



An Assessment of the Contribution of Shipping to the Development of Nigeria's Blue Economy

¹Saka Juliana Obiageli & ²Ezinneka Eunice Okodudu

¹Centre for Logistics and Transport Management, University of Port Harcourt

²Department of Geography and Environmental Management, Faculty of Social Science,
University of Port Harcourt

Corresponding: ezinneka.okodudu@uniport.edu.ng

Abstract:

The concept of the blue economy has emerged as a crucial area of focus for coastal nations, promising sustainable development through the utilization of ocean resources. Nigeria, with its extensive coastline and strategic geographical location, stands to benefit significantly from a well-developed blue economy. This journal explores the integral role that shipping plays in the development of Nigeria's blue economy. It examines the historical context, current state, and potential of the shipping industry in Nigeria. Through a comprehensive assessment, this paper aims to highlight the contributions, challenges, and opportunities within Nigeria's shipping sector, and its impact on the broader blue economy.

Keywords:

Maritime, Blue economy, Sustainable development, Nigeria, Transport



This work is licensed under Creative Commons Attribution 4.0 License.

Introduction

The UN defines the blue economy as "a range of economic activities related to oceans, seas, and coastal areas, and whether these activities are sustainable and socially equitable." According to experts, the blue economy is the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystems. Essentially, it represents the economic benefits and value derived from the earth's coastal and marine environments.

The blue economy concept promotes economic growth, social inclusion, and the preservation or improvement of livelihoods while ensuring the environmental sustainability of oceans and coastal areas. This concept offers a novel solution to marine monitoring and harnessing marine advantages in a more equitable and sustainable manner. According to Hoegh-Guldberg (2015), it has become clear that without improved long-term management of the seas, the people relying on them would perish. This is particularly true for small island states like Nigeria's Niger Delta, which are vital to the blue economy.

The 2030 property development plan acknowledges the potential link between the blue economy, environmental development, and economic growth. Through real estate use of marine biodiversity, and the viable management of fisheries, agricultural production, tourism, and corporate organizations, Target 14.7 of the Sustainable Development Goals (SDGs) aims to strengthen the economic margins of small island developing states (SIDS), water-enclosed territories, and least developed countries (LDCs) such as the Niger Delta (UNCTAD, 2016).

Nigeria, located on Africa's western coast, has an 853-kilometer coastline along the Atlantic Ocean. This vast maritime boundary provides numerous prospects for economic development in industries such as shipping, fishing, tourism, and offshore energy. The blue economy, which emphasizes the sustainable utilization of ocean resources for economic growth, improved livelihoods, and job creation while protecting ocean ecosystem health, is highly pertinent to Nigeria.

The primary objective of this study is to assess the contribution of the shipping industry to the development of Nigeria's blue economy. The specific objectives include analyzing the historical development of shipping in Nigeria, evaluating the current state of the shipping industry in Nigeria, identifying the contributions of shipping to Nigeria's economy, highlighting the challenges faced by the shipping industry, and exploring potential opportunities for enhancing the role of shipping in the blue economy.

Literature Review

Historical Development of Shipping In Nigeria

Shipping has played a crucial role in Nigeria's economic development, facilitating trade, transportation, and commerce. The history of shipping in Nigeria is intertwined with the country's colonial past, the discovery of oil, and its strategic location along the Atlantic Ocean. Shipping activities in Nigeria can be traced back to the pre-colonial era when indigenous people engaged in maritime trade using canoes and small boats. The arrival of European colonial powers in the 15th century marked a significant shift in maritime activities. The establishment of trading posts by the Portuguese, followed by the British, led to increased maritime trade, particularly in commodities such as palm oil, rubber, and later, crude oil. Long before the arrival of Europeans, indigenous peoples of Nigeria, such as the Ijaw and Itsekiri, engaged in maritime activities along the coast and inland

waterways. They built canoes and rafts for fishing, trade, and transportation. The Niger River and its tributaries were essential for moving goods and people.

