ISLAMIC UNIVERSITY JOURNAL OF SOCIAL SCIENCES VOL 3, NO 3, DEC 2024

ISSN: 2709-2429(Print), 2709-2437(Online)-Published 30th Dec 2024

Blue Economy: A Tool for Sustainable Development for the Nigerian Nigeria

*Dr. Bobai¹ Francis Danjuma, Dr. Shuaibu², Isa Mohammed and Dr. Yahaya³ Abubakar Sadiq

¹Department of Economics and Development Studies, Islamic University In Uganda fdbobai@gmail.com

²Department of Economic University of Abuja-Nigeria <u>mohammed_shuaibu@yahoo.com</u>
³Department of Political Science, Islamic University In Uganda <u>sadiqyahaya04@gmail.com</u>

*Corresponding Author: fdbobai@gmail.com (+256 7457 81421) (+234 806 248 1407)

Abstract

Nigeria has been included in this endeavor due to its many littoral component states and a lengthy waterway, therefore developing for the country's economy to grow and develop successfully, Nigeria's blue economy is vital. The goal of a blue economy has a worldwide scope and transcends national boundaries. Alternatively is often referred to as the marine economic system, the blue economy is an ecosystem of economic activity that revolves around huge bodies of water, particularly oceans, and is preserved to fulfill ecological obligations. This paper theoretically examined the blue economy's economic benefits for Nigeria's sustainable growth. There are many opportunities as to the nation's blue economy in terms of the economy, society, and environment, despite its challenges. The study noted that one tool for sustainable development is the blue economy in Nigeria through a smooth trilateral approach that includes; "people, planet and prosperity" which could only be achieved with a strong political will. It was then recommended that in order to solve and transform the socioeconomic, political, legal, institutional, security, and sustainability problems into opportunities, there needs to be significant collaboration among the different stakeholders. It was concluded that a well-defined vision for the Nigerian Blue Economy are essential for a smooth blue transition toward sustainability with positive impact.

Keywords: Blue Economy, Social Justice, Sustainable and Inclusive Development and Triple Bottom Line

1. Introduction

A subset of the green economy, which is more widely defined, is the blue economy which focused on sustainable development that is not detrimental to the environment and emphasizes equitable and efficient use of resources (Bove 2021). The blue economy places a strong emphasis on safeguarding and responsibly developing oceans as well as putting laws into place that guarantee improved management of marine resources, animals, and ecosystems. These sectors serve as the primary driving force for resource production and extraction as well as economic growth in a fully realized blue economy. Thus, blue economy encompasses all commercial activities involving seas and coastal environments. Noteworthy is the fact that organizations differ in extent to which they interpret it.

Furthermore, utilization, conservation and renewal of the maritime ecosystem are jointly known as the blue economy in economics. On the other hand, sea and ocean-related economic activity are also known as the "blue economy" or the "ocean economy". According to World Bank, the "sustainable use of ocean resources to benefit livelihoods, the economy, as well as health of the ocean ecosystem" is often referred to as the "blue economy." Kathijotes (2013) asserted that the blue economy is a social structure that was developed through a methodical process that got its name from the lovely mother earth, whose ocean and sky are blue when pollution is absent. Thus, one important tool for achieving sustainable economic development is the ocean, which is also seen as a frontier for environmental sustainability. Among its many potential benefits are employment opportunities, economic growth, reduction of poverty, and ensuring of food security (United Nations Economic Commission for Africa, 2020).

As a green economics in a blue world, the blue economy, according to UNECA (2016), integrates a new approach for reaping the economic benefits of the resources found in lakes, rivers, oceans, and other bodies of water. Perhaps, blue economy is characterized by the ideal state of human society moving forward as well as developing entrepreneurship and finding more people who are prepared to take chances as their top priorities in this process. Consequently, the blue economy concept was developed with the primary goal of preserving global ocean resources through the promotion of economic growth, social inclusion, and livelihood resilience (Smith-Godfrey, 2016; World Bank and UNDESA, 2017; Olteanu and Stinga, 2019; Essen, 2020; Martinez-Vazuez et al., 2021; Lee et al., 2022). However, by optimizing the advantages of coastal and marine resources for the growth and development of all coastal regions, the blue economy aims to disentangle socioeconomic activity and development from environmental degradation (Lee et al., 2020). The Blue Economy concept is aligned with the United Nations Convention on the Law of the Sea (UNCLOS), which lays out regulations for ocean economy, environment, and marine natural resource management, as well as nations' rights and obligations regarding their use of the world's oceans (World Bank and UNDESA, 2017).

