. Enhancing country-specific regulatory structures, accountability, and transparency

International frameworks: These are essential for the transfer and diffusion of technical skills and resources.

Improving communication and developing capacity: Promote and assist emerging trade prospects, especially those involving access to export markets.

Sustainable Consumption and Production (SCP)

This mechanism makes it easier for those who are skeptical of environmental protection to see that green growth, which is facilitated by the green economy, not only supports but also accelerates economic growth by creating job opportunities and improving food security, well-being, and poverty alleviation, among other benefits. Policies designed to ensure sustainable patterns of consumption and production, along with technologies that will support economic expansion while the ecosystem continues to supply resources and services, are known as the SCP effort.

The following presumption is essential to sustainable consumption:

1. Resource efficiency combined with a reduction in waste and pollution. The adoption of environmentally benign technology, the utilization of renewable resources to the fullest extent of their ability for renewal, longer product life cycles, and justice between and among generations are imperatives. Without doubt, businesses in Nigeria would prosper more under the sustainable production approach, which offers a plethora of chances for growth, profit, and job creation. Beyond this, though, negative externalities will be freed from sustainable production. It is becoming more and more advantageous for companies to take sustainability into account early in the product creation process as the market for goods grows and environmental issues like climate change have a greater impact on laws and enterprises.

Challenges

Green Economy: One of the major challenges of green economy in the world especially in Nigeria is the lack of political will to implement sustainable policies and practices. Despite Nigeria government's commitment to achieving sustainable development goals, there are several instances where environmental policies are disregarded or not enforced properly. Another challenge of green economy in Nigeria is limited access to finance and high transition cost, particularly for small and medium-sized enterprises (SMEs). Green businesses require significant investments in research and development, technology, and infrastructure, which SMEs may not be able to afford. Furthermore, access to green finance is limited, and the cost of capital is high, making it difficult for businesses to make the transition to a green economy.

Inadequate infrastructure is another challenge that hinders the development of a green economy in Nigeria. The country lacks the necessary infrastructure, such as public transport systems, waste management facilities, and renewable energy infrastructure, to support sustainable development. This lack of infrastructure makes it difficult to transition toward a green economy.

Opportunities

Green Economy: Nigeria as a Nation should take a significant step toward building a green economy by investing in renewable energy sources like solar, wind, and hydropower and schemes like Green Hydrogen Mission, Energy Transition, Energy Storage Projects, Renewable Energy Evacuation. If Nigeria will set an ambitious Target of achieving over 200 Gigawatt (GW) of renewable energy capacity by 2030 which may includes 100 GW of solar power, 60 GW of wind, 10 GW of small hydro, 30 GW of Bioenergy. This target is expected to create several employment opportunities in the renewable energy sector.

Apart from renewable energy, Nigeria can also benefit from green economy opportunities in the agriculture and forestry sectors. Sustainable agriculture practices such as organic farming can help reduce greenhouse gas emissions and protect soil health. Similarly, sustainable forestry practices can help conserve biodiversity and reduce deforestation. In addition, there are opportunities in the manufacturing sector to produce eco-friendly products that are biodegradable, recyclable, and made from sustainable materials.

Empirical Literature

The idea of a "green economy" is presented by Hellena Pavese (2011) in her paper "Towards a green economy: pathway to sustainable development and poverty eradication," which makes evident how severely ecosystem services are being degraded. The author discusses the green economy project, which was started with the goal of determining the costs and hazards to society and economy associated with the existing practice of excessive use of natural resources, as well as the prospects for a shift to more sustainable practices.

The UNEP study was critically evaluated by Alexandre P'Avignon and Luiz Anthonia (2011). They declare that the introduction of values beyond utility maximization in the report is a qualitative leap. They highlight the need to approach the shift to a green economy from a systemic perspective, in which human activity is only one component of civil society, which is a subsystem of the biosphere and all of its inanimate and biological components.

The link between the notions of sustainable development and the green economy was examined by Donald Sawyer (2011). The author warned against the possibility that the green economy might take on purely commercial characteristics, favoring market mechanisms and resource pricing over alternative policies. He claims that additional aspects, including social, ethical, cultural, political, and judicial ones, are pertinent to the green economy. According to him, in order for the green economy to be implemented in a way that is complementary to and connected with the more abstract, diplomatic, and governmental concept of sustainable development, policies that uphold the rights of all people and preserve the interconnected functions of ecosystems are necessary.

