The Blue Economy as a Mechanism for Diversifying the Algerian Economy Beyond the Hydrocarbon Sector

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Abstract:

This study examines the role of the blue economy as a strategic mechanism for diversifying the Algerian economy beyond the hydrocarbon sector. It highlights the importance of marine and coastal resources in achieving sustainable development through activities such as fisheries, maritime transport, coastal tourism, and aquaculture. The research also analyzes the economic potential of Algeria in this field and identifies the main challenges limiting the development of the blue economy, including weak investment, inadequate infrastructure, and environmental constraints. The study concludes that the blue economy can significantly contribute to job creation, food security, and increasing non-hydrocarbon exports if supported by an effective national strategy based on sustainable investment and maritime governance.

Keywords: Blue Economy; Economic Diversification; Sustainable Development; Hydrocarbons; Algerian Economy.

Jel Classification Codes: Q01, Q22, O13.

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1. INTRODUCTION

Over the past decades, the Algerian economy has relied heavily on the hydrocarbon sector as the main source of public revenues and foreign exchange earnings, with oil and gas exports representing the largest share of total national exports. This excessive dependence has made the national economy highly vulnerable to fluctuations in global oil prices, especially in light of the economic and energy crises experienced worldwide in recent years. Therefore, it has become necessary to search for new economic alternatives capable of achieving economic diversification and reducing dependence on hydrocarbons.

In this context, the concept of the blue economy has emerged as one of the modern economic approaches based on the sustainable exploitation of marine and coastal resources in order to achieve economic growth, create job opportunities, support food security, and preserve the marine environment. The blue economy has also become a strategic orientation for many coastal countries due to its contribution to sustainable development and the enhancement of national economic competitiveness.

Algeria possesses significant maritime potential that qualifies it to benefit from various blue economy activities, as it has a coastline extending over more than 1,600 km, in addition to diverse marine resources, strategic ports, and important tourism potential. However, the contribution of blue economy-related sectors remains limited compared to the available potential, which highlights the need to study the current situation of this sector and its future prospects.

Based on the above, the main research problem can be formulated as follows:

To what extent can the blue economy constitute an effective mechanism for diversifying the Algerian economy beyond the hydrocarbon sector?

This main question leads to several sub-questions:

-What is meant by the blue economy and what are its main sectors?

-What are the main components of the blue economy in Algeria?

-What are the major challenges facing the development of the blue economy?

-How can the blue economy contribute to sustainable development and economic diversification?

To answer these questions, the following hypotheses were adopted:

-The blue economy contributes to economic diversification and reduces dependence on hydrocarbons.

-Algeria possesses significant maritime potential that enables the development of the blue economy.

-Several constraints limit the effective contribution of the blue economy to the national economy.

This research aims to:

-Highlight the concept and main characteristics of the blue economy.

-Analyze the current state of the blue economy in Algeria.

-Study the role of the blue economy in achieving sustainable development and economic diversification.

-Provide a set of recommendations for developing the blue economy in Algeria.

Regarding the methodology, the study relies on the descriptive-analytical approach through the description and analysis of various data and statistics related to blue economy sectors in Algeria, while referring to official reports and academic studies relevant to the subject.

2. Theoretical and Conceptual Framework of the Blue Economy

The blue economy is considered one of the most prominent modern economic concepts that emerged within the global trend toward achieving sustainable development and the rational exploitation of marine and coastal resources. This concept has gained growing importance due to its role in supporting economic growth

2.1 Concept of the Blue Economy

The concept of the blue economy is considered one of the modern economic concepts that emerged within the framework of global interest in sustainable development and the protection of natural resources, particularly marine and coastal resources. Several definitions have been proposed for this concept depending on the perspectives adopted by international organizations and researchers.

-The World Bank defines the blue economy as "the sustainable use of ocean resources for economic growth, improved livelihoods, and job creation while preserving the health of marine ecosystems" (World Bank, 2023, p. 11).