The idea of the "blue economy" has gained relevance in the fight against global poverty and in the preservation of ocean and coastal resources (Union for the Mediterranean, 2017; Wenhai et al., 2019). Economic, environmental, and social development are the three pillars of sustainable development that must be considered when developing strategies that are inclusive, climateresilient, and environmentally sustainable (United Nations, 2022). Building businesses and

integrated economic activities around ocean space is its primary objective in order to support a robust economy without endangering other aspects of sustainable development (Spalding, 2016). Consequently, by making it possible for regional and international integration to grow, allowing member countries to establish cooperation and coordination, the blue economy promotes the protection of maritime and coastal resources (Haimbala, 2019). Furthermore, it aids in improving administration, management of the land and sea, and management of marine ecosystems.

It is important to understand that the long-term management, development, and welfare of riparian and coastal populations are inseparably linked to the health of the oceans and freshwater resources. The blue economy's development is also critical to the long-term sustainability of freshwater, coastal, and ocean space. All major cities are located near the shore, and around half of the world's population resides 60 kilometers or less from an ocean. For their livelihood and employment, millions of people depend on freshwater resources and the oceans. According to estimates from the UN Food and Agriculture Organization, more than 4.2 billion people get more than 15% of their animal protein from fish (FAO, 2014). It's interesting to note that 90% of global trade is transported by water.

To improve the sustainability of economic sectors' productivity and efficiency, it is vital to emphasize that all sectors of the economy and human endeavors must be able to produce little to no waste and carbon emissions. Popoola and Olajuyigbe (2023) assert that the blue economy, which forms the foundation of national development, may be stably integrated with both land-based and sea-based socioeconomic growth. Interestingly, if the blue economy is used effectively, Jacob and Umoh (2022) stated that it can increase Nigeria's productivity and economic growth. As a result, it is now crucial to assess the blue economy's advantages as a sustainable development strategy in Nigeria, which is what this study aims to achieve. This study will also add to the body of knowledge by theoretically investigating the advantages of the Nigeria coastline region for sustainable growth and development.

2. The Origin of the Concept Blue Economy

According to Jacob and Umoh (2022) Professor Gunter Pauli was the first to coin the concept of "Blue Economy" as an economic philosophy. He was asked by the UN in 2010 to think about the future business models prior to the Kyoto Protocol's adoption at the COP3 conference in Japan, in 1994. However, the concept "blue economy" came to be during the June 2012 Rio de Jeneiro United Nations Conference on Sustainable Development. Two main problems were

discussed at the conference; which are improvement of the "green economy" and the establishment and strengthening of the institutional framework for sustainable development. An idea presented as a substitute economic framework, centers on oceans and their significant role in promoting sustainable growth. Coastal states raised concerns about how the green economy could fit into their circumstances during the planned Rio+20. It became widely recognized that the "blue economy" was a more effective approach for these nations. Since the ocean comprises more than 95% of the biosphere, the idea acknowledges the importance of the oceans to humanity's quest for sustainable development (Lesperance, 2016).

In addition to safeguarding the marine and coastal ecosystems, the blue economy concept primarily seeks to encourage economic activities, promote social inclusion, and improve livelihoods. It comprises separating development and socioeconomic activity from degradation of the environment as well as utilizing the advantages of marine resources (Wairimu and khainga, 2017). The Center for the Blue Economy states that the term "blue economy" is now widely used globally to refer to three distinct but related meanings: the ocean's overall contribution to economies, the need to solve environmental and ecological properties of ocean, and, thus, the ocean economy as a growth opportunity for both developed and developing countries.

Interestingly, the oceans and other bodies of water are or can be viewed as developing spaces that offer opportunities for sustainable development, the "Green Economy" principles were also incorporated into the "Blue Economy" idea, which changed the way that coastal water bodies and related resources are managed in a sustainable way. In addition, the UNECA (2016) defines the blue economy as a green economy in a blue world that uses an innovative approach to the lucrative exploitation of resources found in rivers, lakes, oceans, and other bodies of water. For Instance, world's population depends heavily on the oceans for transportation, food, and livelihoods. Thus, marine ecosystems are a source of hydrocarbons and make a substantial contribution to the tourism sector. The enormous opportunity for sustainable development becomes apparent with the emerging of technology like seabed mineral exploration and bio-prospecting.

