

The Protection of Marine and Coastal Environment in Algeria in light of the Barcelona Convention and the Algerian Legislation.

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Abstract:

The marine region of Algeria holds significant importance due to its strategic location connecting three continents (Africa, Asia, and Europe), the large number of countries bordering it, the growing population along its coastal strip from the eastern to the western borders, as well as its diverse environmental characteristics. This makes the protection and sustainable development of its environment imperative, in cooperation with Mediterranean Basin countries that share similar features and goals. The legal system for the protection of the marine environment in the Mediterranean region, in general, and Algeria, in particular, constitutes a real guarantee to confront environmental and developmental challenges on both regional and national levels, with the associated economic, social, and environmental implications for the present and future of the region's inhabitants. Within this context, this paper reviews the legal framework for protecting the marine environment of Algeria and its sustainable development in light of the Barcelona Convention for the Mediterranean region and Algerian legislation.

Keywords: Marine Environment; Sustainable Development; Barcelona Convention; Algerian Legislation.

Introduction:

The marine and coastal area of Algeria is a crucial part of the Mediterranean Basin, one of the most important marine regions globally, for various geographical, historical, economic, and environmental reasons. These include the fact that the Mediterranean is a semi-enclosed sea, not connected to the oceans except through the Strait of Gibraltar to the Atlantic Ocean, the Suez Canal to the Red Sea, and the Bosphorus Strait to the

Black Sea. Algeria's coastline is thus a strategically important area, as it provides access to both Europe and Asia, as well as acting as a main gateway to Africa. The marine and coastal areas of Algeria also carry a historical legacy from ancient civilizations such as the Roman and Islamic civilizations, which have left their marks on Algerian culture and its relationships with other Mediterranean peoples. These factors make coexistence and cooperation between Algeria and the countries of this region essential across various fields, including security, politics, development, and the environment.

The protection of Algeria's marine environment and its sustainable development play a major role within this framework, given the global environmental and developmental challenges, especially in the current era marked by the worsening effects of climate change and the severe depletion of natural capital, negatively affecting global economic and social development in general, and Mediterranean Basin countries in particular. This has driven these countries, including Algeria, to rapidly establish both legal and structural mechanisms to address the deteriorating state of the Mediterranean marine environment and ensure its effective protection, as well as that of its coastal and internal regions, which are impacted by increasing marine pollution from various sources, while also ensuring the sustainable use of the region's resources to meet the economic and social needs of present and future generations.

In this context, this paper seeks to analyze the legal framework for protecting the marine environment of Algeria and its sustainable development in light of the Barcelona Convention and Algerian legislation, attempting to answer the following question: **To what extent have the Barcelona Convention and Algerian environmental legislation provided the necessary protection for the Mediterranean environment in general, and Algeria's marine area in particular?**

To address this question, we will explore the following sections:

- Section 1: Environmental Characteristics of Algeria's Marine and Coastal Areas.
- Section 2: The Legal Framework for Protecting the Mediterranean Marine Environment.
- Section 3: The Environmental Dimension in the Barcelona Convention and Algerian Legislation.

Section 1: Environmental Characteristics of Algeria's Marine and Coastal Areas

The environmental characteristics of Algeria's marine and coastal region encompass both natural and human factors.

1. **Natural Environment of Algeria's Marine and Coastal Areas:** The Algerian coastline stretches approximately 1,622.48 km from the east at the town of El Kala in the Wilaya of El Tarf, to the west at Marsa Ben M'hidi in the Wilaya of Tlemcen. Algeria's marine region is distinguished by numerous ecosystems, as it forms a significant part of the Mediterranean Basin, including⁽¹⁾:
 - a) Coastal plains,
 - b) Wetlands,
 - c) Rocky shores, seagrass meadows,
 - d) Coral reefs,
 - e) Submarine mountains, among others.
 - f) These ecosystems provide a habitat for a considerable portion of the marine biodiversity.
2. **Population Density of the Coastal Region of Algeria:** Algeria's coastal strip encompasses 14 wilayas (provinces): Tlemcen, Ain Temouchent, Oran, Mostaganem, Chlef, Tipaza, Algiers, Boumerdes, Tizi Ouzou, Bejaia, Jijel, Skikda, Annaba, and El Tarf. These areas are home to approximately 43% of the total population of Algeria, amounting to about 18.5 million people⁽²⁾.
3. **Factors Affecting the Mediterranean Environment:** Despite the ecological significance of Algeria's marine environment as part of the Mediterranean, its ecosystems are continuously degrading due to persistent pressures, primarily marine pollution from various sources. The movement of commercial ships is one of the main causes, with approximately 300 oil tankers crossing the Mediterranean daily, over 100 of which pass Algeria's coasts. The volume of