This definition focuses on the environmental and sustainability dimensions, as it links the exploitation of marine resources with economic development without harming ecological balance.

-The United Nations defines the blue economy as "the set of economic activities related to oceans, seas, and coastal areas aimed at achieving sustainable development and improving human well-being" (United Nations, 2022, p. 40).

It can be observed that this definition emphasizes the developmental and social dimensions of the blue economy, particularly with regard to improving living standards and promoting economic welfare.

-The Organisation for Economic Co-operation and Development (OECD) considers the blue economy to include "all economic activities based on seas and oceans, including fisheries, maritime transport, coastal tourism, marine energy, and sea-related industries" (OECD, 2022, p. 34).

This definition is characterized by its comprehensiveness, as it focuses more on the economic sectors that constitute the blue economy than on environmental aspects.

Researcher Gunter Pauli defines the blue economy as "an economic model that seeks to achieve economic efficiency through the sustainable use of natural resources while reducing waste and pollution" (Pauli, 2010, p. 18).

However, this definition is criticized for placing excessive emphasis on the environmental and technological dimensions while giving less attention to the economic and social aspects of the blue economy.

-Based on the previous definitions, it can be argued that each definition focuses on a specific aspect. The World Bank emphasizes environmental sustainability, the United Nations focuses on human development, while the OECD highlights the economic sectors constituting the blue

economy.

Accordingly, a comprehensive definition of the blue economy can be formulated as follows:

"An economic model based on the sustainable and rational exploitation of marine and coastal resources in order to achieve economic growth, create job opportunities, support food security, and promote sustainable development while preserving the marine environment and ensuring the rights of future generations."

2.2 Characteristics and Importance of the Blue Economy

2.2.1 Characteristics of the Blue Economy

Among the main characteristics of the blue economy are:

-Reliance on environmental sustainability:CThe blue economy is based on the sustainable exploitation of marine resources in a way that ensures their continuity for future generations while preserving ecological balance and reducing marine pollution (World Bank, 2023, p. 11).

-Rational use of marine resources: The blue economy depends on the rational utilization of marine resources through the regulation of fishing activities, the development of aquaculture, and the sustainable exploitation of marine energy resources without depletion (OECD, 2022, p. 36).

-Encouragement of innovation and technology: The blue economy is closely linked to the use of modern technology and scientific research in fields such as maritime transport, smart ports, marine renewable energy, and environmental monitoring systems (Pauli, 2010, p. 21).

-Promotion of local coastal development: The blue economy contributes to the development of coastal areas by creating employment opportunities, improving living standards, and supporting local economic activities (United Nations, 2022, p. 42).

-Balancing economic growth and environmental protection: The blue economy is not limited to generating economic profits; it also seeks to protect marine ecosystems and ensure their long-term sustainability (World Bank, 2023, p. 14).

-Sectoral diversity: The blue economy includes a variety of economic sectors such as fisheries, maritime transport, coastal tourism, marine industries, and marine renewable energy, making it a multi-sector economic model (OECD, 2022, p. 34).

-Dependence on the knowledge economy: The blue economy increasingly relies on knowledge, innovation, and scientific research, especially in the fields of marine technology, digitalization, and artificial intelligence related to maritime activities (Pauli, 2010, p. 24).

-International dimension and economic integration: The blue economy is characterized by its close connection to international trade and global maritime transport, which enhances economic cooperation among coastal countries (UNCTAD, 2023, p. 18).

-Economic resilience: The blue economy helps countries cope with economic crises and global market fluctuations by diversifying sources of income and reducing dependence on traditional sectors (African Development Bank, 2024, p. 29).

2.2.2.Importance of the Blue Economy

The importance of the blue economy is reflected in several economic, social, and environmental dimensions, making it a key component of modern development policies.

Among the major aspects of the importance of the blue economy are:

-Diversification of income sources: The blue economy contributes to reducing dependence

on traditional rent-based sectors, particularly the hydrocarbon sector, through the development of diversified maritime sectors (World Bank, 2023, p. 18).