Introducing the blue economy, Small Island Developing States (SIDS) incorporates energy production, maritime transportation, sustainable use, and spatial planning for conservation. It goes beyond economies centered on the water. It further highlighted that oceans play vital role in economic modeling and decision-making, in addition to being locations for resource extraction

and waste disposal. Thus, blue economy strives for greater well-being, social justice, and environmental sustainability this is in line with the Rio+20 green economy program (Bove, 2021). With a focus on developing nations, it places a high priority on fairness, maximizing advantages, advancing gender equality, creating inclusive growth, and making sure there is fair representation in international governance structures. Mostly, a framework for sustainable development is given by the blue economy, tackling issues like fair participation, benefit distribution, and inclusive growth, especially for countries that rely on offshore resources.

The term "blue economy" refers to a more comprehensive sustainable ocean-based economic model that was accepted by the East Asian Seas Congress in 2012 and is primarily dependent on coastal marine habitats and resources. However, it is one that makes use of cutting-edge, ecologically friendly infrastructure, technology, and practices, including institutional and supporting frameworks for achieving the following objectives; (i) development that is inclusive and sustainable; (ii) safeguarding the oceans and coasts by lowering ecological hazards and deficits; (iii) addressing the security of food, energy, and water; and (iv) promoting ecosystem-based strategies for mitigating and adapting to climate change.

2.2 Components of the Blue Economy

The primary objective of the Blue Economy models is to deal with problems that cause environmental issues and move resources from scarcity to abundance Kathijotes (2013). In order to address the issue of coastal blue growth, Mulazzani et al. (2016) presented an ecosystem service paradigm-based management approach. In the opinion of Soma et al. (2018), cooperation, inclusiveness, and trust in the marine industry are keys to achieving long-term sustainable blue growth. Keen et al. (2018) stated that assessing the sustainable maritime management can help develop a conceptual foundation for the blue economy. In addition, Sarker et al. (2018) were of the view that underlining the need for teamwork in developing the blue growth can aid to meet sustainable development goals (SDGs).

However, fisheries, coastal tourism, marine transportation, offshore renewable energy, marine mineral resources, waste management, climate change, and blue biotechnology are generally understood to be components of a blue economy, though the exact components would vary based on each country's endowment in freshwater and ocean resources. As the World Bank has noted, the following must occur in order for some activities to be considered parts of a blue economy: (i) it must ensure that both present and future generations receive social and economic

benefits; (ii) has the ability to restore, safeguard, and preserve marine ecosystems' intrinsic worth, variety, resilience, productivity, and essential functions. (iii) In order to drastically reduce waste and promote material recycling, it must also be focused on clean technology, renewable energy sources, and circular material flows.

2.3 Oceans as Driver of Growth and Sustainable Development

As a result of their extreme scope and ambition, Agenda 2030 and the SDGs require the development of new, sustainable sources of economic growth in addition to prudent resource management and environmental preservation. The Blue Economy is a creative and sustainable strategy for promoting growth in the economy. Its objectives are to secure political stability, improve livelihoods, create jobs, transform economies from one of scarcity to abundance, encourage social inclusion, and sustainably maintain the health of the ocean ecosystems (UNEP 2015). According to UNDESA (2014), the Blue Economy is clean, low-carbon, and contributes to the preservation, restoration, and maintenance of diversity, productivity, and resilience on the natural capital that is essential to its development. It depends on renewable energy and clean technology and circular material flows to provide long-term social and economic stability. While remaining inside the boundaries of a single planet, it is regulated by transparent, inclusive public and private procedures. Future generations will benefit socially and economically from the Blue Economy.

The World Bank claims that oceans are a valuable natural resource that support billions of people worldwide particularly the poorest by providing food and jobs as well as transportation for 80% of international trade. According to OECD estimates, the value added by oceans to the global economy annually amounts to \$1.5 trillion. Furthermore, UN-FAO estimated that approximately 10-12% of the global population depends on aquaculture for their livelihood, with 90% of these people employed in small-scale operations in developing nations. Fishing, which makes up 15-17% of the world's protein intake, generated over \$148 billion in export earnings in 2014 alone. In addition to these economic benefits, blue carbon sinks like mangroves and their corresponding habitats absorb roughly 25% of the extra CO2 produced by burning fossil fuels and protect coastal areas from hurricanes and flooding. Due to this, freshwater ecosystems, coasts, and oceans are crucial for halting climate change.

In a qualitative study conducted in Pakistan, Shahzad and Jawad (2021) found that the blue economy tackles environmental, social, and economic issues in order to maintain sustainability's

triple bottom line. The conceptual pattern imply that the triple bottom lines three pillars are people, planet and prosperity, of which each is given equal significance in the blue economy, with no one being given a greater significance than the others. Thus, the foundation of the blue economy is social justice, environmental protection in addition to economic growth and development.

