Dafatir El Mustawassit Review
ISSN :23535-035
EISNN:2661 -7439

Volume : 08 / N° : 01 December (2025), pp 77-92

Efforts of Sustainable Development and Environmental Governance within the Framework of North-South Cooperation between the Two Shores of the Mediterranean

جهود التنمية المستدامة والحوكمة البيئية في إطار التعاون شمال–جنوب بين ضفتي المتوسط

Hamza MEBREK [1]

[1] Laghouat University (Algeria), ha.mebrek@lagh-univ.dz

Received: 10/06/2025 *Accepted: 29/12/2025* *Published:31/12/2025*

Abstract:

This study aims to introduce the concept of the blue economy and its close connection to sustainable development efforts and environmental governance, as well as to highlight the most important agreements and initiatives in the field of the blue economy within the framework of North-South cooperation between the two shores of the Mediterranean.

The study presents the Sustainable Blue Economy Initiative in the Western Mediterranean countries as a modern model of Euro-Mediterranean cooperation from which Algeria can benefit to address environmental challenges and create sustainable economic and social development.

The study concludes with the necessity for the Algerian state to adopt marine governance as a modern approach based on the coordination of efforts among the government, civil society, and the private sector in order to achieve the national strategy for the blue economy.

Keywords: Blue Economy, Environmental Governance, Sustainable Development, Mediterranean Security.

ملخص:

تهدف هذه الدراسة إلى التعريف بمفهوم الاقتصاد الأزرق وعلاقته الوثيقة بجهود التنمية المستدامة والحوكمة البيئية، بالإضافة إلى تسليط الضوء على أهم الاتفاقيات والمبادرات في مجال الاقتصاد الأزرق في إطار التعاون شمال–جنوب بين ضفتي المتوسط.

[1] ***Corresponding author**: Hamza MEBREK, **e-mail:*** ha.mebrek@lagh-univ.dz

وتقدم الدراسة مبادرة الاقتصاد الأزرق المستدام في دول غرب المتوسط كنموذج حديث للتعاون الأورومتوسطي، يمكن للجزائر الاستفادة منه لمواجهة التحديات البيئية وتحقيق تنمية اقتصادية واجتماعية مستدامة.

وتختتم الدراسة بضرورة اعتماد الدولة الجزائرية الحوكمة البحرية كنهج حديث قائم على تنسيق الجهود بين الحكومة والمجتمع المدني والقطاع الخاص، بما يحقق الاستراتيجية الوطنية للاقتصاد الأزرق.

كلمات مفتاحية:

الاقتصاد الأزرق، الحوكمة البيئية، التنمية المستدامة، الأمن في البحر الأبيض المتوسط.

1. INTRODUCTION

There is no doubt that the shared environmental responsibility of the countries bordering the Mediterranean Sea calls for serious action and effective cooperation to confront the environmental damages that affect the quality and sustainability of marine life and the related ecosystem on both shores. It also calls for contributing to the sustainability of this vital shared domain through the North-South cooperation initiative. This initiative relies on a non-state-centered approach that considers environmental problems as a shared responsibility and a longstanding legacy with economic and societal dimensions. These problems cannot be overcome except through practical programs that include environmentally friendly activities directly impacting local communities whose activities and livelihoods are tied to some aspect of this domain, with the participation of civil society as one of the main pillars of environmental governance.

One example of North-South cooperation is the Blue Economy Initiative, which focuses on encouraging and financing small and medium-sized economic projects related to the marine life sectors. This study will be an attempt to explore this type of cooperation as a model for participatory cross-border initiatives that go beyond traditional funding paths and conventional ideas.

To what extent can this initiative create a leading experience in environmental governance and sustainable development?

2. The Blue Economy and Sustainable Development (Concept – Sectors – Financing)

2.1 : The Concept of the Blue Economy

To begin with, it is worth noting that there is a close connection between the economy and the environment. This interrelation is evident in the United Nations Sustainable Development Goals (SDGs) for 2030, which emphasize the integration of economic, environmental, and social dimensions. In particular, the fourteenth goal of the SDGs focuses on preserving the quality of marine life and resources and using them sustainably to achieve sustainable development, making this goal closely linked to the concept of the blue economy.

