

## **Evidence based analysis of Environmental, Social and Economic Sustainability and how it can collectively contribute to Nigeria's Development'**

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### **Abstract**

Sustainability and sustainable development have become a global aspiration of many nations aimed at ensuring economic growth, protecting environmental resources, and ensuring better living conditions for the present and future generations. The objective of the study was to make an evidence-based content analysis of how environmental, social and economic sustainability can collectively contribute to Nigeria's development. The study established that only by integrating and interlinking economic, social and environmental sustainability can negative synergies be arrested, positive synergies fostered, and real development encouraged in Nigeria. Also applying social sustainability in Nigeria will be based on emphasis upon satisfying human needs in such essential areas as education, social equity, nutrition, health care, and fostering equitable resource distribution for economic development of the nation. The study recommended among others that sustainable resource management practices should be vigorously pursued in Nigeria to ensure that national and natural resources are utilized responsibly in line with United Nation's SDG 12 (Responsible consumption and production). Also, since increase in economic growth will increase carbon footprint and green house emission that may affect sustainability, Nigerian governments should focus on economic policies that have consideration for environmental and social impacts on citizens in order to achieve sustainable development.

**Keywords:** Environmental Sustainability, Social Sustainability, Economic Sustainability, Nigeria Development.

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### **1. INTRODUCTION**

Sustainability is the ability to provide for present needs without compromising future ability, while Sustainable development is maintaining a delicate balance between the human need to improve way of life, maintain and guarantee continuity of a business and feeling of well-being on one hand, and preserving natural resources and ecosystems, on which we and future generations depend (Orji, 2023). It emphasized on balancing economic growth, social progress, and environmental protection to ensure long-term prosperity, equity, and well-being for current and future generations (Orji, 2024).

The definition of sustainable development implies a continual change or evolution of the term "needs". It is doubtful to assume that the present and future generations will have the same or identical needs, wants and priorities (Ugochukwu et al., 2024). Sustainable development can be viewed from

different angles. Sustainable development involves a deliberate assessment of a nation's current resources, encompassing both human and material assets, with the fundamental goal of preserving future resources. This approach to national development encompasses all facets of human existence, including political, social, cultural, religious, moral, and economic aspects (Nudegbesi et al 2024),

Sustainable development aims to address the interconnected challenges of economic development, social inclusion, and environmental sustainability, seeking to create a harmonious and balanced system that supports human well-being while preserving natural resources and ecosystems. It acknowledges the intrinsic interconnectedness between human systems and the natural environment, advocating for responsible stewardship of resources, equitable distribution of benefits, and the preservation of ecological integrity (Ogunyemi, 2024).

The doctrine of 'sustainable development' derives from a discipline in economics that has been evolving for almost two centuries. The debate about whether Earth's limited natural resources will continue to provide life support for humanity's burgeoning population began with the work of the English political economist Thomas Malthus in the early 1800's (Dixon & Fallon, 1989). In An Essay on the Principle of Population 1798, Malthus framed the fundamental tenet of environmentalism namely, that because human population tends to grow in a geometric progression while subsistence food production can grow in only an arithmetic progression, population growth is destined to be checked by natural resource depletion and inevitable human want and misery (Basiago, 1999).

At the UN's Conference on Environment and Development or 'Earth Summit' held in Rio de Janeiro in 1992, diplomats from over 120 nations signed five pacts framing 'sustainable development' as the overarching policy of the 21<sup>st</sup> century. The 27 principles of The Rio Declaration on Environment and Development 'define the rights and responsibilities of nations as they pursue human development and well-being'. Its many references to 'sustainable development' suggest a form of development that integrates economic growth and environmental protection. Agenda 21 is 'a blueprint on how to make development socially, economically and environmentally sustainable' (Basiago., 1999). In line with this the United Nations 2030 Agenda, which encompasses 17 SDGs was designed to address critical areas such as environmental preservation, human well-being, and economic prosperity. These goals serve as a rallying call for nations to implement strategies that balance ecological sustainability with social and economic advancement (Ogunyemi., 2024).

The question begging for answer is how far has countries gone in their sustainable development efforts? And what are the determinants of sustainable development in Nigeria? It is in the light of this that this study intends to make an evidence-based analysis of how environmental, social and economic sustainability can collectively contribute to Nigeria's development.

## 2. Environmental sustainability

Environmental sustainability involves ecosystem integrity, carrying capacity and biodiversity. It requires that natural capital be maintained as a source of economic inputs and as a sink for wastes.

According to (Ugochukwu et al., 2024) Environmental sustainability refers to responsible participation in the environment to prevent the

depletion or degradation of natural resources and ensure long-term ecological quality. Environmental sustainability ensures that resources are not consumed faster than they are renewed. It implies curtailing socioeconomic effects on the environment to preserve life and resources.

Environmental sustainability can also be seen as the ability to maintain an ecological balance in our planet's natural environment and conserve natural resources to support the wellbeing of current and future generations. Resources must be harvested no faster than they can be regenerated. Wastes must be emitted no faster than they can be assimilated by the environment (Kahn, 1995).