-Job creation: The blue economy generates millions of direct and indirect jobs in fisheries, maritime transport, coastal tourism, and logistics services. The World Bank estimated that more than 350 million jobs worldwide are linked directly or indirectly to the blue economy (World Bank, 2023, p. 22).

-Support for food security: The blue economy contributes to providing fishery products and marine food resources, helping reduce food imports and improve food security (FAO, 2024, p. 56).

-Enhancement of non-hydrocarbon exports: The blue economy enables the development of marine exports and logistics services, thereby supporting the balance of payments and increasing foreign exchange reserves (OECD, 2022, p. 41).

-Protection of the marine environment: The blue economy aims to protect oceans and seas from pollution and overexploitation while preserving marine biodiversity (UNEP, 2023, p. 14).

-Achievement of sustainable development: The blue economy is closely linked to the achievement of sustainable development goals, particularly Goal 14 concerning the conservation of oceans and marine resources (United Nations, 2022, p. 45).

-Development of international trade: Maritime transport and ports play a fundamental role in global trade, as more than 80% of international trade is transported by sea (UNCTAD, 2023, p. 20).

-Encouragement of investment: The blue economy offers promising investment opportunities in coastal tourism, marine industries, marine renewable energy, and ports (African Development Bank, 2024, p. 31).

-Promotion of regional development: The blue economy contributes to the development of coastal regions and reduces regional development disparities (World Bank, 2023, p. 26).

-Addressing climate change: The blue economy supports clean energy and helps reduce polluting emissions, making it an effective tool for addressing climate change (UNEP, 2023, p. 19).

-Improving national economic competitiveness: The development of maritime sectors enhances the competitiveness of the national economy and improves its integration into the global economy (OECD, 2022, p. 39).

3. The Reality of the Blue Economy in Algeria and Its Economic Indicators

The blue economy in Algeria possesses significant natural and economic potential that enables it to contribute to sustainable development and economic diversification. The importance of this sector is reflected through economic indicators related to fisheries, maritime transport, coastal tourism, and aquaculture.

3.1 Natural and Economic Potential of the Blue Economy in Algeria

Algeria possesses significant natural and economic potential that enables it to develop the blue economy and benefit from various marine and coastal resource-related activities. Algeria's geographical location is considered one of the main factors that give it strategic importance in the Mediterranean basin, as it has a coastline extending approximately 1,622 km according to the

Ministry of Public Works and Basic Infrastructure (Ministry of Public Works, 2024, p. 8).
The Algerian coastline includes:

- 14 commercial ports.
- More than 35 fishing ports.
- 5 leisure and tourism ports.
- More than 400 tourist beaches.
- Marine areas rich in fishery resources and natural wealth.

Algeria also enjoys a strategic location linking Europe and Africa, which provides significant opportunities for developing maritime trade and logistics services and transforming Algerian ports into regional platforms for trade and maritime transport.
Estimates from the Algerian Ministry of Transport indicate that more than 95% of Algeria's foreign trade exchanges are conducted by sea, reflecting the major economic importance of Algeria's maritime frontage (Ministry of Transport, 2024, p. 20).

Table 1: Main Maritime Indicators in Algeria

Indicator	Value
Length of coastline	1,622 km
Number of commercial ports	14
Number of fishing ports	35
Number of tourist beaches	More than 400
Share of trade exchanges by sea	95%

Source: Algerian Ministry of Transport, 2024.

The table shows that Algeria possesses maritime infrastructure and a strategic location that allow the development of blue economy sectors, especially maritime transport, fisheries, and coastal tourism. However, the exploitation of these potentials remains limited compared to competing Mediterranean countries.