Colonial Era

The arrival of Portuguese explorers in the 15th century marked the beginning of European involvement in Nigerian shipping. The Portuguese were followed by the Dutch, French, and British, who established trading posts and engaged in the transatlantic slave trade. Coastal cities like Lagos, Calabar, and Bonny became significant ports for exporting slaves, palm oil, and other goods. The British colonization of Nigeria in the late 19th century brought significant changes. The British developed infrastructure to support their economic interests, including ports, railways, and roads. The construction of the Lagos Marina in the early 1900s and the Port Harcourt port in 1913 were pivotal in boosting maritime trade.

Post-Independence Shipping Developments in Nigeria

Post-independence Nigeria saw significant developments in its shipping industry as the newly sovereign nation sought to establish and enhance its maritime capabilities. The government focused on expanding and modernizing ports, developing shipping infrastructure, and promoting indigenous participation in the maritime sector. This period also witnessed the discovery of oil, which dramatically influenced shipping activities. This essay delves into the key post-independence shipping developments in Nigeria.

One of the first significant steps taken by Nigeria post-independence was the establishment of the Nigerian Ports Authority (NPA) in 1954. The NPA was charged with the responsibility of managing and developing the country's ports and harbors. Its mandate included the maintenance of port facilities, the dredging of channels, and ensuring smooth maritime operations. The NPA played a crucial role in streamlining port activities and facilitating international trade.

Following independence, Nigeria embarked on an ambitious program to expand and modernize its port infrastructure. Key ports such as Apapa in Lagos and Port Harcourt were expanded to accommodate increasing maritime traffic. The construction of new ports, such as Tin Can Island Port, which opened in 1977, further boosted Nigeria's shipping capacity. These developments were essential in handling the growing volume of imports and exports, particularly in the oil sector.

The discovery of oil in the Niger Delta in the late 1950s and its subsequent production boom had a profound impact on Nigeria's shipping industry. Oil exports became the backbone of Nigeria's economy, necessitating the development of specialized oil terminals and support services. The Nigerian National Petroleum Corporation (NNPC) was established in 1977 to oversee the oil industry, including its maritime logistics. Terminals such as the Bonny Oil Terminal and the Forcados Terminal became critical points for crude oil exports.

To promote indigenous participation in the maritime sector, the Nigerian government introduced several policies and initiatives. One of the most significant was the Nigerian Coastal and Inland Shipping (Cabotage) Act of 2003. This law was designed to reserve coastal and inland shipping services for vessels owned and operated by Nigerian citizens. The aim was to build a robust indigenous shipping industry, reduce dependence on foreign vessels, and create jobs for Nigerians.

In the early 2000s, Nigeria embarked on a series of port reforms aimed at increasing efficiency and attracting private investment. The privatization of port operations led to the concessioning of various port terminals to private operators. This move significantly improved port efficiency, reduced turnaround times, and attracted foreign direct investment. The Lagos Port Complex and Tin Can Island Port Complex, for example, saw substantial improvements in operations and infrastructure under private management.

The Nigerian Maritime Administration and Safety Agency (NIMASA) was established in 2006, merging the National Maritime Authority (NMA) and the Joint Maritime Labour Industrial Council (JOMALIC). NIMASA is tasked with ensuring maritime safety, security, and the protection of the marine environment. The agency also oversees the implementation of international maritime conventions and promotes maritime education and training. NIMASA's role has been pivotal in addressing challenges such as piracy, maritime security, and environmental protection.

The period before the creation of the Nigerian Shippers' Council (NSC) in 1978 was characterized by deteriorating quality of shipping services and unmitigated increases in ocean freight rates by foreign ship owners who operated scheduled liner services to Nigerian ports. These challenges led to the establishment of the NSC to efficiently facilitate the delivery of shipping services to importers and exporters, moderate and stabilize costs, and improve the understanding and knowledge among various practitioners in international trade.