¹[] UNEP Medium-term Strategy/Mediterranean Action Plan 2016-2021, UNEP Resolution, UNEP (DEPI)/MED IG. 22/4, Athens, Greece, 4-12 February 2016, P. 2.

²[] Bouchiba El Taher, Protection of the Marine and Coastal Environment in Algerian Law, an article published on the Al-Manhal website, P. 1, see the link: <https://bit.ly/2YGS126>, date of visited on: October 16, 2021, time: 11:30.

(*) Stagnant water: is water that has changed its taste due to stagnation and lack of flow. As for wastewater: it is water that is affected by pollutants, whether liquid or solid, and becomes unfit for human use or for use in other works such as agriculture, cleaning, etc.

maritime traffic in the region accounts for 30% of global commercial shipping, transporting 50% of goods with varying degrees of risk⁽³⁾.

Moreover, due to the semi-enclosed nature of the Mediterranean, water renewal through the Strait of Gibraltar takes about 80 years⁽⁴⁾, and the depletion of natural resources exceeds the capacity of the ecosystems to regenerate⁽⁵⁾.

Other significant pressures on the marine environment include industry and overfishing. The growing population accompanying urban and semi-urban expansion also places immense pressure on fragile ecosystems, biodiversity, and human quality of life due to increased demand for water and energy, higher waste generation, land consumption, and deteriorating natural habitats and landscapes. Statistics show that over 5,000 industrial units along the Algerian coastline discharge more than 8,648 tons of solid waste and over 1 million m³ of sewage annually⁽⁶⁾. Additionally, climate change poses a global risk to the environment, and the Mediterranean coastal areas, including Algeria, are particularly vulnerable.

Second: The Legal Framework for the Protection of the Marine Environment of the Mediterranean Region:

The legal framework for the protection of the marine environment of the Mediterranean region, which includes Algeria's marine area as a crucial part, is governed by the Barcelona Convention, which encompasses both the Mediterranean Action Plan (MAP) and the associated protocols.

First – Mediterranean Action Plan (MAP): In 1975, 16 Mediterranean countries, along with the European Union, adopted the Mediterranean Action Plan (MAP) under the supervision of the United Nations Environment Programme (UNEP). Its aim was to assist the countries in the region in evaluating and combating marine pollution, formulating national environmental policies, building capacities to identify the best developmental options, and improving resource allocation. Initially, the plan focused on

³[] Mohamed El Taфраouti, *The Mediterranean Region, Clean Sea and Sustainable Coastal Development*, The Arab World Network, 2011. Link: <https://bit.ly/3qvOhxe>, Date of visit: February 4, 2017, Time: 01:10, See also:

- Nasreddine Hanouni, *Rational Protection of the Coast in Algerian Law*, Dar Houma for Printing, Publishing and Distribution, Algeria, 2013, p. 302.

⁴[] *Idem.*, P. 302.

⁵[] UNEP Medium-Term Strategy/Mediterranean Action Plan 2016-2021, *op. cit.*, P. 2.

⁶[] Bouchiba Taher, *Op.cit.*, P. 2.

combating marine pollution but later shifted its focus towards integrated coastal zone management to address the environmental challenges in the region⁽⁷⁾.

In 1995, a new second phase plan called the "Mediterranean Action Plan for the Protection of the Marine Environment and Sustainable Development of Coastal Areas in the Mediterranean"⁽⁸⁾ was launched. This updated the previous plan to align with global developments, including the 1992 UN Conference on Environment and Development (Rio de Janeiro), which officially recognized the concept of sustainable development and adopted the Agenda 21.