The theoretical framework elaborated by Kahn [8] posits that economic, social and environmental 'sustainability' must be 'integrated' and 'inter-linked'. They must be coordinated in a comprehensive manner. A hypothetical case of deforestation in Nigeria context follows to illustrate this 'integration' and 'interlinkage'. Thus, the following example describes how the economic, the social, and the environmental substrates of 'sustainability' relate to one another and can contribute or mar development in Nigeria: 'If a man in my village of Amaeke Item in Abia State of Nigeria lacks a job (economic problem), he is likely to be poor and disenfranchised (social problem). If he is poor and disenfranchised, he has a potential to engage in practices that harm ecology, for example, by cutting down trees for fire-wood to cook his meals and warm his home (environmental problem). As his actions are aggregated with those of others in his village cutting down trees, deforestation will cause vital minerals to be lost from the soil (environmental problem). If vital minerals are lost from the soil, the village inhabitants will be deprived of the dietary nutrients required to sustain good health and the intellectual performance needed to learn new technologies, for example, how to operate a computer and develop artificial intelligence technology, and this will cause productivity to stagnate (economic). If productivity stagnates (economic), poor people will remain poor unless government agencies or non-government agencies intervened with aids (social).

On the contrary, if the same man in the village is given a job, he has a greater opportunity to accumulate capital (economic). If he accumulates capital, he can spend it by employing other poor people or buying their products, thereby alleviating poverty (social). If poverty is alleviated, poor people will be less likely to cut down trees out of necessity. This will help preserve the soil (environmental), and thereby sustain productivity (economic). So, only by 'integrating' and 'interlinking' economic, social and environmental 'sustainability' can negative synergies be arrested, positive synergies fostered, and real development encouraged in Nigeria.

### 3. Social Sustainability

Social sustainability' implies a system of social organization that alleviates poverty. Social sustainability is a combination of formal and informal processes that involve infrastructure to support the cultural and social life of the people. Social sustainability aims to create inclusive societies, reduce inequality, and ensure long-term well-being for all people while preserving social cohesion and justice. It's about promoting equity, human rights, access to education and health care, and decent work [2]. It generates an environment feasible for social engagement and space for people and spaces to evolve. It promotes the health and well-being of the people by giving them equal opportunities and access to the resources to support their families socially and economically. Social sustainability entails continuous improvement in the social well-being and quality of life. It focuses on social and human development indicators (Yakubu, 2016).

Socially sustainable communities and societies are better equipped to tackle shared challenges in ways perceived to be fair and just, enabling all members to thrive over time. For the purpose of this study, breaks down into four components form a simple conceptual framework for social sustainability:

1. **Social cohesion:** shared purpose, trust, and willingness to cooperate within and across individuals, communities, and between communities and the state.
2. **Inclusion:** access for all to services, markets, and the opportunity to participate in society and live with dignity and respect.
3. **Resilience:** where everyone, including poor and marginalized groups, are safe and can withstand shocks and protect their cultural integrity in a given community.
4. **Process legitimacy:** a relatively new concept focusing on how public decisions get made and implemented, ensuring that stakeholders, especially those who stand to 'lose out' accept these decisions as fair and credible, even when it is not in their own interest.

Social Sustainability can be measured in Nigeria based on the following:

- **Education;** A society that has so many uneducated citizens like Nigeria will continue to witness social crisis, because they will be a willing tool for manipulation by the political elites. Providing access to quality education and vocational skills is the bedrock for social sustainability and national development for a nation like Nigeria.

- **Social inclusion and Diversity management;** For a country to be stable there should be inclusive policies by those in authority, the rights of every Nigerian citizen must be respected and guaranteed.
- **Poverty alleviation;** According to Orji, Olaniyi and Adeyemo (Orji et al., 2022), poverty represents hopelessness, restlessness, joblessness, voicelessness, hunger, disease and social imbalance; it has to do with absence of resources to command means of livelihood. They stated further that Absolute poverty; is used to describe an individual or household below a minimum acceptable level which has been fixed over time as a global stand for meaningful human existence known as poverty. Absolute poverty is also referred to as subsistence poverty is grounded on the idea of subsistence – the basic condition that must be met in order to sustain a physically healthy existence. Individuals or groups who lack basic needs of food, shelter and clothing fall under this category. The latest World Bank report indicated that Nigeria's poverty rate had risen from 40 per cent in 2018 to 46 per cent, as the number of poor people increased from 79 million to 104 million. "Sluggish growth and rising inflation have increased poverty from 40 per cent in 2018 to 46 per cent in 2023, pushing an additional 24 million people below the national poverty line," the World Bank said Punch (2024). It is held that standards for human subsistence are about the same for people of the same age and physique regardless of where they live. Poverty alleviation can be achieved in short time basis through measures such as micro credit financing, skill acquisition for unemployed people, conditional cash transfers to vulnerable citizens, and agricultural input support for farmers in Nigeria.
- **Other measures that can be used to measure social sustainability in Nigeria are;** social justice and protection of human rights, e.g let people's vote count. Also access to basic services like clean water, good sanitation, housing and adequate power supply; community engagement- let the people own policies through community engagements, and no one should be seen to be above the law even the law makers.