2.4 Blue Economy An Emerging Economic Frontier

A new economic model called the "blue economy" focuses on the prosperity side of the triple bottom line, which stands for "people, planet, and prosperity. It is crucial to remember that the blue economy is an efficient and responsible use of water resources, particularly the oceans, for a nation economic development. This is a vital part of any nation's maritime economy. Thus, a country's livelihoods and revenue streams may be improved and diversified if the blue economy is handled well, providing an unparalleled window of opportunity and prosperity. Additionally, it is an ocean-based economic model that includes a broad spectrum of interconnected established and developing maritime-related industries. The notion that seas have an economic impact on the world economy is not new; this has been the case for many years.

Promote Inclusion and social integration: In one sentence, the blue economy enhances human welfare and social equity while simultaneously supporting social inclusion and livelihood preservation. Maintaining the status quo for the indigenous community's future development and addressing the need for evolving knowledge and skills are essential to going forward. Social equity is one of the core tenets of the Blue Economy that underpins the human element of the triple bottom line, much like the relationship between economic growth and development.

Ensured and Maintained Environmental sustainability: Environmental degradation and the marine ecosystem have suffered greatly as a result of the increasing anthropogenic activities occurring throughout coastal regions and oceans. Yet, one of the main goals of the sustainable Development Agenda is respect for the planets boundaries. The blue economy makes sure that these lines are not crossed. The maritime economy enhance resilience to natural disasters, food insecurity, and the consequences of climate change while generating prosperity and making the best use of the ocean space for regenerative activities. It also helps to reduce pressure on marine resources and important ecological services. The development of the blue economy should not harm natural resources because sustainability refers to continuance through conservation.

3. The Coastal Zone of Nigeria

The Nigerian coastline stretches gently down into the Atlantic Ocean for about 853 kilometers, from the Seme border in Badagri to Ikang in Cross River State (from West to East). Situated between latitudes 4°10′ and 6°20′N and longitudes 2°45′ and 8°32′E, it is on Africa's west coast. Consequently, the word "littoral" refers to a coast or shore. In Nigeria, the littoral region includes the seven Southern States of Lagos, Ondo, Delta, Bayelsa, Rivers, Akwa Ibom, and Cross River. Ajayi, Ajao, Awosika, Dublin, and Oyewo (1998) state that the maritime area of the shoreline occupies 6500 km², while the Exclusive Economic Zone, which goes up to 370 km (200 nautical miles) in length, covers 210,900 km². The Nigerian coast is seen in Figure 1 below.



Figure 1: Map of Nigeria showing the coastline region

(Source: http://oceancurrents.rsmas.miami.edu/atlantic/guinea.html.)

The border between land and sea is known as the coastal zone, and is also referred to as coastline. Thus, the ecosystem which supports the interactions between aquatic and terrestrial life is delicate and bio diverse. It extends inland for within 150 km in the Niger Delta, 25 km east of the Niger Delta, and 15 km in Lagos (Adeaga, 2014). Nigeria's coastline region is situated on a sizable but constrained geological protrusion into the Gulf of Guinea ocean basin, close to the systaxis of the two boundary realms of the Guinea basin. According to Allen (1964), this protrusion is composed of a pile of Cretaceous and Tertiary deposits that is 12 km thick. The vast river flood plain (8400 km2) that borders it laterally to the north slopes southward from a point approximately 20 km above mean sea level in the Onitsha gap, a narrow section within the Benue valley that contains the main channel of the Niger River before and after it bifurcates at Samabri (Nenibarini, Ferdinand, and Bolaji, 2019).

4. The Nexus between Blue Economy and Sustainable Development

Interestingly, one-third of the earth is made up of water, apart from the landlocked nation of Africa, while every place on earth has access to enough water in the form of rivers, streams, and the ocean. Thus, water is a natural resource that God has given to the vast majority of the states. This aspect of natural resources offers trade, food, energy, transportation, resources, and all other necessities needed for other countries to advance economically. Therefore, the Blue Economy is both a means and an end in the direction of sustainable development globally. It is critical to keep in mind there is a very strong relationship between sustainable development and the blue economy.