The blue economy, as a concept, revolves around the idea of integrating marine activities into a circular economy through the principle of natural regeneration. This concept aims to mimic nature dynamically, being inspired by the renewable forces of nature. The Belgian economist Gunter Pauli was among the first to draw attention to the importance of the "blue economy" through his 2010 book titled *The Blue Economy: 10 Years, 100 Innovations, 100 Million Jobs*. (Al-Ajroush, 2020)

The concept of the blue economy has become firmly established due to the rapid changes occurring in various fields of life, economy, development, environment, and sustainability, especially following the “Rio+20” Conference in 2012. This conference emphasized the protection and sustainable management of water resources and the preservation of healthy ecosystems, particularly in the oceans. In this context, the Food and Agriculture Organization (FAO) of the United Nations launched what became known as the “Blue Growth Initiative.” This initiative has aimed, and continues to aim, to support the shift toward this new approach and to assist countries and governments in developing and implementing policies that promote the concept of the blue economy. (Sally, 2023)

In the same vein, the 2015 Ministerial Meeting of the Union for the Mediterranean on the Blue Economy referred to the blue economy as “the range of human activities that depend on the sea and/or are supported by land-sea interactions in the context of sustainable

development, particularly industrial and service sectors such as aquaculture, fisheries, blue biotechnology, coastal and maritime tourism, shipping, shipbuilding/repair, ports, ocean energy and marine renewable energy, including offshore wind power, which are among the traditional and emerging maritime economic sectors in the Mediterranean Basin. (https://medblueconomyplatform.org/ar/abou, 2015)

Finally, it can be said that the blue economy is a widely used term around the world, referring to all economic activities related to oceans, seas, and coasts, while preserving the sustainability of the ecosystem of those resources and relying on them and sustainably exploiting them.

2.2 : Characteristics of the Blue Economy

The blue economy is characterized by the following features:

-It is a sea-based economy that provides social and economic returns for present and future generations by contributing to food security, poverty reduction, and the improvement of income and health services.

-The blue economy serves as a strategic framework. Its core is promoting it according to an ecosystem-based management model, which must be at the heart of decision-making in industry and community development.

-The blue economy is considered a branch of the green economy, as indicated by the United Nations Environment Programme and other international organizations. (Ben Yahia, 2022, p 4)

2.3 : Sectors of the Blue Economy

The sectors of the blue economy are divided into two parts:

- The first part: Established sectors of the blue economy.
- The second part: Emerging sectors of the blue economy.

1- Established Sectors of the Blue Economy:

A. Living Resources:

This includes the harvesting of renewable biological resources and their transformation into food, feed, and bio-based products.

B. Offshore Oil and Gas Extraction:

Offshore oil and gas exploration is another type of marine resource with economic importance in terms of production and jobs. However, the environmental repercussions associated with this activity can be severe, as oil spills may occur, causing catastrophic effects.

C. Port, Storage, and Water Projects:

Ports play a major role in developing both established and emerging maritime sectors. These projects include cargo handling, construction of water projects, and service activities related to water transport. Port activities also provide the basic infrastructure for many other sectors, including fishing, transportation, offshore extraction of minerals, oil and gas, marine renewable energy, and marine tourism.

D. Maritime Transport:

Maritime transport includes waterborne transport of passengers and cargo both at sea and along coasts, as well as marine shipping and the leasing of water transport equipment. Inland transport is considered part of the blue economy because it involves the movement of passengers and cargo via rivers, canals, and lakes.

E. Shipbuilding and Repair:

Shipbuilding provides the assets, capabilities, technologies, and knowledge for many blue economy activities such as fishing, transportation, offshore extraction of minerals, oil and gas, marine renewable energy, aquaculture, and tourism. (Khattab, 2020, p 762)

2- Emerging Sectors of the Blue Economy

A. Marine Renewable Energies:

Marine renewable energies refer to kinetic energies (wind and currents), with offshore wind being the fastest-growing activity in the blue economy.