Despite these advancements, Nigeria's shipping industry continues to face several challenges. Inadequate infrastructure, corruption, and piracy remain significant issues. Efforts to combat piracy in the Gulf of Guinea, one of the world's most dangerous maritime regions, have been ongoing. Initiatives such as the Deep Blue Project, launched by NIMASA in collaboration with the Nigerian Navy and other security agencies, aim to enhance maritime security. Environmental concerns, particularly related to oil spills and marine pollution, also require ongoing attention. The government and industry stakeholders are working on sustainable practices and technologies to mitigate these impacts.

In recent decades, Nigeria's shipping industry has continued to evolve. The government has implemented policies to promote indigenous participation in maritime activities, such as the Cabotage Act of 2003, which restricts coastal trade to Nigerian-owned vessels. Efforts to privatize port operations have led to increased efficiency and investment.

Relationship Between Shipping And Blue Economy

Nigeria has significant potential to tap into the blue economy, which interfaces with diverse sectors of the economy, including shipping and ports, oil and gas, tourism, and mining and renewable energy. Shipping remains a cornerstone of global trade. Nigeria's geographical location, if well harnessed, will make it an important hub for West African maritime trade (Intra-African Trade). The numerous port infrastructures, including Lagos, Port Harcourt, and Calabar, serve as crucial hubs for shipping and trade. Investing in ports, shipping infrastructure, and maritime services can help the trade, logistics, and transportation industries grow.

Nigeria is a major oil and gas producer, with offshore reserves accounting for a sizable portion of its resources. Sustainable offshore oil and gas exploration and production can contribute to the blue economy, but this must be balanced with environmental concerns. Therefore, the blue economy has an

interface with the oil and gas industry, requiring careful management to ensure environmental protection while benefiting from these resources.

The coastal areas of Nigeria, which include beautiful beaches and marine wildlife, have the potential for marine tourism and recreational activities. Infrastructure, lodging, and sustainable tourism practices can assist in creating jobs and attracting visitors and foreign investors, such as cruise coastal vessels. Developing the tourism sector within the blue economy framework can significantly boost local economies and promote environmental conservation.

Offshore wind, tidal, and wave energy projects offer prospects for the creation of renewable energy from the ocean. Nigeria might investigate these solutions in order to reduce its carbon impact and diversify its energy mix. With the advancement of technology, deep-sea mining for minerals and resources has become more common. Nigeria has the ability to explore its deep-sea regions and harvest lucrative minerals, but prudence is required to prevent environmental harm. Balancing these activities with sustainable practices will be crucial to maximizing the benefits of the blue economy while minimizing negative impacts.

Current State of The Shipping Industry In Nigeria

Nigeria's maritime infrastructure comprises several major ports, including Lagos, Port Harcourt, Warri, and Calabar. These ports handle a significant volume of the country's import and export activities. Recent investments in port modernization and expansion have improved capacity and efficiency, although challenges such as congestion and inadequate maintenance persist.

The Nigerian shipping industry is characterized by a mix of domestic and international shipping companies. Major players include indigenous companies such as the Nigerian National Petroleum Corporation (NNPC) and private firms like Starzs Marine and Bristow Helicopters. Despite the presence of these companies, Nigeria's merchant fleet remains relatively small compared to global standards, necessitating reliance on foreign-flagged vessels.

The regulatory framework governing Nigeria's shipping industry is primarily overseen by the Nigerian Maritime Administration and Safety Agency (NIMASA), which is responsible for ensuring compliance with international maritime conventions and national regulations. Key legislation includes the Merchant Shipping Act, the Cabotage Act, and various environmental protection regulations. Despite these frameworks, enforcement and regulatory compliance remain challenges.

In spite of the significant role of shipping in the blue economy, its potentials are not fully tapped for maximum benefits due to several challenges bedeviling the sector. These challenges include insecurity of the waterways and sea robbery, inadequate superstructures, insufficient automation and digitalization of processes and procedures, inadequate incentives in the blue economy sector, lack of trained manpower, and the absence of indigenous shipping lines (national fleet). Addressing these challenges is crucial for Nigeria to fully leverage its maritime infrastructure and shipping industry, thereby maximizing the benefits of the blue economy.