4.1 Challenges of the Nigerian Blue Economy

Some of the major challenges faced by the Nigerian blue economy included the following: Unreported, Unregulated, and Illegal Fishing Operations: is a major problem that most of the Nigeria coastal regions must deal with. The simplest way to describe it is "fishing operations that are inconsistent with or in contravention of the management or conservation measures in force for a particular fishery by both commercial and foreign vessels". The ability of Nigeria to fully utilize its maritime resources is under jeopardy due to its significant contribution. Noteworthy is the fact that an important amount of the food, nourishment, income, and cultural traditions of millions of Nigerians who reside in coastal areas are derived from fishing. The nation's marine ecosystems and fish populations have been severely damaged due to illegal unreported and unregulated fishing activities. This illicit fishing operation has negatively affected the lives of law-abiding fishermen in Nigeria. Thus, an important problem facing the nation's coastal regions is illegal and unreported fishing. This has resulted in the depletion of fisheries resources across the nation and contributed to the pollution of the maritime environment.

Lack of Infrastructure: in Nigeria inadequate port, harbor and transportation infrastructure which serves as another challenge faced by most of the coastal states, lack of this basic infrastructure has negatively affected the economic benefits that could be realized or generated by Nigerian economy. Thus, shortage on the provision of this infrastructure could hinder the growth and development of the whole Nigerian blue economy. Globally, the growth of aquaculture, fisheries and maritime transportation depend on efficient infrastructure this cannot be an exception to Nigeria.

Degradation of the Environment: majority of the Niger Delta's communities struggle with environmental deterioration brought on by oil spills. This issue has negatively impacted the local

population and marine habitats in the country's coastal region. The biodiversity and marine ecosystems are at risk due to pollution, oil spills, and other environmental degradation events.

Inadequate Regulatory Framework: it has been observed that Nigeria usually encounter difficulties in putting laws related to environmental preservation, marine operations, and fisheries management into force, while trying to enforce them because of the significant extent of corruption in the nation. The access agreements with coastal African countries have been undermined by this corrupt practice, and the current state of affairs favors the protection of unlawful fishing networks. The establishment of a blue economy that is sustainable in Nigeria requires a comprehensive and efficient regulatory framework which at the moment is lack or no political will.

Global Warming Effect: Fisheries and other marine activities are impacted by rising sea levels, shifting ocean temperatures, and severe weather conditions connected to global warming. In order to lessen these impacts, adaptation techniques are essential.

Overfishing: has reduced the nation's fish stocks, putting the livelihoods of those who depend on fishing as well as the overall health of maritime ecosystem under jeopardy. Beyond only stealing fisheries resources, overfishing has put the Nigeria marine ecosystem in danger. Because of this, there is a significant gap in Nigeria's fisheries management systems, which allows criminals to take advantage of the lax maritime security measures in place.

Inadequate Training and Skills: For any nation to have a sustainable blue economy it depends heavily on a workforce with the requisite training and skills, which is a major challenge in the Nigeria economy. Thus, the development of the industry may be hindered by the lack of opportunities for education and training for those engaged in fishing and maritime activities in the country.

Security Issues: Due to serious security threats faced by the coastal region of Nigeria this has negatively impacted on the possibilities for coastal tourism. Many potential tourism-related revenues have been lost due to marine insecurity in the Nigerian coastal region. Because of armed robbery and marine piracy, the nation's coastline region has not been able to meet its tourism goals. Thus, while having a great deal of tourism potential, the majority of the states are unable to fully capitalize on their breathtaking beaches and other abundant natural resources along the shore due to the high degree of maritime insecurity. However, since Nigeria coastal region is Piracy and other security concerns in the Gulf of Guinea has had a serious negative impact on the country's

marine operations and put both domestic and foreign vessels at danger. For the blue economy to grow safely and sustainably, security concerns must be addressed by the Nigerian government.

4.2 Sustainability Development Benefits of the Blue Economy for Nigeria

Employing blue economy as a tool for policymaking can stimulate job creation and economic growth. According to Wenhai, Cusack, Baker, Tao, Mingbao, Paige, Xiaofan, Levin, Escobar, Amon, Yue, Reitz, Neves, O'Rourke, Mannarini, Pearlman, Tinker, Horsburgh, Lehodey, Pouliquen, Dale, Peng, and Yufeng (2019), the main goal of reviving the economy, the marine industrial sector include a variety of business and industries such as building, transportation, mining resource development, shipbuilding, pharmaceuticals, equipment development, sustainable energy generation from waves and currents, fishing and aquaculture. Interestingly, Nigeria has abundant opportunities to reap from the economic benefits of her blue economy due to its exceptional blue potentials. These benefits include the following:

Economic Prospects

Nigeria's "blue economy" has the capacity to greatly increase the country's opportunities for equitable fiscal expansion and mutually beneficial development in a number of areas, such as ocean resource exploitation, blue/coastal tourism, marine spatial planning, oceanic renewable energy, marine biodiversity, trade and shipping, shipbreaking and recycling, and marine aquaculture. By making the best use of these resources; the nation can save its foreign reserves while attracting significant foreign direct investment (FDI). The Nigerian government can generate jobs in the fishing, aquaculture, shipping, tourism and energy production sectors by focusing on diversification and the Blue economy.