B. Blue Bioeconomy:

The bioeconomy is closely related to the extraction of living resources and includes sectors that depend on renewable aquatic biological resources such as fish, algae, microorganisms, and other large organisms for the production of food, feed, pharmaceuticals, and cosmetics.

C. Water Desalination:

This is a common technology used to compensate for the shortage of freshwater, thus, it is one of the sectors that may require adaptation to increasing freshwater scarcity.

D. Deep-Sea Mining:

This refers to the extraction and processing of non-living resources in the ocean, including marine aggregates and seabed minerals such as copper and zinc. (Khattab, 2020, p 762)

3. Sources of Financing the Blue Economy:

There are multiple mechanisms for financing the blue economy, including state budget allocations, grants, subsidies, and borrowing through blue bonds. The latter are considered a modern financing tool designed to support marine projects and sustainable fishing methods. Therefore, blue bonds are sustainability bonds that serve as a debt instrument issued to support investments in healthy oceans and blue economies. (Badida, 2022, 581)

Moreover, there is dedicated financing for marine protection, which includes revenues from the tourism sector as well as income from the fishing, mining, and energy industries, in addition to social investments

related to the preservation of the marine environment. (Khattab, 2020, p 777)

3. The Blue Economy Initiative as One of the Models of North-South Cooperation between the Two Shores of the Mediterranean

3.1 The Evolution of the Idea of Cooperation between the Two Shores of the Mediterranean

The countries of the European Union realized that the concept of security under current security conditions is no longer confined to its internal dimension. At the end of the Cold War (the rise of security studies), a new set of security concepts emerged in an attempt to expand and deepen the traditional concept of security. This put an end to the tradition that confined the concept of security solely to the military-strategic field, so that the concept of security became linked to multiple dimensions (social, environmental, economic, political, cultural), which in turn paved the way for establishing new epistemological foundations in the field of security studies. (Laqri'i and Wadah, 2014, p 6)

This means that political, economic, social, or environmental instability in the southern shore countries of the Mediterranean Basin will have serious repercussions on the northern shore countries. Thus, European countries became directly concerned with the problems suffered by the southern shore countries of the Mediterranean Basin, whether political, economic, social, or environmental. From this standpoint, new frameworks were sought for dealing with and negotiating with the southern shore countries of the basin to alleviate these problems so that direct threats to the European space do not escalate. (Kateb, 2001, p 73)

Therefore, the "**New Mediterranean Policy**" was introduced to consolidate this direction, which evolved from European-Arab and Euro-Maghreb dialogue and cooperation, through **Euro-Mediterranean Partnership policy** adopted by the European Economic Community towards Mediterranean countries in the 1970s, to adopting the "partnership" approach as the best way, according to the European vision for dealing with Mediterranean countries, aiming to contain the problems these countries face so they do not spread to European territory.

In this context, the Barcelona Convention for the Euro-Mediterranean Partnership, held on November 27-28, 1995, came as a starting point for the Euro-Mediterranean Partnership project between the fifteen European Union countries and the twelve third Mediterranean countries to achieve dialogue and cooperation. (Kateb, 2001, p 75)

Focusing on the environmental dimension in the Barcelona Convention—considered the cornerstone of our study—it was regarded as an important initiative aiming to build a secure and permanently stable region in the Mediterranean Basin, in which all countries on both shores of the Mediterranean commit to protecting the marine environment from pollution sources.

3.2 The Most Important Agreements Related to the Protection of the Blue Economy between the Countries on Both Shores of the Mediterranean

The Barcelona Convention for the Protection of the Mediterranean Sea from Pollution, which came into force on February 12, 1978, is considered one of the most important regional agreements concerned with protecting the Mediterranean Sea and addressing the shared challenges of marine environmental degradation. This convention was reinforced by the adoption of several subsequent protocols over multiple stages.