The main goals of the plan include:

- 1- Ensuring sustainable management of natural marine and terrestrial resources, and integrating the environment into social and economic development and land-use policies.
- 2- Protecting the marine environment and coastal areas by preventing and reducing pollution, and eliminating it to the greatest extent possible.
- 3- Protecting nature and enhancing sites and landscapes of cultural or environmental significance.
- 4- Strengthening solidarity among Mediterranean coastal countries in managing their shared heritage and resources for the benefit of current and future generations.
- 5- Contributing to the improvement of quality of life⁽⁹⁾.

In 2013, the Contracting Parties to the Barcelona Convention launched an evaluation process of the second phase of the Mediterranean Action Plan to effectively address the challenges of sustainable development and the permanent impacts on the environment and resources, with a long-term vision in mind⁽¹⁰⁾.

Second – The Barcelona Convention for the Protection of the Mediterranean Marine Environment and the Protocols:

⁷[] Mohamed El Taфраouti, *The Mediterranean Region, Clean Sea and Sustainable Coastal Development*, Op.cit.

⁸[] Idem.

⁹[] UNEP/MAP Coordination Unit, *Mediterranean Action Plan, Barcelona Convention, Overview*, P. 6. See link: <https://bit.ly/3qv8WkI>, date of visit: 04 February 2017, 15:20.

¹⁰[] Idem., P. 8.

The Barcelona Convention for the Protection of the Mediterranean Sea from Pollution, signed on February 16, 1976, and its related protocols form the legal foundation for achieving the environmental dimension of sustainable development in the region. After amendments were made to the convention on June 10, 1995, its name was changed to "The Barcelona Convention for the Protection of the Mediterranean Marine Environment and Coastal Areas."

The Convention consists of 29 articles and is one of the most significant regional agreements in this field. It covers pollution from various sources, such as land-based pollution, ship pollution, pollution from activities on the seabed, and pollution from dumping⁽¹¹⁾.

The primary objectives of the Convention are:

- 1- Evaluating and combating marine pollution.
- 2- Ensuring sustainable management of natural marine and coastal resources.
- 3- Integrating environmental considerations into social and economic development.
- 4- Protecting the marine environment and coastal areas by preventing, reducing, and eliminating pollution, both on land and at sea.
- 5- Protecting natural and cultural heritage.
- 6- Strengthening solidarity among Mediterranean coastal countries.
- 7- Contributing to improving the quality of life⁽¹²⁾.

A criticism of the Convention is that it does not organize international responsibility and compensation for damages resulting from marine pollution caused by violations of its provisions, and it only urges the parties to cooperate to adopt measures for this⁽¹³⁾.

The Convention has seven protocols, to which Algeria has acceded, which are as follows:

- 1- The Protocol for the Protection of the Mediterranean Sea Against Pollution from Dumping from Ships and Aircraft (adopted in 1976 and amended in 1995).

¹¹[] Nasreddine Hanouni, Rational Protection of the Coast in Algerian Law, Op.cit, P. 373.

¹²[] UNEP/Mediterranean Action Plan Coordination Unit, Op. cit., P. 6.

¹³[] Idem., P. 373.

- 2- The Protocol on Cooperation in Preventing Pollution from Ships and Combating Pollution in Emergency Situations (adopted in 2002, replacing the 1976 protocol).
- 3- The Protocol for the Protection of the Mediterranean Sea Against Pollution from Land-Based Sources and Activities (adopted in 1980, amended in 1996).
- 4- The Protocol for the Protection of Specially Protected Areas and Biodiversity in the Mediterranean (adopted in 1995, replacing the 1982 protocol), including its annexes adopted in 1996, and amended in 2009, 2012, and 2013.
- 5- The Protocol for the Protection of the Mediterranean Sea Against Pollution from Exploration and Exploitation of the Continental Shelf, Seabed, and Subsoil (adopted in 1994).
- 6- The Protocol on the Protection of the Mediterranean Sea Against Pollution from the Transboundary Movement and Disposal of Hazardous Wastes (adopted in 1996).
- 7- The Protocol on Integrated Coastal Zone Management in the Mediterranean (adopted in 2008).

Algeria joined the "Marcos" monitoring body for coastlines in July 2007, which is affiliated with the European Space Agency. This has enabled the country to obtain maps related to oil spills in the Mediterranean and off the Algerian coast⁽¹⁴⁾.