Being an important source of protein, Nigeria's blue economy must be effectively utilized to ensure food security. Furthermore, the increasing need for nutritious food can be met in Nigeria through the sustainable use of marine resources, which improves population health generally. Perhaps, the country's coastal region has a great deal of potential to investigate the blue economy through advancing renewable energy, tourism, shipping, and transportation. The nation's Economic Recovery Growth Plan from (2017-2020) was in line with the Nigeria's coastal area's potential to create at least seven million jobs in three years, that is by boosting inclusive growth (Bobai, 2023). This is only feasible, provided the prospective stakeholders and the government of Nigeria has the political will to run the country's blue economy effectively. The nation can also grow her economy and achieve sustainable growth by utilizing her maritime resources.

Social Prospects

The Nigeria Blue Economy has good resources that, if used effectively, might help improve the socioeconomic condition of most of the communities within the coastal region and beyond, especially women and young people. Nigeria's socioeconomic inequalities can be bridged by a paradigm change that the blue economy may be the source. Additionally, it can guarantee better living conditions and empowerment of the indigenous population, particularly women and young people residing in the nation's coastal states. If effectively employed, the pervasive socioeconomic inequalities will be reduced to a greater extent through improve livelihoods and encouraging atmosphere. It is imperative that we focus on the blue growth objective in a clearer manner, as the blue economy delivers shared prosperity over the long term. Given that the new idea would promote safe and secure living, Nigeria can lower its housing shortage of 17-23 million through the Blue Economy, which will add value to the country economic growth.

In the coastal regions of Nigeria, blue tourism holds enormous potential for bringing about a progressive change in the lives of the local populations. In addition to promoting cultural harmony, it could strengthen national cohesion. Thus, ports, harbors, and transportation networks are examples of vital maritime infrastructure that must be invested in in order to encourage the blue economy. Besides encouraging the expansion of the blue economy, this advances the nation's infrastructure broader. However, innovation and technical breakthroughs in the maritime, aquaculture, and fisheries industries can be propelled by the Nigerian blue economy. These innovations when are established in Nigeria, will make the country serve as the leader in marine technology and improve operational efficiency, sustainability, and competitiveness in the entire Sahara Sub-Africa region.

Environmental Prospects

According to Shahzad, and Jawad, (2021) it is very important to note that the Business-as-usual (BAU) models do not incorporate environmental sustainability, but the blue economy does. The prudent use of aquatic assets not only maintains the health of ecosystems and aquatic life, but it also produces freshwater and safeguards the coastal environment. In addition, the world has already recognized and is actively pursuing the role that the blue economy could be useful in reducing global warming through adaptation and mitigation. It is anticipated that as marine

awareness grows, the Nigerian government would launch specific programs in various coastal regions to address environmental and ecological challenges. As such, it is imperative that the Nigerian government take into account the implications of a successful coastline development for inclusive and sustained national prosperity.

This can be made possible where there are globally standard research institutes, education centers, and training facilities that are basic dedicated to Nigerian blue economy. However, the country can as well use the ocean in a way that maintains the wellbeing of the ocean ecosystems and helps prevent disasters that could result from improper usage of the water. The lifespan of marine ecosystems is ensured by environmentally friendly methods in the blue economy, which also contribute in protecting the environment. Nigeria's, future generation' access to fisheries and tourism resources will be protected by our dedication to environmental care.

5. Conclusion and Recommendations

Nigeria, a nation renowned for its blue potential and favorable geographic location, has the ability to change the conversation to one that emphasizes sustainable development with a lot of economic advantages from its blue economy. A robust policy framework is necessary for the country in order to achieve a good ocean bluing. Since social justice, growth and development as well as protection of the cornerstone of blue economy which is the environment. The Nigerian government must proceed to make meaningful progress in order to achieve the massive economic benefits of her coastal region. This can only be achieved when there is a strong political will and a well-defined vision for the country's blue economy which are essential for a smooth blue transition toward sustainability.