3-2- Fisheries and Aquaculture Sector

The fisheries and aquaculture sector is considered one of the most important components of the blue economy in Algeria due to its role in ensuring food security, creating employment opportunities, and supporting the national economy.
National production of marine products reached approximately 120 thousand tons in 2024 (Ministry of Fisheries and Fishery Products, 2024, p. 15), while the sector provides more than 100,000 direct and indirect jobs (Ministry of Fisheries and Fishery Products, 2024, p. 17).
Despite these potentials, the sector's contribution to GDP remains weak, not exceeding 1% compared to Mediterranean countries such as Morocco and Spain (Arab Organization for Agricultural Development, 2023, p. 44).

Table 2: Development of Fisheries Production in Algeria (2020–2025)

Year	Production (Thousand Tons)
2020	98
2021	105
2022	110
2023	116
2024	120

2025*	128

* Preliminary estimates.

Source: Ministry of Fisheries and Fishery Products, 2025.

The table confirms a gradual increase in fish production during recent years, rising from 98 thousand tons in 2020 to around 120 thousand tons in 2024, representing a growth rate of approximately 22%. This development reflects the relative improvement experienced by the fisheries and aquaculture sector. However, this level remains below Algeria's actual maritime potential, especially when compared to Mediterranean countries such as Morocco and Turkey.
Preliminary estimates for 2025 also indicate a continued increase in production to about 128 thousand tons, demonstrating promising opportunities for further sector development.

Table 3: Evolution of Fish Consumption per Capita in Algeria

Year	Average Consumption per Capita (kg/year)
2020	5.2
2021	5.8
2022	6.3
2023	6.8
2024	7

Source: FAO, 2024.

The table indicates a gradual increase in average fish consumption per capita. However, it remains below the global average estimated at around 20 kg annually, reflecting limited domestic production and high prices.

Table 4: Volume of Trade Exchanges through Maritime Transport in Algeria

Year	Percentage of Trade Transported by Sea
2020	88%
2021	89%
2022	90%
2023	91%
2024	92%

Source: Algerian Ministry of Transport, 2024.

The table indicates that maritime transport is the primary means of Algeria's foreign trade, with the share of trade transported by sea exceeding 90% in recent years. This confirms the strategic importance of ports in supporting the national economy and promoting non-hydrocarbon exports.

Table 5: Ship Processing Time in Some Mediterranean Ports

Port	Average Processing Time
Port of Djen Djen	4 days
Port of Algiers	5 days
Tangier Med Port	Less than 24 hours
Port of Valencia	18 hours

Source: Mediterranean Logistics Reports, 2024.

The table reveals a significant gap between Algerian ports and modern Mediterranean ports in terms of processing speed and logistics services, which negatively affects the competitiveness of

maritime transport in Algeria.

3-3- Coastal Tourism

Algeria has more than 400 tourist beaches, in addition to diverse natural landscapes and coastal archaeological sites. However, tourism's contribution to GDP remains weak, not exceeding 2.5% in 2024 (Ministry of Tourism, 2024, p. 12).

Table 6: Contribution of Tourism to GDP

Country	Tourism Contribution
Algeria	2.5%
Tunisia	14%
Morocco	7%
Spain	12%

Source: World Tourism Organization, 2024.

The table demonstrates the weak contribution of coastal tourism in Algeria compared to Mediterranean countries despite the available natural potential. This is due to weak tourism investment, limited hotel infrastructure, and insufficient tourism promotion.

Table 7: Evolution of Tourist Arrivals in Algeria (2020–2024)

Year	Number of Tourists (Million)
2020	1.2
2021	1.5
2022	2.1
2023	2.7
2024	3.5

Source: Algerian Ministry of Tourism, 2024.

The table reveals a gradual improvement in the number of tourists visiting Algeria after the COVID-19 pandemic. However, the figures remain far below the available coastal tourism potential.

This situation is mainly due to:

- Weak tourism infrastructure.
- Lack of investments.
- Limited tourism services.
- Weak air and maritime connectivity.
- Insufficient international tourism promotion.