Applying 'social sustainability' in Nigeria will be an emphasis upon satisfying human needs in such essential areas as nutrition, health care, and education. The theory of 'social sustainability' calls for economic growth constrained by the requirements of social equity. In order to link these, an enabling environment must be created by the government that will optimizes resource use, prioritizes resource allocation, and fosters equitable resource distribution for economic development of Nigeria.

#### 4. Economic Sustainability

According to Ghaffar and El Aziz (Ghaffa et al., 2021) Economic sustainability relies on four principles, growth, development, productivity, and trickle-down. Economic sustainability advocates reducing energy consumption, downsizing costs, maximizing economic returns and adding new innovative values. Economic sustainability' implies a system of production that satisfies present consumption levels without compromising future needs. It implies the ability of an economy to sustain longtime development. The notion of 'economic sustainability' was originated by Hicks. In his classic work *Value and Capital* (1946), (Hicks., 1946) defined 'income' as 'the amount one can consume during a period and still be as well off at the end of the period'. Traditionally, economists, assuming that the supply of natural resources was unlimited, placed undue emphasis on the capacity of the market to allocate resources efficiently. They also believed that economic growth would bring the technological capacity to replenish natural resources destroyed in the production process. Today, however, a realization has emerged that natural resources like oil are not infinite. An economic system designed in light of the theory of 'economic sustainability' is one constrained by the requirements of 'environmental sustainability'. It restrains resource use to ensure the 'sustainability' of natural capital. It does not seek to achieve 'economic sustainability' at the cost of 'environmental sustainability' (Basiago, 1999).

There is a link between economic sustainability and economic development. Economic development is a complex, multi-faceted process that involves the restructuring and reorientation of both economic and social systems. It encompasses not only physical changes but also a mindset transformation, where a society, through various social, economic, and political initiatives, achieves an improved way of life (Nudegbesi et al., 2024).

Economic sustainability can contribute to Nigeria's development if the following measures are taken:

- **Diversification of sources of revenue;** Nigeria should look beyond oil revenue and diversify the sources of income such as solid minerals mining, development of the tourism sector and entertainment industry. Also, diversification of the economy could be achieved through entrepreneurship and innovations.
- **Investment in human capital through developing skilled and educated workforce;** In 2002 when he visited Nigeria, President Bill Clinton of America, said the resources of the world has shifted from the leg to the head; which means natural resources of the earth is not the driving force for economic development but human brain through technology. Japan and Israel have little or no natural resources but are among the rich nations of the world because of human capital development through technology. For instance, Israel has a variety of natural resources, such as potash, bromine, and magnesium, but is generally considered to be relatively poor in compared to other countries. Israel's greatest resource is its high-tech and industrial manufacturing sectors, which are its major economic drivers. Japan's economy is based on a combination of manufacturing, services, and international trade: Japan is a world leader in manufacturing, producing cars, steel, and consumer electronics.
- **Sustainable Resources Management;** This can be achieved by ensuring sustainable use of natural resources for longtime growth and development. For instance, if Nigeria stops Gas flaring, it can increase the quantity of natural gas supply and enhance revenue generation, that will lead to better living condition of for the citizens.
- **Infrastructure development;** Infrastructure drives development. Good roads, functional railway services, adequate water supply, good schools and constant power supply will encourage investors to invest in Nigeria. Recently Companies such as Michelin, Proctor & Gamble has closed down their operations in Nigeria because of high cost of doing business due to inadequate power supply.
- **Encouraging Research and Innovations;** Research would drive Nigeria's economic development by discovering new things

and technologies. There is a common saying in my village, Amaeke Item in Abia State that 'there is all we need in the soil', this means there is nothing man need that cannot be gotten on the earth if he searches very well, and this can only be done through research and innovations.

- **Other means that Nigeria can achieve economic sustainability for growth and development are;** fair treatment in business competition, financial inclusions, affordable credit and medium term loan to drive production of goods and services, and developing strategic measures that align with the development of all sectors of the economy.

## 5. Conclusion

This paper examined the concept of environmental, social and economic sustainability and how it can collectively contribute to Nigeria's development. The study established that only by 'integrating' and 'interlinking' economic, social and environmental 'sustainability' can negative synergies be arrested, positive synergies fostered, and real development encouraged in Nigeria. Also applying 'social sustainability' in Nigeria will be an emphasis upon satisfying human needs in such essential areas as nutrition, health care, and education. Thus, recommended that sustainable resource management practices should be vigorously pursued in Nigeria to ensure that national and natural resources are utilized responsibly in line with SDG 12 (Responsible consumption and production). Also, since increase in economic growth will increase carbon footprint and green house emission that may affect sustainability, Nigerian governments should focus on economic policies that have consideration for environmental and social impacts on citizens in order to achieve sustainable development.

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