Contributions Of Shipping to Nigeria's Blue Economy

Shipping has long been recognized as a powerful catalyst for socio-economic development. The shipping and maritime industry is responsible for the carriage of about 90% of world trade (International Chamber of Shipping, 2019). Shipping constitutes an indispensable component of the

Nigerian maritime sector and an important driver of the economy (Ugwu, 2006). Nigeria has a long and proud maritime heritage that has played an integral role in the development of West and Central Africa through the provision of efficient and cost-effective seaborne trade. This will provide a significant boost to the African Continental Free Trade Agreement, which is expected to increase intra-African trade by 33 percent (UNCTAD, 2018).

The role of the Nigerian maritime sector in Nigeria's economy cannot be overemphasized. Its significant contributions include employment, revenue generation, foreign exchange earnings, cost-effective transportation, investment opportunities, and regional development and connectivity.

Shipping generates direct and indirect employment opportunities in related industries and sectors. Maritime trade stimulates demand for goods and services, leading to jobs in manufacturing, logistics, transportation services, and retail. Additionally, the maintenance and operation of ports, shipyards, and maritime infrastructure require skilled workers, further contributing to employment. Shipping plays a vital role in generating employment opportunities across a wide range of industries and sectors, contributing to the economic development and prosperity of coastal communities and maritime regions within the blue economy.

The maritime and blue economy generates revenue through global trade by transporting goods between countries and continents. This movement of goods generates revenue through freight charges, port fees, and related services. Ports and terminals earn revenue from handling cargo and providing services to ships, contributing to local and national economies.

Foreign exchange earnings are a significant part of the contribution of shipping to the development of the blue economy. Shipping enables countries to participate in international trade by transporting goods across borders, generating revenue from exports and imports. Coastal nations engage in maritime trade, earning foreign exchange through the sale of their goods abroad and the receipt of payments from importing goods from other countries. Additionally, maritime transportation services provided by shipping companies often involve international transactions, which further contribute to foreign exchange earnings. Maritime tourism, relying on shipping for cruise ships and ferry services, also generates foreign exchange earnings as tourists visiting coastal destinations contribute to the local economy by spending money on accommodations, dining, transportation, and recreational activities, thereby bringing in foreign currency.

The shipping industry's role in facilitating international trade and maritime activities directly contributes to foreign exchange earnings, supporting the development of the blue economy by providing financial resources for investment in infrastructure, sustainable resource management, and community development in coastal areas. Investment opportunities within the shipping sector and blue economy at large aid in the creation of employment.

Shipping is highly cost-effective with regular schedulable cargoes such as trans-oceanic shipping of consumer products and especially for heavy loads or bulk cargoes such as coals and ores. Adam Smith, the father of modern economics, viewed shipping as one of the principal stepping stones to economic development, providing a source of cheap transport to open up wider markets to specialization, offering prices below every other means of transportation. Arguably, the industrial revolution had its first impacts where cheap water transport by canal, navigations, or shipping by all types of watercraft on natural waterways supported cost-effective bulk transport.

Shipping enhances regional development by improving connectivity and facilitating the movement of goods and people. Ports serve as hubs for regional trade, fostering economic integration within West Africa. Improved maritime connectivity also supports the development of hinterland regions by providing access to global markets.

In summary, Nigeria's shipping industry is a crucial component of its maritime sector and a key driver of the economy, contributing significantly to employment, revenue generation, foreign exchange earnings, cost-effective transportation, investment opportunities, and regional development and connectivity. Despite its challenges, the sector holds substantial potential for further development and growth, particularly within the framework of the blue economy.

Challenges Facing The Shipping Industry In Nigeria

Despite recent improvements, Nigeria's maritime infrastructure still faces significant challenges. Ports often suffer from congestion, inadequate maintenance, and outdated equipment. These deficiencies hinder efficiency and competitiveness, impacting the overall performance of the shipping industry.