Third – The Environmental Dimension in the Barcelona System and Algerian Environmental Legislation:

It is essential to first define the content of the environmental dimension of sustainable development, and then address the legal framework for this dimension at the regional level through the provisions of the Barcelona Convention, and at the national level through Algerian environmental legislation.

First – The Content of the Environmental Dimension of Sustainable Development:

The environmental dimension of sustainable development provides the strategies that must be adopted and adhered to in the developmental sector for the rational management of natural capital, to prevent its depletion and to maintain ecological balance. It also includes controlling emissions and waste, reducing the environmental impact of development activities, and ensuring the protection of biodiversity and ecosystems.

¹⁴[] Nasreddine Hanouni, Op.cit., P. 387.

The United Nations has established a series of steps to achieve these goals, including⁽¹⁵⁾:

- 1- Awareness-raising, through all possible means, about the direct and indirect risks of pollution;
- 2- Requiring global companies to adhere to the same standards both inside and outside their countries;
- 3- Implementing the principle of the right to environmental information and involving communities in the decision-making process related to the environment and monitoring its implementation.

Legislation, alongside environmental management systems and pressure groups, is considered a key tool in achieving a balance between the three pillars of sustainable development: environmental, economic, and social dimensions.

Second: The Environmental Dimension in the Barcelona Convention and Algerian Legislation:

The Barcelona Convention for the Protection of the Mediterranean Sea and Coastal Areas, in its amended form of 1995, addresses marine pollution from various sources, including land-based sources, ships, activities on the sea bed, and the dumping of waste at sea. However, the Barcelona Convention neglected an important aspect, namely the regulation of international liability and compensation for damages resulting from pollution of the Mediterranean marine environment, limiting itself to urging the contracting parties to cooperate in a timely manner to develop and implement legal measures for liability and compensation for environmental damage caused by violations of the convention's provisions and its protocols.

Algeria ratified the convention under Decree No. 80-14, dated January 26, 1980, as amended by Presidential Decree No. 04-141, dated April 28, 2004⁽¹⁶⁾.

The environmental concern of the Barcelona Convention is evident in Article 4, particularly in paragraphs two and three. Paragraph 2 states: "The contracting parties are committed to taking appropriate measures to implement the Mediterranean Action

¹⁵[] Abdul Rahman Saif Sardar, Sustainable Development, Dar Al Raya for Publishing and Distribution, First Edition, 2015, Amman, Jordan, P. 34.

¹⁶[] Decree N° 80-14 of January 26, 1980, including Algeria's accession to the Convention for the Protection of the Mediterranean Sea against Pollution concluded in Barcelona on February 16, 1976, Official Gazette of the Algerian Republic, N° 5, issued on January 29, 1980, amended and supplemented by Presidential Decree N° 04-141 of April 28, 2004, Official Gazette of Algeria, N°. 28, issued on May 5, 2004.

Plan and continue striving to protect the environment and natural resources of the Mediterranean region as an integral part of the development process to meet the needs of present and future generations in a fair manner. For the purpose of implementing sustainable development goals, the contracting parties fully consider the recommendations of the Mediterranean Commission on Sustainable Development established within the framework of the Mediterranean Action Plan"⁽¹⁷⁾.

This text shows that protecting the environment and natural resources in the Mediterranean region, as an integral part of the development process, lies at the heart of integrating the environmental dimension into development, ensuring its continuity and its ability to meet the needs of current and future generations, and embodying the principle of fairness between successive generations and among members of the same generation, which is what the concept of sustainable development aims to achieve.

Among the tools used to implement the environmental dimension in both the Barcelona Convention and Algerian environmental legislation is the application of the precautionary principle and the study of environmental impact.

1. Application of the Precautionary Principle:

In paragraph 3(a) of Article 4 of the Barcelona Convention, it is stated: "To protect the environment and contribute to the sustainable development of the Mediterranean region, the contracting parties shall: (a) Apply, according to their capabilities, the precautionary principle, which is based on the existence of serious threats or irreversible damage, and the lack of complete scientific certainty should not be used as a reason to delay taking cost-effective measures to prevent environmental degradation." ⁽¹⁸⁾

The precautionary principle requires taking necessary measures to prevent environmental harm, even when scientific certainty about the existence of these threats is not fully available.