4-Contribution of the Blue Economy to Economic Diversification in Algeria

The blue economy represents one of the strategic economic alternatives that can contribute to reducing dependence on the hydrocarbon sector and achieving economic diversification in Algeria. **4-1- Reducing Dependence on Hydrocarbons and Achieving Economic Stability**

Hydrocarbons constitute the main source of income in Algeria, as the national economy relies heavily on oil and gas revenues to finance the state budget and provide foreign currency. This excessive dependence has made the Algerian economy highly vulnerable to fluctuations in global

oil prices, especially during recent economic and energy crises.

Therefore, it has become necessary to search for alternative economic sectors capable of achieving economic diversification and creating sustainable wealth. The blue economy is considered one of the most promising sectors in this regard due to the diversity of its economic activities and its connection to international trade, logistics services, tourism, and marine industries.

Statistics indicate that hydrocarbons account for more than 90% of Algeria's exports (Bank of Algeria, 2024, p. 33), reflecting the vulnerability of the national economy to oil-related shocks.

In contrast, the blue economy can contribute to:

- Increasing marine exports.
- Developing manufacturing industries.
- Expanding logistics services.
- Raising the contribution of non-oil sectors to GDP.
- Improving the balance of payments.

The United Nations confirmed that investment in the blue economy could increase economic growth rates in coastal countries by between 5% and 7% annually (United Nations, 2022, p. 41).

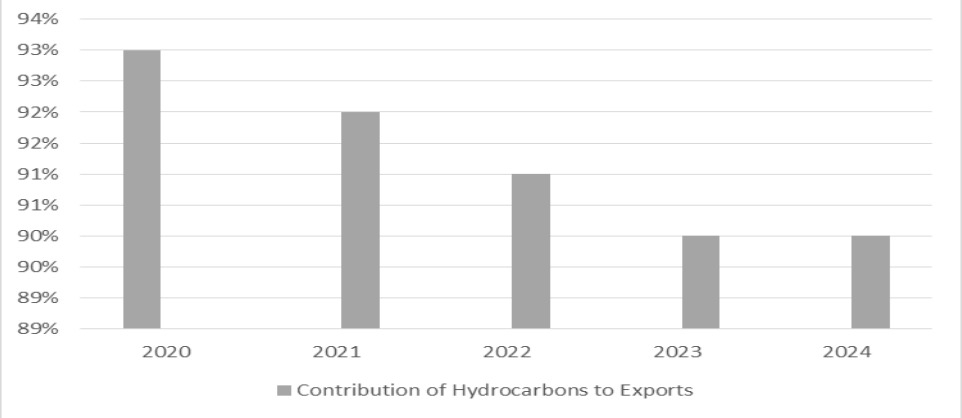
Table 8: Comparison Between the Contribution of Hydrocarbons and the Blue Economy in the Algerian Economy

Indicator	Hydrocarbons	Blue Economy
Contribution to exports	90%	Less than 5%
Employment opportunities	Relatively limited	High
Sustainability	Weak	High
Sensitivity to global prices	Very high	Moderate
Environmental impact	High	Relatively lower

Source: Prepared by the researcher based on data from the Bank of Algeria and the Ministry of Fisheries, 2025.

The table shows that the Algerian economy still relies heavily on hydrocarbons compared to the blue economy. However, the latter has a greater capacity to create jobs and achieve long-term economic sustainability, making it a strategic option for supporting economic diversification.

figure 1: Evolution of Hydrocarbon Contribution to Algerian Exports



Source: Prepared by the researcher based on data from the Bank of Algeria and the Ministry of Fisheries, 2025.

The figure illustrates the continued dominance of hydrocarbons in Algerian exports during

recent years, highlighting the urgent need to develop alternative sectors such as the blue economy in order to achieve economic balance.

4-2- Job Creation

The blue economy contributes to creating diverse employment opportunities, especially for young people, through activities related to fisheries, maritime transport, coastal tourism, marine industries, and logistics services.

Estimates from the Ministry of Fisheries indicate that aquaculture projects alone could generate more than 50,000 additional jobs in the coming years (Ministry of Fisheries, 2025, p. 10).