In order for Nigeria's economy to profit from its blue economy, this study recommended as follows: Firstly, the different stakeholders should work closely together to address the socioeconomic, political, legal, institutional, security, and environmental issues and turn them into opportunities for the nation across all sectors to grow and develop. Secondly, to be able to provide the necessary human resources for diversifying the blue economy's workforce, there has to be global standard blue economy research institutes, education centers, and training facilities that will properly coordinate her major activities and other economic benefits in Nigeria. Thirdly, It's crucial to understand that adopting a blue economy necessitates a methodical strategy based on the goals, social context, and resource base of the nation, with expertise from the maritime industry to manage the herm of this affairs, who have the basic knowledge on digital mapping, data-limited

stock assessments, and integrated aquatic surveillance in marine and coastal spatial planning in line with the economic benefits that will be achieved by the Nigerian economy. Fourthly, the blue economy strives to balance economic growth, social equity (such as employment and poverty reduction) and environmental preservation. A better understanding of this trilateral approach will ensures long-term sustainability and undoubtedly, help the Nigeria economy reap the economic benefits of her vast blue economy.

References

- Adeaga, O. (2014). Morphology Analysis of Niger Delta shoreline and Estuaries for Ecotourism Potentials. In S. Diop, J. Barusseau, & C. Descamps (Eds.), The land/ocean interactions in the Coastal Zone of West and Central Africa (pp. 108–118). Springer.
- Adepoju, O.O. (2023). Concept of Blue Economy: A Critical Discourse for Sustainable Economic Development in Nigeria being a lecture delivered at a workshop organized by Chartered Institute of Marine, Port and Terminal Management, USA on the 4th March, 2023
- Ajayi, T. O., Ajao, E. A., Awosika, L. F., Dublin-Green, C. O., & Oyewo, E. O. (1998). The Nigerian coastal and marine environment. In A. C. Ibe & S. G. Zabi (Eds.), State of the coastal and marine environment in the Gulf of Guinea (pp. 77–92). Benin: CEDA.
- Allen, J. R. L. (1964). The Nigerian continental margin: bottom sediments, submarine morphology and geological evolution. Marine Geology, 1, 289–332.
- Bobai, F.D. (2023). Analysis of Road Transport Infrastructure and Inclusive Growth Along Kaduna-Kano Federal Road Nigeria. A Ph.D Thesis submitted to the School of Postgraduate Studies, Department of Economics, in Partial Fulfillment for the Award of Doctor of Philosophy in Economics, Ahmadu Bello University Zaria-Nigeria.
- Bove, T., (2021). What are the Promises of A Blue Economy? African Americas Asia OceaniafebEarth.Org is Powered by over 150 contributing Writers
- Essen, E. (2020). Blue Economy. The New Frontier for Marine Environmental Protection and Sustainable Development. Munich: GRINerlag, 1–36.

- Haimbala, T. (2019). Sustainable Growth through Value Chain Development in the Blue Economy: a Case Study of the Port of Walvis Bay. [MSc Thesis]. Available online at: https://commons.wmu.se/all_dissertations/1123?utm_source=commons. wmu.se%2Fall_dissertations%2F1123andutm_medium=PDFandutm_campaign= PDFCoverPages (accessed March 13, 2019).
- Jacob, A.O., and Umoh, O.J. (2022). "The Nigerian Blue Economy: Economic Expansion Issues and Challenges". Socio Economy and Policy Studies (SEPS) 2(1) 29-33 doi.org/10.26480/seps.01.2022.29.33
- Kathijotes, N. (2013). Keynote: blue economy environmental and behavioural aspects towards sustainable coastal development. Procedia Social and Behavioral Sciences 101, 7 13. doi: 10.1016/j.sbspro.2013.07.173
- Keen, M. R., Schwarz, A.-M., and Wini-Simeon, L. (2018). Towards defining the Blue Economy: practical lessons from pacific.
- Lee, K.H., Noh, J., and Khim, J. S. (2020). The blue economy and the united nations' sustainable development goals: challenges and opportunities. Environ. Int. 137, 105528.doi: 10.1016/j.envint.2020.105528
- Lesperance, J., (2016). The Blue Economy: Origin and concept <u>Virtual University for Small</u>

 States of the Commonwealth (VUSSC) at the Commonwealth of Learning.
- Martínez-Vázquez, R. M., Milán-García, J., and de Pablo Valenciano, J. (2021). Challenges of the Blue Economy: evidence and research trends. Environ. Sci. Europe 33, 1–17. doi: 10.1186/s12302-021-00502-1
- Mulazzani, L., Trevisi, R., Manrique, R., and Malorgio, G. (2016). Blue growth and the relationship between ecosystem services and human activities: the Salento artisanal fisheries case study. Ocean Coast. Manag. 134, 120–128. doi: 10.1016/j.ocecoaman.2016.09.019