Several parts of the Barcelona Convention underwent significant changes from 1994 until a revised version of the convention was reached in 2002. This revision aimed to develop the original convention to keep pace with the principles of the Rio Declaration and the philosophy of the new United Nations Convention on the Law of the Sea (UNCLOS), ultimately becoming a tool for sustainable development and reflecting the progress achieved in international environmental law. (Priority Environmental Issues in the Mediterranean Region, p 68)

The current structure of the Barcelona Convention includes the following:

-Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean

-Dumping Protocol (Immersions): Aims to reduce pollution of the Mediterranean Sea resulting from the dumping or incineration of waste by ships and aircraft.

-Emergency Protocol (Critical Situations): Related to preventing pollution of the Mediterranean waters by oil or ship-generated waste.

-Protocol on Specially Protected Areas and Biological Diversity (ASP and Biodiversity): Addresses specially protected areas and biodiversity in the Mediterranean Sea.

-Protocol on Offshore Pollution: Concerns pollution resulting from the exploration and exploitation of the continental shelf, seabed, and subsoil.

-Hazardous Waste Protocol: Aims to reduce pollution of the Mediterranean Sea through the cross-border movement and disposal of hazardous wastes. (Maidi and Abdelhamd, pp 121-125)

The latest update to the legal framework of the Barcelona Convention reflects the parties' view of the framework as a dynamic system, subject to review and amendment if necessary. Therefore, at the 2003 meeting, the signatory states requested the Secretariat to draft an additional protocol addressing the integrated management of the coastal zone. (Priority Environmental Issues in the Mediterranean Region, p 69)

Environmental Action Program (SMAP): This program aims to make SMAP the executive tool for implementing the policies adopted by the countries of the Euro-Mediterranean Partnership (EMP) in the field of the environment. The program also provides project funding through the Regional Environment Program for the Mediterranean Assistance (MEDA). In 2002, the environment ministers of the countries participating in the Euro-Mediterranean Partnership (EMP) reaffirmed their commitment to the Environmental Action Program according to the short- and medium-term priorities (SMAP), adopting the Athens Declaration, which particularly emphasizes the importance of ensuring

synergy between the Environmental Action Program (SMAP) and other regional environmental initiatives.

Over the past ten years, the total investment by the MEDA program in the regional environment has reached 50 million euros through three consecutive projects within the framework of SMAP. Additionally, the MEDA program has funded regional projects related to water.

In parallel with this regional initiative, the European Union has concluded bilateral agreements with most partner countries within the framework of the Euro-Mediterranean Partnership (EMP). These agreements have laid the foundation for cooperation tailored to the needs and specific conditions of each country. These agreements include the commitment of both the European Union and the partner countries to work towards harmonizing their laws and seeking further cooperation legally across many sectors, including the environmental sector. (Priority Environmental Issues in the Mediterranean Region, p 69)

In the same context, the European Neighborhood Policy (ENP) has continued along the same path as the Barcelona Initiative despite differences between them in terms of frameworks. The ENP introduced a new approach based on bilateral relations, unlike the previous multilateral dialogue, aiming to establish strong relationships with the EU's neighboring countries built on shared values and interests. These relationships are based on existing mechanisms and frameworks, such as agreements concluded with most of the southern neighboring countries bordering the Mediterranean Sea. The ENP relies on joint action plans that cover a wide range of policies, including environmental policies, which are among its most important implementation tools.

4. Sustainable Development Initiative for the Blue Economy in the Western Mediterranean Countries – Case of Algeria

4.1: Program Definition

The WestMed Initiative was developed to build bridges of trust between Southern Europe and North Africa. The initiative seeks to develop new sustainable concepts at the sub-regional level to provide blue growth, blue job opportunities, and a better standard of living for the populations

of the Mediterranean Sea, while ensuring the protection of the Mediterranean seas from polluters and unregulated maritime activities.