Algerian legislation implicitly enshrines this principle in Decree 88-149, dated July 26, 1988, which regulates facilities likely to cause significant environmental risks. It

¹⁷[] Paragraph 2 of Article 4 of the Barcelona Convention of 1976 as amended in 1995 on the Protection of the Marine Environment and the Coastal Region of the Mediterranean.

¹⁸[] Paragraph 3 (a) Article 4.

requires attaching a risk document to the application for a license to operate such facilities, detailing measures to prevent environmental damage⁽¹⁹⁾.

In the second section of Law 03-10 on the protection of the environment within sustainable development, dated July 19, 2003, under the heading "Environmental Protection Requirements," the precautionary principle is explicitly mentioned in paragraph seven of Article 3. It states: "The precautionary principle, under which the lack of available techniques due to current scientific and technical knowledge shall not be a reason for delaying the implementation of effective and proportionate measures to prevent serious environmental harm, and these measures should be economically feasible."⁽²⁰⁾

This text clarifies that the precautionary principle does not apply if the cost of preventive measures exceeds the expected benefits, considering the balance between environmental protection needs and the economic objectives of activities that may harm the environment⁽²¹⁾.

2. Environmental Impact Study of Activities:

An environmental impact study is one of the most effective tools for considering the environment before initiating developmental activities. It is a pre-licensing administrative procedure that assesses the potential impact of an activity or project on the environment. Based on this study, authorities can either approve or reject the proposed activity⁽²²⁾.

This procedure is included in several international agreements, including:

- a) The United Nations Convention on the Law of the Sea (1982),
- b) The United Nations Framework Convention on Climate Change (1992),

¹⁹[] Paragraph 5 of Article 6 of Decree 88-149 of July 26, 1988 regulating the organization applicable to classified establishments and determining their list, Algerian Official Gazette, N°. 30, issued on July 27, 1988.

²⁰[] Paragraph 6 of Article 3 of Law 03-10 of July 19, 2003 relating to the protection of the environment within the framework of sustainable development, as amended, Algerian Official Gazette, N°. 43, issued on July 20, 2003.

²¹[] Qaidi Samia, Legal Mechanisms for Achieving Sustainable Development, a series of lectures given to students of the Master of Environmental Law, Faculty of Law and Political Science, Mouloud Mammeri University, Tizi Ouzou, P. 13.

²²[] *Idem.*, P. 16.

- c) The United Nations Convention on Biological Diversity (1992),
- d) The Barcelona Convention for the Protection of the Mediterranean Sea and Coastal Areas (1976, amended in 1995).

The Barcelona Convention, in paragraph 3(c) of Article 4, requires contracting parties to carry out environmental impact assessments for activities that may cause significant harm to the marine environment and require national authority approval⁽²³⁾.

Algeria adopted this procedure in Article 15 of Law 03-10, which outlines the types of projects and activities that must undergo an environmental impact assessment. These include "development projects, fixed installations, factories, works of public infrastructure, and any other work or construction programs likely to directly or indirectly affect the environment, particularly natural species, materials, and ecosystems, as well as the quality of life."⁽²⁴⁾

The Algerian legislator delegated the implementation of this provision to Executive Decree No. 07-145, dated July 19, 2007, which outlines the procedures for approving and content of environmental impact assessments⁽²⁵⁾. However, this decree has been criticized for omitting some types of projects and installations from environmental impact assessments. Executive Decree No. 18-255, dated October 9, 2018, amended and supplemented the previous decree, adding to its annex projects related to tourism development in areas exceeding 10 hectares. And this is where the question of the real reasons behind the exclusion of certain projects and infrastructures from implementing an environmental impact study.⁽²⁶⁾

Considering the presence of large industrial complexes in Algeria's coastal cities and the resulting chemical and organic pollution of seawater⁽²⁷⁾, the application of both the

²³[] Paragraph 3 of Article 4 of the Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean., Op.cit.

²⁴[] Article 15 of Law 03-10, Op.cit.