- Nenibarini, Z., Ferdinand, D.Giadom., and Bolaji, B.B., (2019). Chapter 36 Nigerian Coastal Environments. World Seas: An Environmental Evaluation Vol.1 Europe, the Americas and West Africa (Second Edition) 2019pages 835-854
- Olteanu, A., and Stinga, V. (2019). The economic impact of the blue economy. LUMEN Proc. 7, 190–203. doi: 10.18662/lumproc.111
- Popoola, O.O., and Olajuyigbe, A.E., (2023) Operationalizing the blue economy in the Gulf of Guinea, Africa. *Front. Political Science* 5:1070508. doi: 10.3389/fpos.2023.1070508
- Sarker, S., Bhuyan, M. A. H., and Rahman, M. M. (2018). From science to action: exploring the potentials of Blue Economy for enhancing economic sustainability in Bangladesh. Ocean Coast. Manag. 157, 180–192. doi: 10.1016/j.ocecoaman.2018.03.001
- Shahzad, A.G., and Jawad, I., (2021). Exploring the Role of Blue Economy in Sustainable Development: A Perspective from Pakistan. DOI:10.53963/pjmr.2021.006.3
- Smith-Godfrey, S. (2016). Defining the blue economy. Maritime Aff. J. Nat. Mar. Foundation India 12, 58–64. doi: 10.1080/09733159.2016.1175131
- Soma, K., van den Burg, S. W. K., Hoefnagel, E. W. J., Stuiver, M., and van derHeide, C. M. (2018). Social innovation a future pathway for blue growth? Mar.Policy 87, 363–370. doi: 10.1016/j.marpol.2017.10.008
- Spalding, M. J. (2016). The new blue economy: the future of sustainability. J. Ocean Coastal Econ. 2, 2. doi: 10.15351/2373-8456.1052
- Spalding, M. J. (2016). The new blue economy: The future of sustainability. *Journal of Ocean and Coastal Economics*, 2(2), 8–21.
- Union for the Mediterranean, (2017). Blue Economy in the Mediterranean. Spain: Pere Duran Farell, 1–72.
- United Nations Economic Commission for Africa, (UNECA 2016). "The Blue Economy" www.uneca.org First printing November 2016 ISBN: 978-99944-68-74-4
- United Nations Environment Programme, (2020). African Ocean Governance Strategy: Scoping Study and Gap Analysis. Available online at: https://wedocs.unep.org/ 20.500.11822/34034 (accessed September 24, 2022).
- Vasigh, B., Fleming, K., and Tacker, T., (2013). Introduction to Air Transport Economics From Theory to Applications Second Edition

- Wairimu, E., and Khainga D., (2017). Kenya's Agenda in Developing the Blue Economy, Available at http://kippra.or.ke/kenyas-agenda-in-developing-the-blue-economy/
- Wenhai, L., Cusack, C., Baker, M., Tao, W., Mingbao, C., Paige, K., Xiaofan, Z., Levin, L., Escobar, E., Amon, D., Yue, Y., Reitz, A., Neves, A.A.S., O'Rourke, E., Mannarini, G., Pearlman, J., Tinker, J., Horsburgh, K.J., Lehodey, P., Pouliquen, S., Dale, T., Peng, Z., and Yufeng, Y., (2019). Successful Blue Economy Examples With an Emphasis on International Perspectives. Front. Mar. Sci. 6:261. doi: 10.3389/fmars.2019.00261
- Wenhai, L., Cusack, C., Baker, M., Tao, W., Mingbao, C., Paige, K. (2019). Successful blue economy examples with an emphasis on international perspectives. Front. Marine Sci. 6, 261. doi: 10.3389/fmars.2019.00261
- World Bank Group (2016). Blue Economy Development Framework: Growing the Blue Economy to Combat Poverty and Accelerate Prosperity. Washington, DC: World Bank Group.
- World Bank and UNDESA (2017). The Potential of the Blue Economy Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries. Washington, DC: World Bank.
- World Bank and UNDESA (2017). The Potential of the Blue Economy Increasing Long-term

 Benefits of the Sustainable Use of Marine Resources for Small Island Developing States
 and Coastal Least Developed Countries. Washington, DC: World Bank.
- World Bank, World Development Indicators. (2018). GDP (Constant 2010 US\$) Retrieved from https://data.worldbank.org/indicator/NY.GDP.MKTP.KD (assessed on June 2019).
- World Bank. (2017). What is blue economy? Available at https://www.worldbank.org/ en/news/infographic/2017/06/06/blue-economy.