Table 9: Expected Employment Opportunities in the Blue Economy in Algeria

Sector	Expected Number of Jobs
Fisheries	20,000
Aquaculture	50,000
Maritime transport	15,000
Coastal tourism	40,000
Marine industries	25,000

Source: Ministry of Fisheries and Fishery Products, 2025.

The statistics demonstrate that the blue economy is capable of creating thousands of jobs, especially in coastal regions, thereby contributing to reducing unemployment rates and improving living standards.

Table10: Distribution of Employment Opportunities in Blue Economy Sectors

Sector	Number of Jobs
Aquaculture	50,000
Coastal Tourism	40,000
Marine Industries	25,000
Fisheries	20,000
Maritime Transport	15,000

Source: Ministry of Fisheries and Fishery Products, 2025.

The table shows that the aquaculture sector represents the largest potential source of employment within the blue economy, followed by coastal tourism. This highlights the importance of investing in these sectors to achieve economic and social development.

4-3- Enhancing Food Security

The blue economy contributes directly to enhancing food security through the development of fisheries and aquaculture, as it enables increased fish production and reduces food imports.

The development of this sector can: (FAO, 2024, p. 56).

- Increase national fish production.
- Reduce the food import bill.

- Improve the consumption level of marine proteins.
- Contribute to achieving food self-sufficiency.

Average fish consumption per capita in Algeria increased from 4 kg annually in 2010 to around 7 kg in 2024

5-Challenges and Constraints Facing the Blue Economy in Algeria

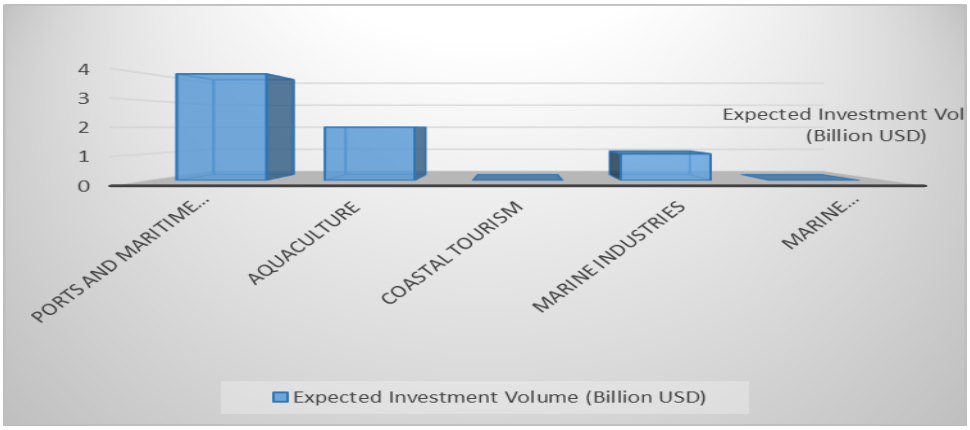
Despite Algeria's significant maritime potential, the contribution of the blue economy to economic development remains limited due to several economic, technological, environmental, and organizational challenges. These obstacles restrict the effective exploitation of marine resources and hinder the achievement of sustainable development.

5-1 Weak Investment

Investments directed toward maritime sectors remain limited compared to the available potential, both in terms of financing volume and the nature of implemented marine projects. This is mainly due to the weak attractiveness of maritime investment, limited economic incentives, and the complexity of administrative procedures related to coastal and marine projects.

The African Development Bank indicated that Algeria requires maritime investments exceeding 10 billion USD over the next decade in order to develop maritime infrastructure and improve the performance of blue economy sectors (African Development Bank, 2024, p. 29).

figure 2: Estimated Investments Required for Developing the Blue Economy in Algeria



Source: Prepared by the researcher based on African Development Bank data, 2024.

The figure shows that the ports and maritime transport sector accounts for the largest share of the required investments, given the importance of modernizing maritime infrastructure and connecting it to modern transport and logistics networks.