²⁵[] Decree 07-145 of May 19, 2007 defining the scope of application, content and methods of approving the environmental impact study and summary, Algerian Official Gazette, N° 34, issued on May 22, 2007, amended and supplemented by Executive Decree N° 18-255 of October 9, 2018, Official Gazette of the Algerian Republic, N° 62, issued on October 17, 2018, and Annex I containing the list of projects subject to the impact study.

²⁶[] Executive Decree No. 18-255 of October 9, 2018, Op.cit.

²⁷[] Nasreddine Hanouni, Op.cit., P. 393.

precautionary principle and environmental impact assessments must be thoroughly reviewed to ensure their practical and effective implementation for projects in Algeria's coastal regions.

The Algerian legislator has set three levels of oversight on the impact study: citizen oversight, administrative oversight, and judicial oversight. In line with the principle of the right to participate in decision-making processes that affect the environment and follow up on their implementation, citizens can exercise their oversight role under this decree by announcing the opening of a public inquiry after the preliminary review and acceptance of the study or impact summary issued by the relevant regional governor. However, this oversight is ineffective because the decree does not grant citizens the right to attend public meetings during the public inquiry; they can only submit their comments on an open register for this purpose⁽²⁸⁾.

On another note, Article 52 of Law 03-10 prohibits the discharge, dumping, or incineration of materials into the marine waters under Algerian jurisdiction that could⁽²⁹⁾:

- Harm public health and marine ecosystems,
- Obstruct maritime activities, including navigation, aquaculture, and fishing,
- Deteriorate the quality of marine waters for their intended use,
- Reduce the recreational and aesthetic value of the sea and coastal areas and harm their tourist potential.

The Algerian legislator has delegated the identification of materials prohibited from discharge, dumping, or incineration to regulation and entrusted the establishment of responsibility rules for damages in case of their occurrence to implementing texts.

However, the legislator, under Article 53 of the same law, has allowed the environment minister to grant permission for discharges, dumping, and incineration operations at sea under conditions that guarantee the absence of risk and harm⁽³⁰⁾.

²⁸[] Qaidi Samia, Legal Mechanisms for Achieving Sustainable Development, Op.cit, P. 29, see also:

- Paragraph 4 of Article 10 of Decree 07-145 dated May 19, 2007, Op.cit.

²⁹[] Article 52 of Law 03-10, Op.cit.

³⁰[] Article 53, Idem.

The application of this article does not apply in cases of force majeure caused by weather changes or other factors, and when the lives of humans or the safety of ships or aircraft are at risk⁽³¹⁾.

Moreover, the Algerian legislator required obtaining a permit from the environment minister for all materials or waste intended for sea dumping⁽³²⁾.

If damage or an accident occurs involving any ship, aircraft, machinery, or floating platform transporting harmful or dangerous materials or fuels in waters under Algerian jurisdiction, and these materials pose a serious and unavoidable risk to the coast and related benefits, the owner of the ship, aircraft, machinery, or floating platform is excused from taking all necessary measures to mitigate these risks⁽³³⁾. If this mitigation is unsuccessful or not achieved within the set timeframe, or in cases of urgency, the competent authority will order the necessary measures to be taken at the owner's expense⁽³⁴⁾.

Article 57 of the same law obligates the captain of any ship passing through or within waters under Algerian jurisdiction and carrying dangerous, toxic, or polluting goods to report any maritime accidents on their vessel that could threaten marine pollution, deterioration of the environment, and contamination of national waters and coasts⁽³⁵⁾. The Algerian legislator has referred to regulations on how to implement this article.

Article 58 imposes liability on the owner of any ship carrying a fuel load that causes pollution due to spillage or discharge of fuel from the ship. The owner is liable for damages under the conditions and restrictions set out by the international convention on civil liability for damages caused by oil pollution⁽³⁶⁾.

The Algerian legislator has imposed criminal responsibility for violations outlined in Articles 52 to 85 of Law 03-10, leading to marine environmental pollution under Algerian jurisdiction. These violations incur varying penalties, ranging from Considering the severity of the actions committed under the aforementioned articles and the penalties established for them, these penalties do not suffice to compensate for the

³¹[] Article 54, Idem

³²[] Article 55, Idem

³³[] Paragraph 1 of Article 56, Idem.

³⁴[] Paragraph 2 of Article 56, Idem.

³⁵[] Article 57, Idem.