Regulatory and governance issues present significant obstacles to the shipping industry in Nigeria. Corruption, bureaucratic inefficiencies, and inconsistent enforcement of regulations undermine investor confidence and contribute to operational inefficiencies. These challenges make it difficult for the industry to reach its full potential.

Maritime security is a critical concern in Nigerian waters, which are plagued by piracy, armed robbery, and other illicit activities. These security threats pose risks to shipping operations and discourage foreign investment in the maritime sector. Ensuring the safety of maritime activities is crucial for the industry's growth and stability.

The environmental impact of shipping, including pollution and habitat destruction, is a growing concern. Addressing these issues requires stringent environmental regulations and the adoption of sustainable practices within the industry. Balancing economic development with environmental sustainability is a key challenge that the Nigerian maritime sector must address to ensure long-term viability. Overall, while Nigeria's maritime infrastructure has seen improvements, significant challenges remain. Addressing these issues is crucial for enhancing the efficiency, competitiveness, and sustainability of the shipping industry in Nigeria.

Opportunities For Enhancing The Role Of Shipping In The Blue Economy

Embracing technological advancements, such as digitalization, automation, and smart port technologies, can significantly enhance the efficiency and competitiveness of Nigeria's shipping industry. Investments in technology can streamline operations, reduce costs, and improve service delivery, making the maritime sector more robust and adaptive to modern demands.

Implementing policy reforms and providing incentives for investment in the maritime sector can stimulate growth. Reforms should focus on improving regulatory frameworks, reducing bureaucratic barriers, and enhancing transparency. Incentives may include tax breaks, subsidies, and public-private partnerships, all aimed at attracting investment and fostering a more conducive business environment.

Investing in capacity building and training programs is essential for developing a skilled maritime workforce. Enhancing maritime education and providing opportunities for professional development

can address the skills gap and improve the quality of maritime services. A well-trained workforce is crucial for maintaining high standards and ensuring the industry's long-term success.

Enhancing regional collaboration through organizations such as the Economic Community of West African States (ECOWAS) can promote maritime trade and connectivity. Strengthening regional partnerships can facilitate the sharing of best practices, resources, and infrastructure, contributing to the overall development of the blue economy. Collaborative efforts can help address common challenges and leverage collective strengths for regional prosperity.

Conclusion and Recommendations

This study highlights the significant contributions and assessments of the shipping industry to the development of Nigeria's blue economy. Shipping plays a crucial role in facilitating trade, generating employment, and supporting regional development. However, the industry faces numerous challenges, including infrastructure deficiencies, regulatory issues, security concerns, and environmental impacts.

To enhance the role of shipping in Nigeria's blue economy, the following recommendations are proposed:

First, providing and ensuring security at the waterways, river ports, and channels leading to sea ports is crucial. This will address security concerns and encourage smoother and safer operations.

Second, digitalizing the processes and procedures of service delivery within the blue economy through the deployment of technology can streamline operations, increase efficiency, and reduce bureaucratic delays.

Third, training and building the capacity of manpower within the MDAs (Ministries, Departments, and Agencies) and operators in the blue economy ecosystem are essential. This will ensure a skilled workforce capable of meeting industry demands.

Encouraging private partnerships to create service providers in the sector can bring in additional expertise and investment. This can help bridge gaps and enhance service delivery.

Creating a business-friendly environment to attract more foreign investors to the sector is also important. Simplifying regulations and offering a stable investment climate can make Nigeria more attractive to international investors.

The Nigerian Investment Promotion Council should develop incentives for the blue economy sector to attract investors and indigenous shipping lines. These incentives can include tax breaks, subsidies, and other financial benefits.

Organizing international investment summits where such incentives can be highlighted and showcasing the potential of the blue economy can attract would-be investors. These events can serve as platforms to express interest and forge partnerships.

Collaborating with various ministries that interface with the blue economy to create Service Level Agreements (SLA) can help achieve sustainable benefits. Clear SLAs can delineate responsibilities and streamline coordination.

Developing comprehensive and clear policies and regulations governing different aspects of the blue economy, such as fisheries, maritime transport, inland waterways interstate transport, environmental protection, tourism, and offshore activities, is necessary. These policies will provide a framework for sustainable and efficient operations.