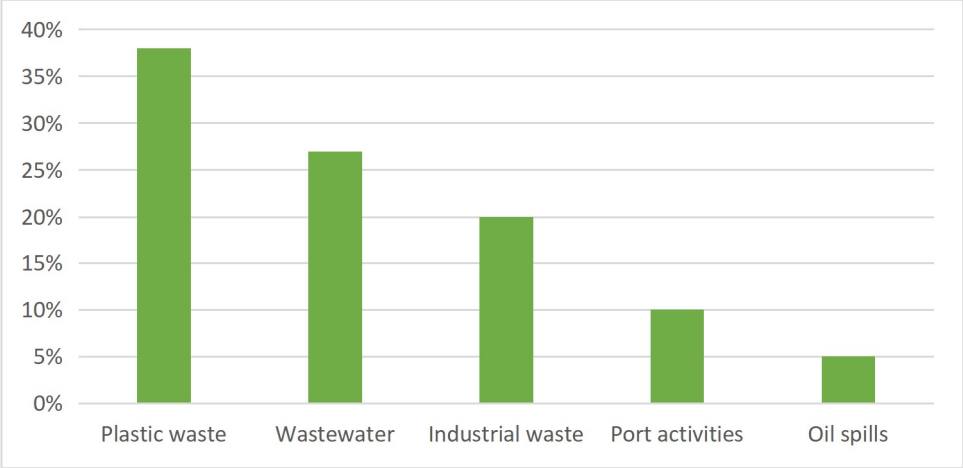
5-2 Marine Pollution

The Algerian coastline suffers from several forms of marine pollution that directly affect marine resources, tourism activities, and public health. The most important forms of pollution include:

- Industrial waste.
- Untreated wastewater.
- Plastic pollution.
- Oil spills.
- Pollution caused by port activities.

Statistics indicate that the Mediterranean Sea receives more than 570,000 tons of plastic annually (UNEP, 2023, p. 14), posing a serious threat to marine ecosystems.

figure 3: Sources of Marine Pollution in Algeria



Source: United Nations Environment Programme (UNEP), 2023.

The figure indicates that plastic waste represents the largest source of marine pollution, which requires strengthening environmental monitoring and developing coastal waste treatment systems.

5-3- Weak Technology and Scientific Research

Algeria suffers from weak maritime technology and insufficient scientific research specialized in the blue economy, which negatively affects the competitiveness of maritime sectors and limits opportunities for innovation and development.

The main manifestations of this weakness include:

- Lack of marine research centers.
- Limited specialized laboratories.
- Weak use of digitalization and artificial intelligence.
- Shortage of qualified specialists in maritime technology.
- Weak cooperation between universities and economic sectors.

Reports from the Ministry of Higher Education have shown that spending on marine scientific research in Algeria remains low compared to advanced Mediterranean countries.

Table 11: Comparison of Marine Scientific Research Between Algeria and Some Mediterranean Countries

Country	Number of Marine Research Centers	Share of Spending on Marine Research
Algeria	5	0.3%
Morocco	12	0.8%
Spain	35	1.7%
France	42	2.1%

Source: Mediterranean Marine Research Reports, 2024.

The table highlights the weakness of marine scientific research in Algeria compared to other Mediterranean countries, which negatively affects innovation and technological development in the blue economy.

6- Mechanisms and Prospects for Developing the Blue Economy in Algeria

The blue economy represents a strategic opportunity for Algeria to achieve sustainable development and economic diversification. However, achieving this objective requires the adoption of effective policies and measures to develop various maritime sectors.

6-1- Modernizing Maritime Infrastructure

The development of maritime infrastructure is considered one of the main conditions for developing the blue economy through:

- Modernizing commercial ports.
- Digitalizing port services.
- Developing maritime transport networks.
- Establishing coastal logistics zones.
- Improving connections between ports, roads, and railways.