³⁶[] Article 58, Idem.

severe environmental damage inflicted on the marine ecosystems of the waters under Algerian jurisdiction, which in most cases cannot be restored to their original state.

Conclusion:

In conclusion, the legal system for protecting the marine and coastal environment in Algeria has kept pace with regional and global international instruments, starting with the 1972 Stockholm Conference on the Human Environment up to the present day. From the beginning, we observed:

- 1- How the United Nations Environment Program has overseen the development of the Barcelona Convention for the Protection of the Mediterranean Sea from Pollution, as well as the Mediterranean Action Plan, since 1976;
- 2- After twenty years of adopting the plan and convention, the parties evaluated the first phase of the plan and achievements of the convention, designing a new action plan for the second phase called the Action Plan for the Protection of the Marine Environment and Sustainable Development of Coastal Areas in the Mediterranean, while also revising the Barcelona Convention to align with the developments in global environmental work under the United Nations. The concept of sustainable development aimed to balance economic and social development with environmental protection, emphasizing the crucial role of the environment for the continuity of development. This was clear in the objectives of the new plan and the convention and its attached protocols;
- 3- Algerian environmental legislation has undergone a radical change in an attempt to harmonize with the global and regional legal system for protecting the marine environment;
- 4- However, the integration of sustainable development principles and tools into Algerian legislation still suffers from shortcomings, especially in the field of protecting and sustainably developing the marine and coastal environment. Examples of this include the lack of effective application of the precautionary principle and environmental impact assessment, both of which are effective tools outlined in the amended 1995 Barcelona Convention for the Protection of the Mediterranean Sea and its coastal areas. This shortcoming mainly arises from the reluctance to take necessary measures to prevent harm to the marine environment, whether due to negligence in adopting these tools or shortcomings in legislative texts, particularly when scientific certainty about the potential risks is uncertain, or when the costs of the required measures are prohibitively high, considering economic aspects.

5- One significant gap in Algerian environmental law is the failure to effectively implement the right to participation. The executive decree organizing this procedure merely establishes a register for citizens to submit their comments but does not allow them to attend meetings that would enable them to participate in the public inquiry regarding the request for a development activity permit.

6- Given that the right to environmental information is foundational to the right to participate, the environmental laws of many Mediterranean countries, including Algeria and France, have imposed restrictions on enforcing this right, refusing to provide environmental information under the guise of disclosing administrative secrets, leaving the discretion of whether to provide the information to the concerned administrative authorities.

Therefore, the following recommendations can be made:

1- Coordinate and consult with the parties to the 1995 amended Barcelona Convention on the Protection of the Mediterranean Sea and its coastal areas to further develop it, particularly in regulating international liability and compensation for damages caused by pollution in the Mediterranean Sea if a party breaches its provisions;

2- Develop Algerian environmental legislation in the field of marine environmental protection to ensure full integration of environmental considerations in the path of economic and social development, aiming for sustainable development of the marine and coastal areas, and revise the penalties outlined in Law 03-10 concerning the protection of the marine environment under Algerian jurisdiction to align with the gravity of crimes committed against it;

3- Make further efforts to raise awareness and environmental culture among individuals at all levels of society, as sustainable development considers humans as the central pillar of development;

4- Promote civil society institutions to ensure that citizens exercise their procedural environmental rights, including the right to environmental information, participation in environmental decision-making, and access to justice for environmental cases. Environmental procedural rights guarantee the fundamental right of citizens to a healthy and sustainable environment, in accordance with the Algerian Constitution;

5- Work towards a rapid transformation in the technological base by introducing cleaner, more efficient technologies in the industrial sector, which can save the biodiversity and natural landmarks of Algeria's marine and coastal areas and reduce pollution. Efforts should also focus on climate stability and accommodating population

growth, especially since the countries on the northern Mediterranean coast have made significant progress in this area;

6- Strive to achieve peace and stability in the Maghreb countries, establish foundations for cooperation among them to build their capacities, promote sustainable development, and address environmental issues, especially in their marine and coastal regions.

imprisonment for six months to five years and fines between 50,000 DZD and 10 million DZD, with judgments being made by a competent court⁽³⁷⁾.

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³⁷[] Articles 88 to 100, Idem.

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