Creating awareness campaigns through the media and public enlightenment on the potentials of the blue economy and its sustainable use can educate and engage the public. Awareness can drive support and adherence to sustainable practices.

Implementing measures to prevent and manage pollution from sources such as oil spills, plastic waste, and industrial discharges is crucial for environmental sustainability. These measures will help protect marine ecosystems and ensure long-term viability.

Finally, fostering partnerships between the government and private sector can leverage resources, expertise, and technology for blue economy development. Collaborative efforts can drive innovation, efficiency, and growth in the sector.

These recommendations aim to address the challenges faced by Nigeria's shipping industry and enhance its role in the blue economy, ultimately contributing to the nation's economic growth and sustainable development.

This study highlights the significant contributions and the assessment of the shipping industry to the development of Nigeria's blue economy. Shipping plays a crucial role in facilitating trade, generating employment, and supporting regional development. However, the industry faces numerous challenges, including infrastructure deficiencies, regulatory issues, security concerns, and environmental impacts.

To enhance the role of shipping in Nigeria's blue economy, the following recommendations are proposed:

1. Provide and ensure security at the waterways, river ports and channels to our sea ports
2. Digitalize the processes and procedures of service delivery of the MDAs within the blue economy through deployment of technology
3. Train and build capacity of manpower of the MDAs as well as operators in the eco-system of the blue economy
4. Encourage private partnership in creating the service providers in this sector
5. Create an enabling business friendly environment to attract more foreign investors in the sector
6. The Nigerian Investment Promotion Council need to develop incentives for the blue economy sector so as to attract investors as well as indigenous shipping lines to the sector
7. Organize International Investment Summit where such incentives can be highlighted and showcased the potentials of the blue economy for expression of interest of would-be investors
8. There is need to collaborate with the various Ministries that interfaces with the Blue Economy to create Service Level Agreement (SLA) with them on how to achieve sustainable benefits of the potentials of blue economy

9. Develop comprehensive and clear policies and regulations that govern different aspects of the blue economy, including fisheries, maritime transport and inland waterways interstate transport, environmental protection, tourism and offshore activities etc.
10. Create awareness campaign through the media and public enlightenment on the potentials of the blue economy and its sustainable use.
11. Implement measures to prevent and manage pollution from sources such as oil spills, plastic waste, and industrial discharges.
12. Foster partnerships between the government and private sector to leverage resources, expertise, and technology for blue economy development.

References

- African Union. (2014). Agenda 2063: The Africa We Want. African Union Commission.
- Bari, A. (2017). Our Oceans and the Blue Economy: Opportunities and challenges. *Procedia Engineering*, 194, 5-11. <https://doi.org/10.1016/j.proeng.2017.08.109>
- Bond, P. (2019). Blue Economy Threats, contradictions and resistances seen from South Africa. *Journal of Political Ecology*, 26(1). <https://doi.org/10.2458/v26i1.23504>
- European Commission. (2012). Blue Growth: Opportunities for Marine and Maritime Sustainable Growth. European Union.
- Hussain, M. G., Failler, P., Karim, A. A., & Alam, M. K. (2017). Major opportunities of Blue Economy Development in Bangladesh. *Blue Economy and the total environment: Mapping the interface. Environment International*, 157, 106796.
- J. (2019). Oceans without history? Marine Cultural Heritage and the Sustainable Development Agenda. *Sustainability*, 11(18), 5080. <https://doi.org/10.3390/su11185080>
- Nigerian Maritime Administration and Safety Agency (NIMASA) publications
Economic Community of West African States (ECOWAS) documents
International Maritime Organization (IMO) conventions and reports
Academic journals on maritime studies and blue economy
- Pauli, G. A. (2011). *The Blue Economy*. Paradigm Publications. Pendleton, L., Evans, K., & Visbeck, M. (2020).
- UNCTAD, (2018) Nigerian Ports Authority (NPA) reports
- World Bank. (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*. World Bank.