Table 12: Objectives for Maritime Infrastructure Development in Algeria

Indicator	Current Situation	2030 Target
Ship processing time	5 days	Less than 24 hours
Port digitalization rate	35%	90%
Volume of maritime trade	92%	95%
Port capacity	Moderate	High

Source: Algerian Ministry of Transport, 2025.

6-2- Encouraging Investment

Algeria can enhance investment in the blue economy through:

- Providing tax incentives.
- Simplifying administrative procedures.
- Supporting marine start-ups.
- Encouraging foreign partnerships.
- Financing coastal projects.

Table 13: Most Attractive Sectors for Maritime Investment

Sector	Investment Attractiveness
Coastal tourism	High
Maritime transport	High
Aquaculture	High
Marine industries	Medium
Marine energy	Medium

Source: Algerian Ministry of Transport, 2025.

6-3- Supporting Scientific Research

Developing the blue economy requires strengthening scientific research and training in maritime fields through:

- Establishing specialized research centers.
- Supporting maritime innovation.
- Encouraging digitalization.
- Developing maritime university education.

- Enhancing international cooperation in marine research.

6-4- Developing Coastal Tourism

Coastal tourism can be developed through:

- Improving tourism infrastructure.
- Establishing seaside resorts.
- Developing maritime tourism transport.
- Improving hotel service quality.
- Intensifying international tourism promotion.

Table 14: Objectives for Coastal Tourism Development in Algeria

Indicator	2024	2030 Target
Number of tourists (million)	3.5	8
Tourism contribution to GDP	2.5%	6%
Number of coastal hotels	420	800

Source: Algerian Ministry of Tourism, 2025.

6-5- Protecting the Marine Environment

Protecting the marine environment is a fundamental condition for achieving the sustainability of the blue economy through:

- Strengthening environmental monitoring.
- Reducing plastic waste.
- Treating wastewater.
- Developing the coastal green economy.
- Strengthening marine environmental legislation.

Table 15: Marine Environmental Protection Objectives

Indicator	Current Situation	2030 Target
Plastic pollution rate	High	-50%
Wastewater treatment	45%	85%
Protected marine areas	7%	20%

Source: United Nations Environment Programme (UNEP), 2024.

7. CONCLUSION

This study demonstrates that the blue economy represents one of the most important strategic options that Algeria can adopt to achieve economic diversification and reduce dependence on the hydrocarbon sector. The Algerian economy still relies heavily on oil and gas revenues, making it vulnerable to global economic fluctuations and oil crises. In contrast, Algeria possesses significant maritime and natural potential that qualifies it to develop various sectors related to the blue economy, particularly fisheries, maritime transport, aquaculture, coastal tourism, and marine industries.

The study also revealed that the contribution of the blue economy to the national economy remains limited compared to the available potential, despite the relative progress achieved in some maritime sectors during recent years. Furthermore, the indicators and statistics highlighted that Algeria possesses maritime infrastructure and a strategic location capable of transforming the blue economy into a major driver of sustainable economic development.

The study reached several key findings, including:

-The continued dominance of the hydrocarbon sector in the Algerian economy.

-Algeria possesses significant maritime potential that remains underexploited.

-The blue economy has the capacity to create employment opportunities and promote local coastal development.

-The importance of maritime transport and ports in supporting foreign trade.

-The existence of several obstacles limiting the development of the blue economy, especially weak investment, limited infrastructure, marine pollution, and weak scientific research and technology.

Based on these findings, several recommendations can be proposed, including:

-Establishing a comprehensive national strategy for developing the blue economy.

-Modernizing maritime infrastructure and digitalizing ports.

-Encouraging local and foreign investment in maritime sectors.

-Supporting scientific research and training in maritime fields.

-Developing coastal tourism and improving tourism services.

-Strengthening marine environmental protection and combating pollution.

-Encouraging aquaculture projects and marine processing industries.

Accordingly, Algeria's success in developing the blue economy would significantly contribute to building a diversified and more sustainable national economy capable of facing future economic challenges and achieving sustainable development goals.

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