The European Commission adopted the Blue Economy Initiative on April 19, 2017. The initiative brings together 10 countries from the Western Mediterranean: Algeria, Spain, Portugal, France, Italy, Libya, Tunisia, Mauritania, Morocco, and Malta. The implementation of this initiative was approved by the Western Mediterranean countries during the informal ministerial meeting held in Naples, Italy, on November 30, 2017. The actual implementation of the initiative began in 2021.

4.2: Pillars of the Sustainable Development Initiative for the Blue Economy in the Western Mediterranean Region

Developing maritime activity hubs to implement the Blue Economy strategy (waste management, sustainable fisheries).

Biodiversity and conservation of the marine environment and its diversity (combating pollution, establishing marine protected areas, and integrated marine waste management).

Sustainable consumption and production, and sustainable development of fisheries.

Promoting and facilitating the mobility of skills among countries in the region in the field of the Blue Economy.

Enhancing the management of maritime surveillance to improve collective maritime safety and security.

4.3: The Security Dimension of the Sustainable Development Initiative for the Blue Economy in the Western Mediterranean

The security dimension of the Blue Economy initiative for the Western Mediterranean countries includes the following: (Halis, 2017, pp 21-28)

1. Achieving maritime security and safety: This involves protecting maritime transport and port facilities against threats and illegal activities, as well as safeguarding human lives, property, and the environment by taking preventive measures to avoid disasters and maritime accidents.

2. Coastal defense for Mediterranean countries: This means protecting biodiversity in coastal areas from sand theft gangs along the coastline, as well as from deforestation and forest fires, by enacting laws and regulations in this field. For example, the Algerian coast has lost approximately 18 million cubic meters of sand due to theft over 650 km of coastline.

3. Contributing to achieving food security in the Mediterranean: Aquaculture plays a major role in achieving food security. To ensure the sustainability of fisheries, the initiative calls for developing fisheries and preserving fish stocks for the current generation and future generations.

4. Contributing to health security: This means integrating regional efforts to combat marine pollution and protect coastlines and marine organisms from poisoning caused by hazardous emissions of energy-related substances crossing the shores of the Mediterranean Sea.

5. Blue Economy Program in Algeria within the Sustainable Development Initiative for West Mediterranean Countries

5.1: Blue Economy Sector in Algeria:

Official figures indicate that 65% of Algeria's population lives in the northern region, of which 43% reside along the Mediterranean coast. Meanwhile, 20% of the GDP is represented by marine- and coastal-related activities and services. The maritime economy directly employs approximately 300,000 people and indirectly employs about 450,000. The Algerian state’s investments in the maritime sector are estimated at around 40 billion USD, invested over the past twenty years in maritime and coastal infrastructure and equipment.

A. Definition of the Blue Economy Program in Algeria:

The Blue Economy Program in Algeria was launched by Expertise France in partnership with the Ministry of Fisheries and Fishery Products, funded by the European Union within the framework of the Sustainable Development Initiative for the Blue Economy in the Western Mediterranean basin. The program implementation period is set from

2021 to 2026. It aims to contribute to sustainable development in Algeria in line with the national blue economy strategy.

The program objectives are as follows:

-Support the creation of job and investment opportunities for coastal communities through diversifying services, innovation, and marine aquaculture.

-Improve the incomes and working conditions of fishermen and artisans.

-Strengthen national capacities to ensure the monitoring, surveillance, and management of fisheries across the entire maritime territory. (shttps://www.economiebleue.dz, 2024)

B. Summary of the activities of the Blue Economy Program in Algeria:

-The administration possesses an effective fisheries information system in addition to technical capabilities and a legal framework to manage fishery stocks with the participation of professionals to ensure participatory monitoring of catch quantities and production.

-The capacity to monitor and follow up on activities to combat illegal, unreported, and unregulated fishing, and to strengthen this capacity in regulated fishing zones to later include all Algerian maritime areas.

-Strengthening professional structures and following up, supporting, and supervising artisanal fishing professions.

-Conducting training sessions for public and private actors in the fields of fishing and aquaculture.