Renato Roseberg, Ernani Kuhn, and Francisco Gaetani gave a summary on the state of the green economy in Brazil. They said that Brazil is a leader in environmental energy because of its wealth of national resources and its numerous environmental conservation laws and regulations. The country has some of the greatest greenhouse gas emissions in the world, according to the authors, but it is changing this by setting voluntary objectives for emissions reduction. They provide an overview of the primary steps Brazil has been taking to develop a green economy in areas like water resources, solid waste management, and forestry, among others. Maria Cecilia J. Lustosa examined the significance of environmental innovations as a way to shift the existing technological paradigm which is heavily reliant on fossil fuels for energy and raw materials into one that is more environmentally responsible. She discussed how environmental challenges have emerged historically and how they relate to economic activity. Next, with an emphasis on environmentally sound technologies, the author presents the circumstances in

which and in which directions such changes might occur, highlighting the significance of the inventive process in technological transformation and paradigm shift. The key characteristics of the innovations related to environmental challenges in Brazilian enterprises were discovered by the author through additional investigation. The author comes to the following conclusions: creating a green economy requires environmental advances, and expanding company capacity is essential and, where appropriate, linked to state-sponsored incentives. She also concluded that poor innovation investment in the productive sector is undoubtedly a contributing cause to the further inhibition of environmental innovation in Brazil.

Theoretical Literature

Understanding the economy through the lens of technology as a tool for social change in human societies is made easier by the neo-Schumpeterian idea. In order to facilitate a smooth transition to a green economy, this strategy takes into account other, adaptable, locally relevant alternatives. According to Pollin et al. (2008), enhancing the environment can play a part in reviving economies that had been severely hit by recession and encouraging growth, especially in the area of employment. Simple Keynesian theory, which maintained that governments should replace lost private sector demand with public expenditure during a downturn, served as the main defense of government spending. Further income and employment growth are subsequently produced by this multiplier impact. Spending of this kind need not be environmentally friendly, but a green stimulus package has distinct advantages due to the scope of environmental options and the added benefits to health and amenities they provide.

These claims are somewhat supported by estimates of the effects of the green stimulus programs implemented in 2008–2010. The US stimulus package's environmental components were predicted to have generated about 500,000 net new employment (Barbier 2010a), while comparable measures implemented in South Korea were expected to have produced up to 960,000 jobs (OECD 2010). According to some estimates, green measures in the US created 20% more jobs than traditional infrastructure spending, indicating that the green stimulus measures may have been more successful in creating jobs than their proponents had predicted.

Analysis

Economic growth is achieved through the combination of labor, physical capital, human capital, and technology, according to mainstream economic theory. When these variables raise overall productivity, economic development follows. It is anticipated that productivity will only rise in this way if a specific percentage of output is reinvested in better technology, higher wages and salaries, and other fringe benefits intended to encourage labor for higher productivity as well as better healthcare and education for the workforce. The pace of economic growth is determined by the rate of investment in these elements of production. The core of the green economy is the comparison between the environment and other industrial parameters. Actually, the natural environment is a component of production; it functions as capital in three ways: it supplies resources, absorbs waste, and offers a variety of environmental services necessary for living, such as maintaining ecosystem health and regulating climate. Because of this complete disregard, natural resources are overused, resulting in reduced fisheries, overabstraction of water, erosion of soil, and depletion of forests. We allow ecosystems that offer important functions, like forests and wetlands, to deteriorate. These arise from the inability of the market to determine the proper prices, if any, for our natural resources. The market fails when it fails to account for the entire value of the activities that take place inside it. Therefore, the green growth paradigm holds that the existing rates of economic development are unsatisfactory and inefficient.

This implies that, in the case of Nigeria, the government must intervene at this point, when there is undeniable proof of market failure, and provide the infrastructure and take-off initiative to draw in private investment. In addition to creating new market possibilities and increasing market rivalry, this will significantly lower the high rates of environmental deterioration.

This means for Nigeria that, just as she did in the power sector, the government must now intervene to provide the initiative and take-off infrastructure to attract private participation, given that the country's environmental capital is fundamentally underpriced and, consequently, a victim of market failure. In addition to creating new market possibilities and fostering competition in the market for environmental products and services, this will significantly lower the high rate of environmental deterioration.