-Implementing and developing comprehensive fishery management plans.

-Providing capacity building and training programs for fishermen to understand sustainable fishing practices.

-Integrated planning of marine and coastal spaces.

-Diversifying blue economy activities, including aquaculture, and creating new professions, including for women.

-Supporting the establishment of startups to contribute to the development of the blue economy.

-Free training for vulnerable groups (unemployed youth, women, persons with disabilities) in repairing and restoring fishing nets, along with support to enter the entrepreneurial world and support for financing the establishment of their small private enterprises.

-Launching local consultative workshops with the participation of local stakeholders within the framework of marine governance to discuss: training and research, artisanal fishing and working conditions, support and financing plans. (shttps://www.economiebleue.dz, 2024)

The National Center for Research and Environment, in cooperation with the Blue Economy Program, issued a call for researchers interested in the blue economy and holding the best projects containing innovative ideas. They benefited from intensive training alongside experts, and the first-place winner was the seawater desalination project, distinguished by a mobile distillation desalination device powered by renewable energies. (shttps://www.economiebleue.dz, 2024)

6. Conclusion:

The Blue Economy Initiative Program is considered the appropriate foundation for rationalizing the over-exploitation of marine wealth and reducing unsustainable fishing practices in Algeria through adopting a marine governance approach based on:

-Developing governmental policies and mechanisms that enhance sustainable marine business models and services in the blue economy field.

-Involving civil society in developing the blue economy by working to raise public awareness about the importance of sustainable marine life through promoting sustainable products and businesses.

-Universities and research institutions are developing and innovating sustainable research projects in the blue economy field.

-Encouraging small and medium enterprises to invest in the sustainable blue economy sector and to turn environmental challenges into economic opportunities, thereby reducing environmental risks and creating economic and social development.

The security dimension of the blue economy program is also of utmost importance for the North Mediterranean countries by creating real development opportunities in the South to confront the increasing threat of illegal immigration to the North.

5. References and Bibliography List:

Faiza Al-Ajroush. (2022). *The Blue Economy: A Promising Future and a Sector Supporting the National Economy and Attracting Local and International Investments*. Retrieved 4 12, 2024, from Center website: https://url-shortener.me/5CJX

Sally Mohamed Farid. (2022). *Potential and Opportunities for Transitioning to a Blue Economy in Africa*. Retrieved 28 12, 2024, from Center website: https://url-shortener.me/5CMG

Union for the Mediterranean. (2015). *Ministerial Conference on Blu Economy*. Retrieved 28 12, 2024, from Center website: https://medblueconomyplatform.org/ar/abou

Ben Yahia, Nassima .(2022). The Blue Economy: A Mechanism for Achieving Sustainable Development in the Mediterranean. *Research Journal*, 07(2), 197-213.

Mohamed Galal Mohamed .(2020). Elsayed Khattab. Requirements for Activating the Role of the Blue Economy in Achieving Sustainable Development in Egypt. *Journal of Law for Legal and Economic Research*, 01(2), 735-859.

Houria, Badida.(2022). Blue Bonds as an Innovative Solution for Advancing the Blue Economy. *Qabas Journal for Human and Social Studies*, 06(2), 575-602.

Laqrai Hicham, and Wadah Sara. (2014).Security Threats in the African Sahel Region and Their Repercussions on Algerian Security (Master's Thesis). University of Annaba.

Ahmed Kateb. (2000). Background of the Euro-Mediterranean Partnershp (Master's Thesis). University of Algiers.

European Environment Agency. (2006). Priority environmental issues in the Mediterranean region (EEA Report, No. 4). European Environment Agency.

Hajar Maidi, and Amir Abdel Hamid.(2023). Euro-Mediterranean Partnership Efforts to Protect the Marine Environment in Algeria, *Journal of Rights and Freedoms*, 11(1), 113-141.

Mohamed Halis. (2017).The Security Strategy of the Blue Economy Initiative, *Algerian Journal of Political Science and International Relations*, (9), 21-28.