Analysis of Selected sectors in Nigeria

Agricultural Sector

A number of detrimental environmental effects, such as the ongoing loss of biodiversity and ecosystem services, the depletion and erosion of top soil nutrients, the growing scarcity of freshwater, the worsening of water pollution due to inadequate nutrient management, the release, disposal, emissions, and waste of hazardous chemicals, and trade that is carried out on a business-as-usual basis, pose a threat to Nigerian agriculture's future. In the medium and long term, sustainable agriculture may either maintain or boost agricultural output while lowering resource use, protecting the environment, and enhancing food safety.

The use of sustainable farming techniques can boost output, make it easier to enter global supply chains, and meet the need for more organic and sustainable products worldwide. Growers of cocoa, rubber, rice, cassava, groundnuts, and other crops will see increases in output as well as an improvement in their general well-being and a secure and successful future.

Put another way, improving the environment via investment will lead to an enhanced ecosystem, and the only way to maintain this improvement in the environment is to participate in the SCP project. This will stop the environment from getting worse while leading to an increase in organic goods and services. In the end, this will improve the overall well-being of over half of the country's rural residents, as well as their access to income and production.

Fisheries

The Niger-Delta zone's aquatic culture is in almost complete collapse and deterioration. The reason behind the incapacity of these prominent fishermen to catch fish is not overfishing, but rather the unsustainable use of fossil fuels in the area. However, Nigeria imports fish and other fish products worth millions of dollars every year. This can be changed by practicing sustainable exploitation, and by certifying fish products for sustainability, Nigeria's fisheries management systems can be strengthened overall.

Climate change is sending most of these species farther into the Atlantic, increasing the difficulty and cost of fishing. The sea level is also rising as a result. It is also possible to argue that, although non-sustainable fishing practices in coastal areas have severely damaged the environment and negatively impacted aquatic life, the increasing prevalence of unsustainable fishing methods, particularly in Oguta Lake, has severely aggravated the declining fishing conditions. These unsustainable fishing methods, which included the use of dynamite and gamaline 20 underwater explosive, had abruptly gained popularity among young men in Oguta

Lake. Either way, aquatic life suffers a fatal blow with the destruction of additional aquatic habitat in addition to eggs and fingerlings.

Even if there may be a way to turn things around, it will need sincere and dedicated efforts from all parties involved, particularly the government, which has to put more pressure on regulations. Better aquatic life will translate into more income opportunities and a better quality of life for the rural residents of the Escravos River and the entire southern riverine region.

Forestry

Nigeria's forest reserves in the states of Edo, Delta, Taraba, Buichi, and Ondo are currently seriously threatened by the rise of illicit logging. This trend is made worse by the acts of local government officials, who have integrated themselves into the illegal trade. On the other hand, traceability and transparency in the forestry sector may be greatly enhanced by sustainable commerce in wood and non-timber forest products, especially through certificate systems.

Renewable Energy

Numerous issues confronting Nigeria's energy industry today can be resolved by the use of renewable energy resources. The Nigerian power industry is in a dire state; not even the reforms implemented over the years, which have seen public investments transferred to politicians and their allies, have helped the industry in any way. Instead, consumers are still required to pay high rates for energy that is not used through monthly estimated billing, even in the event of a blackout. Nigeria's electricity output plummeted to 2,887.8 megawatts by June 2014 (Business July 2014).

With the right laws governing low-carbon emissions and energy-efficient renewable energy-based technology, this trend may also be reversed. Nigeria has abundant wind and solar resources that, if used, may propel the country into the enviable status of sustainable energy self-sufficiency, output growth, and job creation.

Conclusion/ Recommendations

In Nigeria, the green economy through green growth is both desirable and realistic as it can combine the creation of jobs and revenue with the fight against poverty and the preservation of natural resources. Naturally, accomplishing this is essential to fulfilling Millennium Development Goal No. 7. Consequently, the economy that generates a steady rise in the natural capital stock is known as the "green economy."

The following suggestions are made in order for Nigeria to effectively transition into the green economy, reap the benefits, and meet Millennium Development Goal 7:

- (1) Integrating environmental and economic policy requires the development of institutional capability.
- (2) The indispensability of institutional capacity to develop an environmental indicator system capable of quantifying and tracking the returns on investments in natural capital.
- (3) The green economy must be viewed by Nigeria as a means of achieving its goals of economic growth. Nigeria's economy is still in its early stages of development and does not have the lock-in effect of the more developed countries, therefore implementing some green growth strategies may be simpler for her.

In conclusion, Nigeria may profit economically and socially from environmental rules rather than viewing them as a problem that has to be solved.

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